

**ENGINEERING AND RELATED SERVICES  
JUNE 8, 2012**

**STATE PROJECT NO. H.003855.5  
F.A.P. NO. H003855  
WINFIELD ROAD EXTENSION  
ROUTE: WINFIELD ROAD  
(BENTON ROAD (LA 3) TO BELLEVUE ROAD)  
BOSSIER 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 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, 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 contract execution.** One Prime-Consultant/Sub-Consultant(s) will be selected for this Contract.

**Project Manager** – Mr. Nicholas Olivier

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

**PROJECT DESCRIPTION**

The selected Consultant will provide engineering and related services to design a new two lane roadway from Benton Road (LA 3) to the intersection of Bellevue Road and Winfield Road, a distance of approximately eight (8) miles. The design of the project will be in accordance with the Selected Alignment (3R) shown in the approved Environmental Document.

The project shall be a new alignment, on an off-system route, which will consist of a two lane roadway with 12' lanes with 8' shoulders. The project will be initially constructed as a two lane facility with right-of-way clearance sufficient for future widening to a 4 lane divided highway. In addition, a roundabout will be designed at the intersection of Swan Lake Road and Winfield Road Extension.

In addition to the roadway design, five bridges will be constructed along this route. The contract shall consist of four parts which are to be performed as separate and distinguishable efforts. In Stage 3, Part I, the Consultant shall perform surveying services for the project, which consists of topographic and property surveys, title work, updates and take-offs and R/W maps. Stage 3, Part III shall consist of the design and preparation of preliminary design engineering plans and estimates. Stage 3, Part IV shall consist of

the design and preparation of final design engineering plans and estimates. The final phase, Stage 5, will be for construction related engineering services. Final Plans and Construction Related Activities will be contracted by supplemental agreement.

**Traffic Services**

This study will examine the feasibility of a roundabout located at the proposed intersection of Winfield Road Extension and Swan Lake Road. The evaluation of this intersection should consist of, at a minimum, 3 different alternatives. The intersection does not currently exist. Therefore, the consultant will be supplied with copies of an East-West Corridor Winfield Road Extension Traffic Study that contains essential traffic data. Proposed concepts shall be developed using design guidelines for the appropriate roadway classification. For guidance on the roundabout study and design the consultant should refer to EDSM VI.1.1.5 and VI.1.1.6.

**Geotechnical Services**

The selected firm will perform pavement design and geotechnical exploration services for the above captioned project, consisting of eight (8) deep soil borings, three (3) embankment borings, eighty-two (82) shallow roadway borings, sampling, and laboratory testing along the project alignment in Bossier Parish. The project alignment includes construction of new flexible pavements, new embankment, and five bridges. The following table summarizes the anticipated boring schedule:

<b>Structure/Improvement Type</b>	<b>Boring Spacing (ft)</b>	<b>Number of Borings</b>	<b>Boring Depth (ft)</b>
Flexible Pavement	500	82	8
Embankment	300	3	70
Bridges	100	8	120

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 90 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 75 percent of all samples obtained from the borings. UU Triaxial compression and Atterberg limit testing shall be performed on at least 75 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 overconsolidated 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**

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 Bossier Parish Project Manager.

The Contract will be between the Consultant and the Entity, hereinafter referred to as the "Entity".

## 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-Offs

#### Part III: Preliminary Plans

- (a) Subsurface Investigation (Soil borings)
- (b) Geotechnical Design
- (c) Traffic Engineering

#### Part IV: Final Plans (by Supplemental Agreement)

## STAGE 3: DESIGN

### Topographic Survey

The Consultant shall be responsible for all services required to make a complete topographic survey, in English units of measure, as required for the proper design and layout of the project. The survey should include, but not be limited to the staking of centerline when required and when physically possible and, where this is not possible, to the running of all ground traverses necessary to compute and establish centerline. Aerial photogrammetry may be used when feasible and by written agreement with the DOTD in developing the topographic surveys. This work shall include, for the control of the field survey and later use, the establishment of referenced iron rods along the Project, as may be necessary, to define the centerline and of a referenced system of bench marks on a closed level circuit. The survey shall also include the location and establishment of ownership of all utilities in the way of construction as specified in the manual. In addition, the survey shall include structural survey for the bridges. The Consultant's attention is specifically directed to requirement in the manual whereby a sketch of the survey line shall be submitted to the DOTD Location and Survey Administrator for approval immediately after the initial establishment of said line and prior to proceeding further with the survey. The Project survey control and horizontal alignment shall be based on the Louisiana State Plane Coordinate System, (NAD-83-92), as determined by G.P.S. observation.

### **Title Work**

Shall consist of obtaining the necessary Title Research Reports.

