ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES JANUARY 20, 2022

CONTRACT NO. 4400023434 CONTRACT FOR US 190: UPRR OVERPASS NEAR OPELOUSAS STATE PROJECT NO. H.000445 F.A.P. NO. H000445 ROUTE US 190 ST. LANDRY PARISH

DBE GOAL = 0\%

Under the authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues this advertisement for consulting firms 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 the Louisiana Professional Engineering and Land Surveying (LAPELS) Board under its rules for firms. If a consultant is not 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 LAPELS must be met at the time the proposal is submitted. Prime consultants must be registered with the Louisiana Secretary of State and the Federal Government, using SAM.gov, prior to contract execution.

One (1) proposal will be selected for the contract solicited per this advertisement. Only one (1) DOTD Form 24-102 proposal is required for this advertisement, and it represents the prime consultant's qualifications and those of any and all sub-consultants proposed to be used for the referenced contract(s). All identifying contract number(s) should be listed in Section 2 of the DOTD Form 24-102.

Any questions concerning this advertisement must be sent in writing to <u>DOTDConsultantAds80@la.gov</u> no less than 48 hours (excluding weekends and holidays) prior to the proposal deadline.

SCOPE OF SERVICES

The general tasks to be performed by the consultant for this contract are described more specifically in Attachment A, which is incorporated herein by reference.

The consultant shall perform the work in accordance with the requirements of this advertisement and the resulting contract. Deliverables shall be in such format as required in Attachment A. The work performed by the consultant shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

MINIMUM PERSONNEL REQUIREMENTS (MPRs)

The requirements set forth in Attachment B must be met at the time the proposal is submitted.

EVALUATION CRITERIA

The criteria to be used by DOTD in evaluating responses for the selection of a consultant to perform these services are listed below:

- 1. firm experience on similar projects, weighting factor of three (3);
- 2. staff experience on similar projects, weighting factor of four (4);
- 3. firm size as related to the project magnitude, weighting factor of three (3);
- 4. past performance on similar DOTD projects, weighting factor of six $(6)^*$;
- 5. current work load with DOTD, weighting factor of five (5);
- 6. approach and methodology, weighting factor of nine (9).

*The consultant is to identify in the table below those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102.

THE FOLLOWING TABLE MUST BE COMPLETED AND INCLUDED IN SECTION 12 OF THE DOTD FORM 24-102 PROPOSAL.

Sub-consultants are allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102*, the name of each firm that is part of the proposal, and the percentage of work in each past performance evaluation discipline to be performed by that firm. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract. (Add rows and columns as needed)

			(The To We wild Cordinate us needed)				
Evaluation	% of	Prime	Firm B	Firm C	Firm D	Firm E	Each
Discipline(s)	Overall						Discipline
210010100(0)							must total
	Contract						to 100%
							100%
							100%
							100%
Identify the percentage of work for the overall contract to be performed by the prime							
consultant and each sub-consultant.							
Percent of Contract	100%						

*The past performance evaluation disciplines are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other.

If sub-consultants are allowed, the prime consultant can perform less than 50% of the work, but none of the sub-consultants can perform a larger percentage of the overall contract than the prime consultant.

Proposals will be evaluated as set forth in the "Evaluation Criteria" section of this advertisement. 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 one (1) through five (5). The rating will then be multiplied by the corresponding weighting factor. The rating in each category will then be added to arrive at the proposal's final rating.

DOTD's Project Evaluation Team (PET) will be responsible for performing the above described evaluation, and will present a shortlist of the three (3) (if three are qualified), highest rated consultants to the Secretary of DOTD. The Secretary will make the final selection.

COMPLIANCE WITH SUPPLEMENTAL ETHICS REQUIREMENTS

DOTD has established supplemental ethics requirements applicable to consultants and PET members. These requirements are found in the "Supplemental Ethics Requirements" article of the sample contract linked to this advertisement, which are incorporated herein by reference. Any firm that is found to have violated these requirements may not be considered for this selection.

By submission of a proposal to perform services pursuant to this advertisement, the consultant agrees to comply with DOTD's Supplemental Ethics Requirements.

RULES OF CONTACT UPON ADVERTISEMENT

DOTD is the single source of information regarding the contract selection. Any official correspondence will be in writing, and any official information regarding the contract will be disseminated by DOTD's designated representative via the DOTD website. The following rules of contact will apply during the contract selection process, commencing on the advertisement posting date and ceasing at the time of final contract selection. Contact includes face-to-face communication, the use of a telephone, facsimile, electronic mail (email), or formal or informal written communications with DOTD. Any contact determined to be improper, at the sole discretion of DOTD, may result in the rejection of the proposal (i.e., DOTD Form 24-102).