The term “Title Research Report” is defined as a report of the ownership of the current property owner(s) with addresses, acquisition data, assessment and tax information, description of the property, conveyances of full ownership, conveyances of other rights (servitudes, leases, restrictions, etc.) existing R/W, recorded plats, and copy of the last acquisition.

### **Property Survey**

Shall consist of all Investigations, Studies, and Field Property Surveys required for the preparation of Base R/W Map.

The Field Property Survey shall be based on the same survey control as the Topographic Survey. Upon completion of the Property Survey, a notification of completion shall be furnished to the Department’s Location and Survey Section. Along with this notification, the consultant shall submit to Location and Survey electronic copies of a sketch showing all surveyed property lines, an electronic text file showing coordinates and descriptions of all found property monuments, an electronic copy of all documents (plats, maps, etc.) used to determine property line locations, and an electronic copy of all Title Research Reports or Title Takeoffs used to determine Property Line locations

### **Title Updates**

Shall consist of obtaining Updates of the originally acquired Title Research Reports, if the Reports are more than six months old.

These Updates shall be used in the preparation of the final R/W Maps and also by the DOTD’s Real Estate Section in acquiring title to the property required for the construction project.

### **R/W Maps**

Shall consist of all services required to complete the Base and Final R/W Maps, described more specifically as follows:

The Base R/W Map shall show the adopted project centerline, all existing R/W, limits of construction, appropriate topography (residences, commercial buildings, structures, etc.), parcel line locations and ownerships, and required taking lines, with ties to the adopted project centerline. Individual parcel metes and bounds and precise area calculations are not required at this time, however, the approximate area of each required parcel and remaining area shall be determined and shown on the Base Map. These Maps shall be in the same standard format and shall form the basis for the Final R/W Map. Specifically, this work shall be performed in accordance with all principles and objectives set forth in

the latest issue of the DOTD's Location and Survey Manual, although currently acceptable surveying standards and methods, as approved by the Location and Survey Administrator, may be used. For purposes of a joint review meeting, the Base R/W Map along with one copy of each of the Title Reports used in preparation of the Base R/W Map, shall be furnished at approximately 60% completion, and reviewed by a DOTD Team. Appropriate revisions recommended for inclusion in the Final R/W Map shall be addressed by the Consultant.

The Final R/W Map preparation shall include all activities necessary to complete the Final R/W Map and shall be performed in accordance with the requirements specified in the latest issue of the DOTD's Location and Survey Manual. The Final R/W Map shall be the Base R/W Map as described above, and shall also include all revisions recommended by the Joint Review Team, parcel metes and bounds, parcel acquisition blocks, parcel areas, remaining areas, Lambert coordinates of all breaks in the required R/W and P.C.'s and P.T.'s of curves, and shall be accompanied by an electronic file containing the DOTD COGO program input commands for creating parcel descriptions suitable for use by the DOTD's Real Estate Section.

### **Title Take-Off**

Is defined as a report of the deed of ownership of the current property owner, and all survey documents, (plats, maps, etc.) associated with the current ownership deed. One take-off shall be obtained for each parcel and a copy of each take-off shall be furnished to the DOTD's Location and Survey Section with the submittal of the Base Right-of-Way Map.

The original and three copies of the Title Research Reports and the original and three copies of all Title Updates shall be furnished to the Location and Survey Administrator along with the Final R/W Map submittal, for forwarding to the Real Estate Section.

### **Preliminary Design**

The Consultant shall be responsible for all engineering services required for preparing the preliminary design, for the completion of preliminary roadway and bridge plans, and for the construction estimates, for the design of a new two lane roadway from Benton Road to the intersection of Bellevue Road and Winfield Road, a distance of approximately eight (8) miles, including the design of a roundabout at the intersection of Swan Lake Road and the Winfield Road Extension. The new two lane facility shall include five (5) bridges in which preliminary investigations indicate that the bridge structures will include slab spans and pre-stressed girder (quad beam) span structures. The project shall be under a schedule for completion which shall be in conformity with the contract time specified in Contract Time Section. The design of the project will be in accordance with the Selected Alignment (3R) shown in the approved Final Environmental Assessment, East-West Corridor, Winfield Road Extension, Bossier Parish, Louisiana, November 2010. The project includes, but is not limited to:

- Two lane roadway with 12' lanes with 8' shoulders.
- The project will be initially constructed as a two lane facility with right-of-way clearance sufficient for future widening to a 4 lane divided highway
- Constructing five (5) bridges over waterways described in the Final Environmental Assessment with sufficient width to accommodate the future four lane divided section

The consultant shall provide engineering design roadway and bridge plans for the project including, but not limited to the following:

- Title Sheet
- Typical Sections and Details
- Summary of Estimated Quantities
- Miscellaneous Details & General Notes
- Reference Points and Bench Mark Elevation Sheets
- Temporary Erosion Control
- Existing Drainage Area Map
- Drainage Map
- Temporary Construction Signs ,Detour Layout and Suggested Sequence of Construction
- Cross Sections (earthwork)
- Geometric Details
- 1"=50', Plan-Profile Sheets
- Summary of Bridge Quantities
- Bridge Plan and Profile (General Plan)
- Foundation Plan
- Special Details

Environmental approval was previously obtained and no effort is anticipated herein. The Consultant's assistance with permit application drawings, if required, will be established by a fully executed Supplemental Agreement or Extra Work Letter.

### **Final Design**

The Consultant shall be responsible for producing Final Plans for construction of the roadway and structures as previously described, including an LRFR as-built load rating document upon completion of construction of all structures.

During the progress of preliminary and final design phases of work, standard intermediate submittals will be made to the DOTD for review and comment. Comments received as a result of the submittals will be discussed with the DOTD and incorporated into the subsequent 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), the DOTD Road Design Manual 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 Non-Standard (NS) Item Number requests shall be provided to DOTD.

All drawings will be developed using MicroStation and CadConform and shall comply with the DOTD CADD Standards.

### **Utility Relocation**

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

### **Geotechnical Services**

#### **Slope Stability (Embankment & Excavation)**

The Objective of a Slope Stability Analysis is to determine the factor of safety of the proposed embankment or excavation on the project subsurface soils and make appropriate Engineering Design Recommendations. The resistance factors from the AASHTO LRFD Bridge Design Specifications, latest edition, shall be used to analyze slope stability.

#### **Standard Procedure**

The embankment/excavation slope stability analysis shall consist of (1) modeling the appropriate boring logs to define the critical embankment/excavation geometry (cross-section) with subsurface soils, (2) interpreting the shear strength test data to determine drained and/or un-drained shear strength design parameters, (3) performing the stability analysis utilizing the Bishop, Spencer, and/or sliding block method deemed appropriate by the engineer, (4) determining the maximum resistance factors for both long- and short-term conditions at the critical fill heights at each bridge end, along the approach embankment (intermediate fill height) and in critical cut sections. Maximum resistance factor should also be taken into consideration for rapid drawdown conditions when applicable, (5) analyzing different methods for mitigating possible stability problems and if necessary, make recommendations for geotechnical instrumentation to monitor stability performance, (6) defining areas of highly erodible materials and analyzing erosion control measures, and (7) preparing a report with all the above information and engineering recommendations.

Deliverables of Slope Stability Analysis shall include the following:

- Printout of critical stability circle and/or block for each design case;
- Geotechnical models (cross-sections) and design input parameters;
- Summary table with critical fill heights and resistance factors, or critical excavation cross-sections with resistance factors;
- Certification that the modeled embankments meet the required long and short-term resistance factors required;
- Summary of alternatives for mitigating possible stability problems with resistance factors and estimated costs;
- Specifications for slope stability mitigation measures;
- Geotechnical Instrumentation Plan (if recommended);
- Recommended erosion control measures; and
- Construction Slope Stability notes for the Bridge General Notes Sheet.

### **Embankment Settlement**

The Objective of a Consolidation/Settlement Analysis is to determine the amount of settlement in inches/feet, and the time required for this settlement to take place in days/months/years when the proposed embankment is constructed on the project subsurface soils, and make appropriate Engineering Design Recommendations.

### **Standard Procedure**

The embankment settlement analysis shall consist of (1) modeling the appropriate boring logs to define the critical embankment geometry (cross-section) with subsurface soils, (2) interpreting the consolidation test data to determine design consolidation soil parameters, (3) performing a settlement analysis for the critical bridge end fill heights and for intermediate fill heights as needed, (4) determining the predicted total consolidation settlement, the predicted 90% consolidation settlement and the time periods for the predicted settlement to occur, (5) if the predicted time for 90% of the settlement to occur is excessive (greater than 5 months) recommendations shall be made to reduce the amount of consolidation settlement and/or to accelerate the settlement through the use of lightweight fills, surcharge placement, wick drains or other methods determined by the Engineer, (6) if mitigation is required, the consultant shall include all analyses and information including special provisions relating to surcharge quantities and limits, wick drain information and layouts and settlement monitoring instrumentation details, (7) assess the impact of predicted settlement and recommended mitigation on pavement, culverts, retaining walls and bridge abutments, and (8) preparing a report with all the above information and engineering recommendations.