Consultants and consultant organizations shall correspond with DOTD regarding this advertisement only through the email address designated herein; <u>DOTDConsultantAds80@la.gov</u> and during DOTD sponsored one-on-one meetings.

No consultant, or any other party on behalf of a consultant, shall contact any DOTD employee, other than as specified herein. This prohibition includes, but is not limited to, the contacting of: department, office, or section heads, project managers, members of the evaluation teams, and any official who may participate in the decision to award the contract resulting from this advertisement.

DOTD will not be responsible for any information or exchange that occurs outside the official process specified above.

By submission of a proposal to perform services pursuant to this advertisement, the consultant agrees to the communication protocol herein.

PROJECT TIME

The overall time for the completion of the scope of services is estimated to be **1000 days**.

COMPENSATION

The estimated compensation payable to the consultant for **initial** services rendered in connection with this contract shall be **\$1,016,026**. This estimate will be used for grading purposes only. Actual compensation will be determined by DOTD based on work hours negotiated between DOTD and the selected consultant. Within fifteen (15) calendar days of notification of selection, a kick-off meeting will be held with the selected consultant and appropriate DOTD personnel. The selected consultant will be required to submit a work hour proposal within thirty (30) calendar days following the notification of selection. All negotiations must be completed within the timeframe set forth in the Consultant Contract Services Manual.

Payment will be made based on Lump Sum.

DIRECT EXPENSES

To the extent that the consultant is allowed to claim reimbursement for direct expenses, all direct expense items that are not paid for in the firm's indirect cost rate and are needed and will be consumed during the life of the contract must be identified by the consultant during contract development. Standard equipment or resources to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses.

The consultant should own most of the equipment required to provide the work and services. The cost of this equipment should be included in the consultant's indirect cost rate. Equipment may be considered "specialized" if it cannot be considered standard equipment for that particular consultant's normal operating business needs. If a consultant believes special equipment is needed for the contract, the consultant must inquire through the Question and Answer process, as provided herein, whether the identified item will be considered specialized equipment for the individual contract.

All travel related expenses will be compensated under direct expenses, and will be in accordance with the most current Louisiana Office of State Travel regulations as promulgated in the Louisiana Administrative Code under the caption "PPM No. 49", with the exception that compensation for vehicle usage will be based on actual miles traveled directly and exclusively related to project needs. Vehicle rental rates will require prior approval from the PM.

QUALITY ASSURANCE/QUALITY CONTROL

The Scope of Services provided in Attachment A includes design of one (1) or more bridges and/or component parts thereof. The prime consultant shall submit a bridge design QA/QC plan document specifically developed for this contract as part of the DOTD Form 24-102. The QA/QC plan document must comply with the minimum requirements in the DOTD Bridge Design Section Policy for QA/QC as stated in Part I, Chapter 3 of the DOTD Bridge Design & Evaluation Manual (BDEM). The grading instructions, the rating matrix, and the grading sheet for the QA/QC plan document are included in Appendix G of the BDEM Part I, Chapter 3 – Policy for QA/QC. The QA/QC plan document shall be prepared to address all evaluation criteria included in the rating matrix. The QA/QC plan document must be implemented for all bridge design activities in both design phase and construction support phase of the contract. The prime consultant is fully responsible for QA/QC of their work as well as the work of all sub-consultants. All contract proposals must include a QA/QC certification that the proposals meet the requirements of the QA/QC plan document. Attach the QA/QC plan in Section 21 of the DOTD Form 24-102.

If Attachment A includes specific QA/QC requirements that contradict those set forth above, the requirements in Attachment A control.

TRAFFIC ENGINEERING PROCESS AND REPORT TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to high quality traffic engineering reports, a traffic engineering training course must be taken by traffic engineering PEs and EIs in order to be eligible to work on DOTD projects. When traffic is included as a discipline on which past performance is evaluated, for consultants performing traffic engineering services (i.e., traffic analysis throughout all DOTD project stages and/or QC of traffic analysis), appropriate personnel must successfully complete the three (3) modules of the Traffic Engineering Process and Report Course offered by Louisiana Transportation Research Center (LTRC). This Course must be completed no later than the time the proposal is submitted. **Copies of training certificates are to be included in Section 20 of the proposal.** It will be the prime consultant's responsibility to ensure their staff and subconsultants complete the training. Copies of training records may be obtained from the LTRC website <u>https://registration.ltrc.lsu.edu/login</u>.

WORK ZONE TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to work zone safety, required work zone training courses must now be taken every four (4) years in order for personnel to remain eligible to work on DOTD projects. For consultants performing preconstruction services (*e.g.*, design, survey, subsurface utility, geotechnical, traffic, bridge inspection, environmental services), appropriate personnel must successfully complete these courses. In general, the person in responsible charge of traffic control plans shall be required to have Traffic Control Supervisor training. For preconstruction field services performed within the clear zone, at least one (1) 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 contract who have completed the appropriate work zone training courses. All preconstruction work zone training 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.

In addition to the above requirements, if the Scope of Services set forth in Attachment A includes Construction Engineering and Inspection (CE&I), the following training requirements shall be met **at the time the proposal is submitted**:

Field Engineers:	Traffic Control Technician Traffic Control Supervisor Flagger
Field 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
Other Field Personnel*:	Traffic Control Technician Flagger

* excluding Asphalt Plant Inspector, Paint Managers, and Paint Inspectors

Approved courses are offered by ATSSA and AGC. Substitutes for these courses must be approved by the DOTD Work Zone Task Force. For more information, please contact DOTD HQ Construction at 225-379-1584. Specific training course requirements are:

Flagger:	Successful completion every four (4) 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 (4) years of a work zone traffic control technician course approved the			

- zone traffic control technician course approved the Department. After initial successful completion, it is not necessary to retake this course every four (4) years if Traffic Control Supervisor training is completed every four (4) 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 one (1)-day TCS refresher course or retake the original two (2)-day TCS course every four (4) years.

ATSSA contact information: (877) 642-4637

REFERENCES

All services and documents will meet the standard requirements as to format and content of DOTD and will be prepared in accordance with the latest applicable editions, supplements, and revisions of the following:

- 1. AASHTO Standards The American Association of State Highway Transportation Officials https://www.transportation.org/
- 2. AASHTO A Policy on Geometric Design of Highways and Streets <u>https://bookstore.transportation.org/collection_detail.aspx?ID=110</u>
- 3. ASTM Standards <u>https://www.astm.org/BOOKSTORE/BOS/index.html</u>
- 4. DOTD Bridge Design and Evaluation Manual (BDEM) <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/BD</u> <u>EM.aspx</u>
- 5. DOTD Complete Streets <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complet</u> <u>e_Streets/Pages/default.aspx</u>
- DOTD Construction Contract Administration Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.</u> <u>aspx</u>
- 7. DOTD Consultant Contract Services Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20M</u> <u>anual%20rev%20Dec%202020.pdf</u>
- 8. DOTD Hydraulics Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/ Documents/Hydraulics%20Manual.pdf
- 9. DOTD Location and Survey Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location_and_Survey_Manual.pdf</u>
- 10. DOTD Addendum "A" to the Location & Survey Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf</u>
- 11. DOTD Louisiana Standard Specifications for Roads and Bridges http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/P ages/Standard%20Specifications.aspx
- 12. DOTD Materials Sampling Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Men u_MSM.aspx
- 13. DOTD Minimum Design Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda /Minimum%20Design%20Guidelines.pdf

- 14. DOTD Off-System Highway Bridge Program Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Manuals/ Other%20Manuals%20-%20Guidelines/2019%20Federal%20Aid%20Off-System%20High way%20Bridge%20Program%20Guidelines.pdf
- 15. DOTD Roadway Design Procedures and Details Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road</u> <u>-Design-Manual.aspx</u>
- 16. DOTD Stage 1 Planning/Environmental Manual of Standard Practice <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stag</u> <u>e_1.aspx</u>
- 17. DOTD Testing Procedures Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Men</u> <u>u_TPM.aspx</u>
- 18. DOTD Traffic Engineering Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc_%20Documents/Traffic%20Engineering%20Manual.pdf</u>
- 19. DOTD Traffic Engineering Process and Report <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Man</u> <u>ualsPublications/Pages/TEPR.aspx</u>
- 20. DOTD Traffic Signal Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic_ic%20Control/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf</u>
- 21. e-CFR Electronic Code of Federal Regulations (all applicable) <u>https://ecfr.io/</u>
- 22. FHWA Bridge Inspector's Reference Manual (BIRM) website: <u>https://www.fhwa.dot.gov/bridge/nbis.cfm</u> manual: <u>https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf</u>
- 23. FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) <u>http://mutcd.fhwa.dot.gov/</u>
- 24. National Electrical Safety Code (NESC) https://standards.ieee.org/products-services/nesc/index.html
- 25. NFPA 70 National Electrical Code (NEC) <u>https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70</u>
- 26. NEPA National Environmental Policy Act <u>https://www.epa.gov/nepa</u>

CONTRACT EXECUTION REQUIREMENTS

The selected consultant will be required to execute the contract within ten (10) days after receipt of the contract.