Deliverables of Consolidation/Settlement Analysis shall include the following:

- Geotechnical models (cross-sections) with design input parameters;
- Printout of settlement analysis for each design case;

- Presentation of settlement analysis in graphical form (Settlement vs. Time of consolidation Curves) with clear indications of total predicted settlement, 90% predicted settlement, and the effect of surcharging and/or placing wick drains. Hand calculations should be included;
- Assessment of the potential impact of predicted settlement and any recommended mitigation on pavement, culverts, retaining walls and bridge abutments;
- Wick Drain Design Sheets;
- Specifications for recommended settlement mitigation measures (surcharge, wick drains, etc.); and
- Construction Settlement notes for the Bridge General Notes Sheet.

### **Bridge Foundations:**

#### **Piles**

The Objective of a Pile Design Analysis is to determine the pile type, pile capacity, lateral load requirements, and pile length for the project subsurface soils considering pile set-up, down-drag (negative skin friction), potential scour, and other project related factors.

#### **Standard Procedure**

The Pile Foundation Design Scope of work shall consist of (1) modeling the appropriate deep boring logs and/or Cone Penetration (CPT) sounding data to define the project subsurface soil profile, (2) obtaining Standard Penetration Test (SPT) N-values and interpreting the laboratory test data to determine pile design soil parameters, (3) performing pile static analyses to determine pile type, pile capacity and plan pile tip elevation or length, (4) estimating foundation settlement and “down-drag” loads, (5) performing lateral load analyses, (6) estimating scour depths, (7) performing wave equation analyses to determine pile drivability and hammer approval, (8) assessing constructability issues such as installation sequencing, heave and/or lateral pile movement, installation aids (jetting or augering), etc., (9) performing analyses to develop test pile recommendations (feasibility, location, test pile tip elevation, etc.), and pile driving analyzer (PDA) recommendations.

(The consultant shall utilize approved pile capacity prediction methods or software. The “PILECPT” software provided by the LTRC Web site shall be utilized with the CPT sounding data.)

Deliverables for Pile Foundation Design Analysis shall include the following:

- Design spreadsheets or calculations indicating the geotechnical design parameters utilized for each boring log, including scour elevations if applicable, for the pile type selected;

- Graphical or tabulated representation of the pile capacity vs. tip elevation (not depth of penetration);
- If the FHWA software Driven 1.2 is used, include an electronic copy of the data file generated along with a hard copy of the input and output;
- Lateral load analyses;
- Recommended plan pile tip elevations for all bents. (Shown in the pile data sheet.);
- Feasibility study for utilizing a test pile (static resistance factors vs. dynamic resistance factors);
- Drivability recommendations;
- Pile installation criteria with discussion of installation issues;
- Pile Driving Analyzer (PDA) recommendations;
- Hammer approval method recommendations;
- Necessary pay items and corresponding quantities for test piles, indicator piles, and monitor piles;
- Special Provisions for Dynamic Monitoring and Dynamic Analysis, if recommended for project;
- Special Provision for Static Load Test, if recommended for project;
- Considerations for “down-drag” effects on piles;
- Considerations for pile “set-up;”
- Uplift Capacity of Group Piles if required by project conditions; and
- Pile notes for the Bridge General Notes Sheet.

### **Drilled Shafts**

The Objective of a Drilled Shaft Analysis Design is to determine the diameter, tip elevation and installation procedure for the project subsurface soil conditions.

### **Standard Procedure**

The Drilled Shaft Foundation Design Scope of work shall consist of (1) modeling the appropriate deep boring logs and/or Cone Penetration (CPT) sounding data to define the project subsurface soil profile, (2) obtaining Standard Penetration Test (SPT) N-values and interpreting the laboratory test data to determine drilled shaft design soil parameters, (3) selecting appropriate design equations for the project soil types to determine ultimate base and side resistance and selecting appropriate resistance factor, (4) performing axial and lateral load analyses to determine drilled shaft diameter and tip elevation, and (5) performing analyses to determine appropriate Construction Method for project soil conditions.

Deliverables for Drilled Shaft Foundation Analysis and Design shall include the following:

- Design spreadsheets or calculations indicating the geotechnical design parameters utilized for each boring log including scour elevations if applicable;
- Graphical or tabulated representation of the drilled shaft capacity vs. tip elevation for each diameter;
- Lateral load analyses;
- Considerations for “down-drag;”
- Recommended plan drilled shaft diameters and tip elevations for all bents. (Shown in the Drilled Shaft data sheet);
- Recommended Construction Method with discussion of installation issues;
- Drilled Shaft notes for the Bridge General Notes Sheet;
- Special Provision for Integrity Testing if required for project; and
- Special Provision for drilled shaft Load Test if required for project.

### **Other Foundations**

If other types of foundation are recommended for the specific project conditions, the Standard Procedure format and the Deliverables format outlined for piles and drilled shafts shall be followed with specific design details for the type of Foundation recommended.

### **Pile Supported Approach Slab Design Data**

The DOTD normally uses a timber pile supported approach slab to minimize differential settlement in the transition zone between the approach embankment and the bridge abutment.