A sample of the contract provisions can be found at the following link: <u>http://wwwsp.dotd.la.gov</u>/<u>Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx</u>.

REVISIONS TO THE ADVERTISEMENT

DOTD reserves the right to revise any part of the advertisement by issuing addenda to the advertisement at any time. Issuance of this advertisement 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 DOTD Form 24-102s submitted, and/or cancel this consultant services procurement if it is determined to be in DOTD's best interest. All materials submitted in response to this advertisement become the property of DOTD, and selection or rejection of a proposal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the advertisement.

CLARIFICATIONS

DOTD reserves the right to request clarification of ambiguities or apparent inconsistencies found within any proposal, if it is determined to be in DOTD's best interest.

PROPOSAL REQUIREMENTS

The consultant's proposal for this advertisement must be submitted by email to <u>DOTDConsultantAds80@la.gov</u> using the most current version of the DOTD Form 24-102 (available at <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Manuals_Forms_Agreements.aspx</u>). Hard copies of the consultant's proposal are not required. All proposals must be in accordance with the requirements of this advertisement, and the Consultant Contract Services Manual. Unless otherwise stated in this advertisement, copies of licenses and certificates are not required to be submitted with the proposal.

If more than one (1) contract is to be selected based on this advertisement, no prime consultant is allowed to be a sub-consultant on any other consultant's 24-102. If a prime consultant is submitted as a sub-consultant on another consultant's 24-102, its proposal as a prime consultant may be deemed non-responsive.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

DOTD employees may not submit a proposal, nor be included as part of a consultant's proposal.

Contract and/or part-time employees are allowed. Such employees should be shown in Section 14 of the DOTD Form 24-102 with an asterisk denoting their employment status.

The DOTD Form 24-102 should be identified with contract number 4400023434 and/or State Project No. H.000445, and must be received by DOTD via email no later than 3:00 p.m. CST on Thursday, February 10, 2022.

ATTACHMENT A – SCOPE OF SERVICES

The project time is **typical**. The route classification is **NHS**.

The home office indirect cost rate shall be applicable to all services except as otherwise designated hereafter.

The Consultant shall provide engineering and related services to facilitate the replacement of the following structures in St. Landry Parish:

Project Number	Recall Number	Latitude	Longitude	Existing Structure Type	Route	Crossing	Historic Category
H.000445	007490	30.535320	-92.059300	CONIBM	US 190	MO PACIFIC RR	Non- Priority
	007500	30.536010	-92.058500	CONIBM	US 190	MO PACIFIC RR	Non- Priority
	007530	30.545740	-92.010700	CONIBM	US 190	LITTLE TECHE BAYOU	Non- Priority
	007540	30.545990	-92.010500	CONIBM	US 190	LITTLE TECH BAYOU	Non- Priority

SITE EXPECTATIONS AND ASSUMPTIONS

These locations have been selected based on several specific features. If during project development the proposed work falls outside the following conditions, stop work and notify the project manager immediately:

- Environmental investigation will result in a Categorical Exclusion (CE) or an Environmental Assessment (EA).
- Transportation Management Plan is a Level 2.
- New substructures will be driven pile or drilled shaft supported bridges.
- If adequate space is not available for a slope, permanent earth retaining structures such as MSE walls, cantilever retaining walls, sheet piles, etc. will be required.

PROJECT SCHEDULE

The 100% Final Plan date will be established by the Project Manager. Before beginning work on the items listed below, submit a project schedule for the major work items listed below for the projects on this contract. Additionally, before beginning preliminary plans, submit a project

schedule containing at a minimum, all dates for deliverables in the preliminary and final plans section.