Deliverables for Pile Supported Approach Slabs shall include the following:

- Layout showing pile locations;
- Pile diameter and length; and
- Drivability Recommendations.

### **Bridge Foundation Load Test Program**

If the project subsurface conditions are difficult, significant uncertainties exist in the Foundation Design, and if cost savings can be predicted, a Foundation Load Test Program may be appropriate. Depending on project conditions, a Foundation Load Test Program may be included either in the Design or in the Construction phase.

Deliverables for the Foundation Load Test Program shall include the following:

- Location and Type of Load Test Proposed;
- Design of Test Foundation (pile, drilled shaft, or other);
- Dynamic Test Procedures and Schedules;

- Load Increment Requirements;
- Maximum Test Load;
- Instrumentation Requirements;
- Load Test Layout and Design Sheets for Plans;
- Special Provision for Construction of Test Foundation and Conduct of Load Test;
- Interpretation of Load Test Results and Recommendations; and
- Foundation Load Test Report.

## **Earth Retaining Structures**

A Retaining Wall is normally required if adequate space (r-o-w) is not available for a Slope. The DOTD has used Mechanically Stabilized Earth (MSE) Walls, Gravity Concrete Walls, Sheet Pile Walls, plus other types for transportation projects. The selection of the most appropriate Retaining Wall type for the specific project requirements and site and subsurface conditions can have profound effects on the project cost and constructability.

### **General Considerations**

Every Retaining Wall type has a unique design procedure and generally requires the services and coordination of a Geotechnical Engineer and a Structural Engineer. The following criteria are generally required for analysis and design of all Retaining Wall types:

Deliverables for all Retaining Wall Analyses and Designs shall as a minimum include the following:

- Earth Pressure Distributions;
- Bearing Capacity of the foundation soil or rock;
- Analyses for Sliding and Overturning and Mitigation Recommendations;
- Settlement and Tilt (Rotation) Analyses and Mitigation Recommendations;
- Drainage Recommendations;
- Global Stability Analyses and Mitigation Recommendations;
- Backfill Properties;
- Wall Components/Materials;
- Wall Construction Procedures;
- Wall Layout with plan view, elevation view, typical sections, and details;
- Quantities Table with applicable General Notes;
- Design Life; and
- Special Provisions.

## **Mechanically Stabilized Earth (MSE) Walls**

The AASHTO LRFD Bridge Specifications, latest edition as well as all supplements shall be followed for analysis and design of all MSE Walls. FHWA NHI-10-024 Vol. I and NHI-10-025 Vol. II, “Design of MSE Walls and Reinforced Slopes” (Berg et al., 2009) may be used as a reference.

Additional Deliverables for MSE Walls shall be required to identify the MSE specific design and construction requirements:

- Type and Size of Facing Element;
- Type, Size and Design Length of Reinforcement Elements;
- Type of Connections;
- Minimum embedment requirements;
- Backfill Material Requirements; and
- If TEMPORARY WALL, identify specific requirements.

## **Concrete Walls**

Cast-In-Place Concrete Gravity or Cantilever Walls are now generally limited to small applications or specialized situations because of the development of more economical wall types. Standard design and construction procedures are well documented in many geotechnical books and other publications.

Deliverables for Concrete Walls are as outlined under General Considerations above.

## **Sheet Pile Walls**

The resistance factors from the AASHTO LRFD Bridge Design Specifications, latest edition, shall be used to design sheet pile walls.

Additional Deliverables for Sheet Pile Walls shall be as outlined in the DOTD Guidelines:

- Sheet Pile Section and Type;
- Minimum Section Modulus;
- Minimum Depth of Penetration;
- Moment of Inertia Requirements;
- Estimated long and short term Deflections;
- Anchor Loads;
- Long and short term Stability including Drawdown and Liquefaction;
- Complete Design Details of sheet piling, Backfill, Drainage, and Connections;
- Corrosion Protection Measures; and
- Construction Constraints

## **Other Retaining Wall Types**

Other types of Retaining Walls that may be appropriate for DOTD transportation projects are Drilled Shaft Walls, Soldier Pile & Lagging Walls, Slurry Walls, Anchored (Tied-back) Walls, Soil Nailed Walls, Reticulated Micro-Pile Walls, Jet-Grouted Walls, and Deep Soil Mixing Walls. These walls shall be designed using generally recognized design procedures applicable to the specific type of wall used.

## **Geotechnical Analysis & Design Recommendations Report**

No standard report format is required and the Consulting Firm may use its own format. However, the GEOTECHNICAL ANALYSIS & DESIGN RECOMMENDATIONS REPORT shall contain a Background Description of THE PROJECT such as location, geological irregularity, if exists, engineering features and requirements, etc., and shall include all the items listed under Deliverables above that are a part of THE PROJECT.