TOPOGRAPHIC SURVEY SERVICES

A topographic survey shall be required along a portion of US 190 at the Little Bayou Teche bridge sites (Recall 007530 and 007540). A complete topographic survey including all utilities with depths and all drainage is required, along with finish floor elevations of all buildings that fall in the survey limits. This project shall be completed in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation procedures and also meet the designer's requirements.

A topographic survey was already completed for the railroad overpass bridges (H.000445). These files will be provided by the Department. The survey for the Little Bayou Teche bridge sites should utilize the same control network as the existing survey.

The survey shall begin and end approximately 1200 feet beyond either end of the subject structures and extend down all side streets within the survey limits for a distance of 300 feet. The width of the Survey and DTM shall extend from apparent right of way to apparent right of way. The project alignments shall be established using the existing centerline of roads. See attached survey sketch for detailed survey limits.

Permission of land owners shall be acquired by the Consultant before entering any property associated with this description.

All work shall be done in the English units of measurement, and no drainage map is required.

Deliverables:

Static GPS / RTK for Primary Control

- 1) GPS raw data files
- 2) GPS rinex files
- 3) NGS OPUS solution printouts
- 4) GPS point description document
- 5) GPS control sketch

Traverse for Primary Control

1) Traverse sketch

Levels

- 1) Levels field book (3 wire forward, single wire return)
- 2) BM tabulation form
- 3) TBM tabulation form
- 4) Documentation on vertical control point (NGS benchmark) held for levels.

Utilities

- 1) Letter to DOTD Utility Relocation Engineer listing all Utility Companies, Utility Company address and Utility Company contact person
- 2) Letter to DOTD Utility Relocation Engineer listing La. One call contacts and ticket numbers.

Survey Data Collector File Types

The following data collector file types are supported by Bentley Inroads Survey, version 8.5 or later version, and may be acceptable.

SDMS (.cal) Sokkia SDR (.sdr) SMI Raw (.raw) LISCAD GSI (.gsi) Wild GRE (.gre) AASHTO SDMS (.sdm) Zeiss REC500 (.zss) Geodimeter (.raw) Topcon FC4 (.fc4) Nikon (.mwd) TDS (.rw5) TDS RAW (.raw) Trimble DC (.dc)

Location and Survey is familiar with only the Sokkia SDR and Trimble DC data collector file types and cannot verify which of the listed data types work correctly and/or contain the required information.

Survey Feature Codes and Attributes Required

Refer to the Location and Survey Feature Code Guide Book (revised 01-30-09) for a listing and description of survey feature codes and attributes required for each code.

Survey Data Collector File Required Information

Any data collector file type submitted for total station surveys should contain the following information;

1) primary control points

- primary control point number
- primary control point x, y & z coordinates
- primary control point DOTD feature code
- primary control point DOTD attributes *

- 2) instrument setup
 - setup point number
 - setup point x, y & z coordinates
 - setup point DOTD feature code
 - setup point DOTD attributes *
 - instrument height

3) backsite observation

- backsite point number
- backsite point x, y & z coordinates
- backsite point DOTD feature code
- backsite point DOTD attributes *
- backsite horizontal angle
- backsite vertical angle
- backsite slope distance
- backsite target height
- backsite tolerance errors
- 4) foresite observation
 - foresite point number
 - foresite point DOTD feature code
 - foresite point DOTD attributes *
 - foresite horizontal angle
 - foresite vertical angle
 - foresite slope distance
 - foresite target height

5) prism constant correction (should be applied at the total station)

6) atmospheric corrections (should be applied at the total station)

* The Consultant will be responsible to input the required attribute information into the final edited and corrected survey data file (.FWD) if the acceptable data collector file type does not support attributes. A field book should be used to record point number and attribute and delivered with the survey deliverables.

Final Edited and Corrected Survey Data File (.FWD)

The final edited and corrected survey data file must be a Bentley Inroads Survey, version 8.5 or later version, .FWD file with all errors and erroneous data removed. This .FWD file, when opened in Microstation, version 8.5 or later version, with Bentley Inroads Survey, must generate correct 3d plan graphics with all required DOTD attribute information included.

Final 3D CADD Filfe (.DGN)

The final 3d cadd file must be a Microstation, version 8.5 or later version, 3d, .DGN file, generated by Bentley Inroads Survey, from the final .FWD file described above. All DOTD cells, colors and line styles must be utilized. All attribute information must be attached to all cells and lines of the survey as tags. DOTD level organization must be utilized. The survey alignment must be merged from the final 2d cadd file described below.