## **List of Published Geotechnical DOTD Reports and Forms plus other Technical References**

Most of the following can be obtained at the DOTD web site ([www.dotd.state.la.us](http://www.dotd.state.la.us)) or at the FHWA Bridge/Geotechnical web site ([www.fhwa.dot.gov/bridge](http://www.fhwa.dot.gov/bridge)).

### **DOTD Reports and Forms:**

- AASHTO LRFD Bridge Design Specifications, latest edition and supplements;
- Standard Specification, latest edition;
- Bridge Manual;
- Road Design Manual;
- Hydraulics Manual;
- Materials Sampling Manual;
- Materials Testing Procedures Manual;
- Drilled Shaft Foundation Construction Inspection Manual (1/08/02);
- LTRC “PILECPT” Software;
- FHWA “DRIVEN” Software;
- Pile and Driving Equipment Data Form (06/19/06);
- Deep Soil Boring Request and Field & Laboratory Request Form (1/03/02) (in one sheet);
- Wick Drain Design Sheets; and
- DOTD Testing Procedures Guidelines For Standard Format.

## **Other Technical References:**

The DOTD has used the following as technical references and guidelines in the design and construction monitoring of Geotechnical features for DOTD projects in the past and are recommended for use by the Geotechnical Engineering Consultant community. This list is not all-encompassing and other publications may be used and referenced. Additions will be made as this Document is updated.

- Subsurface Investigations Manual, Publication No. FHWA HI-97-021, Nov. 1997;
- Manual On Subsurface Investigations, Published by AASHTO, 1988;
- AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, PART I – SPECIFICATIONS and PART II – TESTS, current edition;
- ASTM Procedures and Regulations, current edition;
- Earth Retaining Structures, Participants Manual, FHWA-NHI-99-025, 1999;
- Earth Retaining Systems, Geotechnical Engineering Circular No. 2, Publication No. FHWA-SA-96-038, February 1996;
- Design of MSE Walls and Reinforced Slopes, FHWA NHI-10-024 Vol. I and NHI-10-025 Vol. II, 2009;
- Geotechnical Instrumentation Manual, Publication No. FHWA HI-98-034, October 1998;
- Drilled Shafts: Construction Procedures and LRFD Design Methods, Publication No. FHWA-NHI-10-016, May 2010;
- Soils and Foundations Workshop Manual, Publication No. FHWA NHI-00-045, August 2000;
- Geosynthetic Design and Construction Guidelines Manual, Publication No. FHWA HI-95-038, April 1998;
- Ground Improvement Technical Summaries, DP 116, Publication No. FHWA-SA-98-086;
- Design and Construction of Driven Pile Foundations Reference Manual, Volumes 1 & 2, Publications No. FHWA-NHI-05-042 and FHWA-NHI-05-043, 2006;
- Soil Nail Walls, Geotechnical Engineering Circular No. 7, Publication No. FHWA-IF-03-017, March 2003;
- Soil Nailing Field Inspectors Manual, (DP 103), Publication No. FHWA-SA-93-068, April 1994.

## **Traffic Services**

### **Study Objectives**

At the conclusion of this study the consultant should present the preliminary layout and a report for the roundabout at Swan Lake Road @ Winfield Road Extension as defined in EDSM VI.1.1.5.

This is the only intersection (Swan Lake Road @ Winfield Road Extension) that should be evaluated for this study.

### **Task 1.0 - Initial Meeting**

This initial meeting will establish the foundation for continued coordination, develop a mutual understanding of the deliverables, present a schedule, and solidify on the procedures to follow. This meeting is to be scheduled at the beginning of the project. A representative from the consultant firm and the DOTD project manager should be in attendance. Any requests or exchange of information from either party necessary to complete the scope of services. It is the consultant's responsibility to take minutes for this meeting and distribute copies to all attendees. At the completion of each task please submit the deliverables for review to DOTD. The consultant should not move on to the next task until the submitted deliverables have been approved.

**Task 1.0 Initial Meeting Deliverable:** Minutes of meeting which will include a project schedule.

### **Task 2.0 – Review of Data:**

The following data will be needed to complete the study:

- **Daily 24 Projections with vehicle classification:** At the future intersection (East- West Corridor for Winfield Rd. Extension traffic study to be provided)
- **Turning Movement Projections for peak hour AM and PM:** (East- West Corridor for Winfield Rd. Extension traffic study to be provided)
- **Projected Peak Period Counts:** For a 15 year design life and should be done using Sidra Analysis (East- West Corridor for Winfield Rd. Extension traffic study to be provided)

**DOTD Responsibilities:** DOTD will supply the consultant with following information:

- Data contained within the East – West Corridor Traffic Study for the Winfield Road Extension.

### **Task 3.0 - Analyses of Alternatives**

- **Analysis of intersection alternatives:** Consultant shall use Sidra Intersection 5.1 (computer software – Akcelik & Associates) to compare the level of service and the v/c ratio between a roundabout, a signal and a stop-controlled intersection.

- **Conceptual Drawing of Proposed Roundabout:** Consultant should assure appropriate geometry can be obtained for entry and exit using a WB-67 (or larger) design vehicle. The drawing should clearly identify horizontal and vertical geometry, approximate Right of Way, nearby driveways, utilities, sidewalk location and drainage issues.
- **Capacity Analysis Comparison:** Analyze the intersections with stop controlled, signal controlled and a roundabout using Sidra software (AM, Midday, and PM Peaks)

The Consultant will show the results of this comparison in a chart clearly indicating which alternative is best for each category. This will be defined in the report as a range of percent improvement.

### **Task 3.0 Modeling and Alternative Development Deliverables:**

- Electronic analysis of intersection alternatives in Sidra 5.1
- Conceptual Drawing of Proposed Roundabout on 11 x 17 with proposed right of way lines and the proposed roadway geometry
- PDF of Auto Turn runs for each movement of the roundabout
- Capacity Analysis comparison in chart format
- The report in Sidra Intersection that gives the life expectancy of the roundabout shall be attached to the report.

### **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](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 BY THE DOTD**

- Final Environmental Assessment (FONSI): East-West Corridor, Winfield Road Extension, Bossier Parish, Louisiana, S.P. No. 700-08-0130, F.A.P. No. DE-0806(509), November 2010
- Access to Standard Plans
- Access to As-Built Plans
- Traffic Data (ADT)

### **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, Part IV Final Plans

Stage 5 Construction Engineering Services

### **Construction Support**

#### **Shop Drawings**

The Consultant shall be responsible for providing construction related services during the construction phase, which includes, but is not limited to shop drawing reviews and approvals, requests for information (RFIs), change orders, dynamic monitoring, and pile test.

During the progress of preliminary and final design phases of the contract, 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 survey, design and drawings will comply with the requirements of the latest DOTD's Location and Survey Manual, AASHTO LRFD Bridge Design Specifications, the DOTD LRFD Bridge Design Manual (including Technical Memoranda), DOTD Roadway Design Procedures and Details Manual, and the current edition of the DOTD Road and Bridge Specifications. Where it is absolutely necessary to depart from the Location & Survey, Road, and Bridge 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.

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 overall contract time to complete this project is estimated to be **42 months**. The Consultant will proceed with the services upon issuance of the Notice to Proceed from the DOTD.

Included in the overall contract time are review durations for each submittal phase and Joint Plan Review duration. Surveying services beyond the topographic survey may run concurrently with preliminary and final plan phases. Bossier Parish has requested a work stoppage after Preliminary Plans in order to evaluate Funding to ensure a successful completion of final plans.

Stage 3, Part I: Surveying Services: 20 months (600 calendar days)

- 16 months (480 calendar days) – Topographic Survey, occurs prior to Preliminary Plans
- 4 months (120 calendar days) – Property Survey and Preliminary R/W Maps concurrent with Preliminary Plans

Stage 3, Part III: Preliminary Plans: 10 months (300 calendar days)

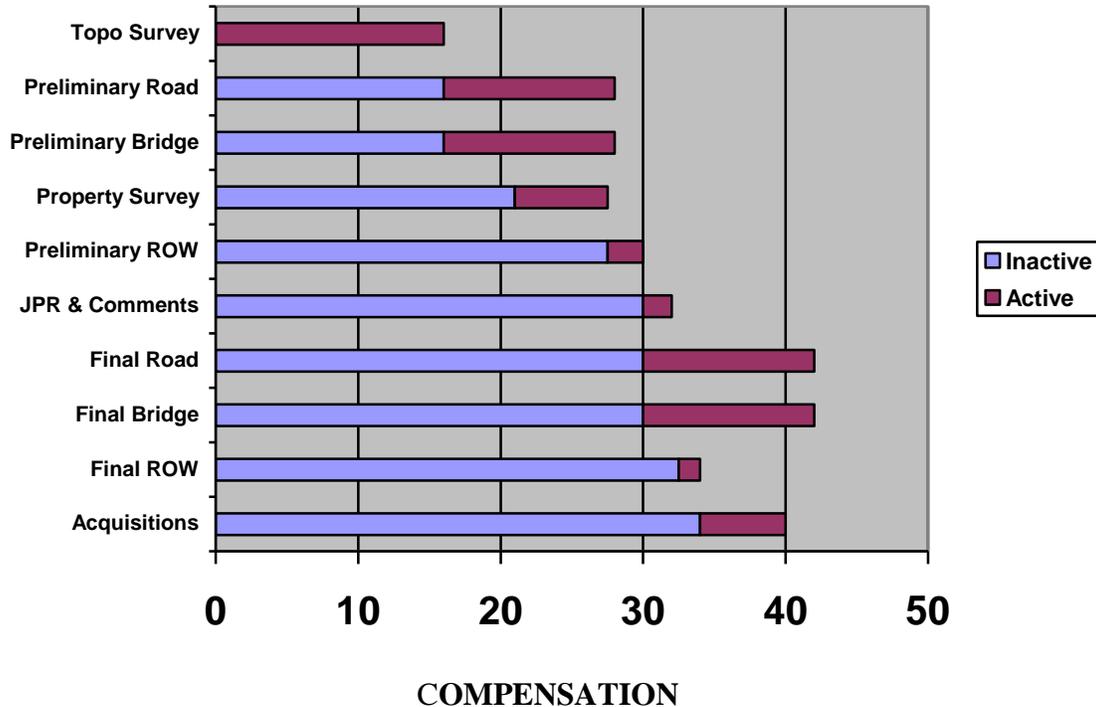
- Preliminary Plan duration includes geotechnical and traffic services

(By Supplemental Agreement)

Stage 3, Part IV: Final Plans: 12 months (365 calendar days)

- Title Research, Updates and Reports concurrent with Final Plans
- Final Plan duration includes geotechnical and traffic services

The delivery schedule for all parts will be negotiated and approved by the Project Manager. Construction Engineering Services will coincide with the execution of the construction contract.



The total compensation to the Consultant for all services rendered in connection with this Contract is estimated to be a non-negotiated lump sum of **\$1,675,433**.

<u>Preliminary Services</u>	\$1,162,516	
• Stage 3, Part I: Surveying Services:	<u>\$491,273</u>	(29%)
○ Topographic Survey	\$301,917	
○ Property Survey	\$ 95,955	
○ ROW Maps (60%)	\$ 56,026	
○ Title	\$ 37,375	
• Stage 3, Part III, Preliminary Plans:	<u>\$483,511</u>	
○ Road Design	\$288,842	(17%)
○ Bridge Design	\$194,669	(12%)
• Stage 3, Geotechnical Services:		

○ Drilling, Sampling & Laboratory Testing	\$176,638	(11%)
• Stage 3, Traffic Services:	\$ 11,094	(1%)
<u>Final Services</u> (By Supplemental Agreement)	\$512,917	
• Stage 3, Part I: Surveying Services:	<u>\$ 48,564</u>	(3%)
○ ROW Maps (Final)	\$ 37,351	
○ Title	\$ 11,213	
• Stage 3, Part IV, Final Plans:	<u>\$400,744</u>	
○ Road Design	\$265,348	(16%)
○ Bridge Design	\$135,396	(8%)
• Stage 3, Geotechnical Services		
○ Engineering	\$ 63,609	(3%)

## 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 or a Responsible Member of the Prime Consultant must be a Registered Professional Civil Engineer in the State of Louisiana.
2. The Prime Consultant must also employ on a full time basis a minimum of two (2) 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 five (5) years of experience in Bridge Design, and one should have at least five (5) years of experience in Road Design.
3. 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(s):

- a. A responsible member with a minimum of five (5) years experience in traffic counting and speed data collection.
- b. One Registered Professional Civil Engineer in the State of Louisiana with five (5) years of Geotechnical experience and a corresponding support staff.
- c. 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.
- d. One Professional Traffic Engineer, (PTOE), registered in the State of Louisiana, with at least five (5) years of traffic analysis experience with signal warrants and signal timing, and a corresponding support staff.

Certifications of Compliance must be submitted with and made part of the Consultants DOTD 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 6;

\*\* The Road Design (RU) performance rating will be used for 33% of this project.

\*\* The Bridge Design (BB) and the Bridge Design – Structural – Simple (BV) performance ratings will be used for 20% of this project.

\*\* The Surveying (SV) and the Location and Survey (LS) performance ratings will be used for 33% of this project.

\*\* The Geotechnical Design (GD) performance rating will be used for 14% of this project.

Complexity Level – (**moderate**)

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 the largest percentage 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. Brent Waguespack
3. Chris Guidry
4. Chris Nickel
5. Harold Cranfield
6. ~~Bob Taylor~~ Nicholas Olivier

### 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 has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website ([www.dotd.louisiana.gov](http://www.dotd.louisiana.gov)), will not be considered for this project.

### **SUBMITTAL REQUIREMENTS**

One original (**stamped original**) and **five** copies of the 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 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.

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 24-102 will be identified with **State Project No. H.003855.5**, and will be submitted **prior to 3:00 p.m. CST on Monday, July 2, 2012**, 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.