Final 2D CADD File (.DGN)

The final 2d cadd file must be a Microstation, version 8.5, 2d, .DGN file, generated with Bentley Inroads Survey software containing the survey alignment.

Final Digital Terrain Model File (.DTM)

The final digital terrain model file must be a Bentley Inroads, version 8.5 or later version, .DTM file, generated by Bentley Inroads Survey, from the final .FWD file described above and must containing all points and breaklines of the surveyed surface. The perimeter of the DTM must be clean and contain no erroneous information.

Final Geometry File (.ALG)

The final geometry file must be a Bentley Inroads, version 8.5 or later version, .ALG file, generated by Bentley Inroads Survey, from the final .FWD file described above and must contain the complete geometry of every point and line in the survey and survey alignment, along with all descriptions and attributes of every point and line.

Final Geometry ASCII File (TXT)

The final geometry ASCII file must contain all points of the survey and survey alignment and must be a comma delimited file containing the following information in the following format;

Point number, northing, easting, elevation, description, attribute information

- 1) Location Report
- 2) Survey Activity and Progress Report
- 3) Property Owners Permission of Entry Form
- 4) Storage Tank Report Form
- 5) Storage Tank/Hazardous Waste Site Information Form

Surveyors Certification

It is the responsibility of your firm to provide Location and Survey with a survey that is accurate, correct, and conforms to all applicable minimum standards for engineering surveys. The survey deliverables must meet the "*LADOTD Software and deliverable Standards for Electronic plans*" as describe herein.

The transmittal letter shall be signed and sealed, certifying correctness of survey and deliverable standards.

Suggested transmittal letter wording:

Transmitted herewith is the completed topographic survey for the captioned project. This field survey is certified to have been performed within acceptable standards of practice for engineering surveys, has been reviewed, checked, and is considered to be correct within those standards. This transmittal is in accordance with LADOTD software and Deliverable Standards for Electronic Plans and includes the following:

A transmittal letter from the design engineer stating that the topographic survey has been reviewed and is acceptable for design is also required.

SITE VISIT AND DOCUMENT REVIEW

Review the existing alignment study, as-built plans, existing load rating reports, inspection reports, existing R/W, traffic data, parish maps, scaled aerial photos of site, DOTD roadway classification, Stage 0 Structural Site Surveys, and any other relevant and available information that would aid in providing the required submittals.

Conduct a field visit to the bridge sites, assess the site conditions (including environmental impacts, railroad impacts, utility relocation, r/w impacts, permit issues, possible roadway detour alternatives and length of detour, existing approach roadway section and geometry, etc.), and have a reasonable understanding of the current health and serviceability of the existing structures. Determine how the existing conditions might cause constructability issues and affect possible construction alternatives, such as phased bridge construction.

HYDRAULIC ANALYSIS AND DESIGN SERVICES

The Consultant shall evaluate each site and provide a recommended drainage alternate type and applicable dimensions. DOTD will review the proposed drainage alternate and accept or reject the proposal. Upon acceptance, the Consultant shall perform the hydraulic design of the drainage structure in accordance with the DOTD Hydraulics manual and any other applicable DOTD requirements. All hydraulic designs will be reviewed and approved by DOTD before completing preliminary plans.

PRELIMINARY PLAN DEVELOPMENT SERVICES

The Consultant shall develop preliminary plans and all associated forms and reports. The Consultant shall provide preliminary plans for the project including, but not limited to, the following:

- Title Sheet
- Typical Section and Details
- Summary of Estimated Quantities
- Miscellaneous Details & General Notes

- Temporary Construction Signs, Suggested Sequence of Construction/Detour Route Signing
- Cross-Sections (Earthwork)
- Geometric Details
- Plan/Profile Sheets
- Construction Cost Estimate
- Bridge Sheets as outlined in the DOTD Bridge Design and Evaluation Manual

Deliverables

- Proposed Plan Development Schedule
- Bridge Design Criteria
- 30% Preliminary Plans
- 60% Preliminary Plans
- 90% Preliminary Plans
- Plan-in-Hand Meeting Attendance
- 100% Preliminary Plans
- Transportation Management Plan Checklist
- Plan Constructability Review Form
- Preliminary Design Report
- Design Waivers or Design Exceptions (if required)
- Preliminary Construction Cost Estimate

FINAL PLAN DEVELOPMENT SERVICES

The Consultant shall provide final plans for the project including, but not limited to, the following:

- Title Sheet
- Typical Section and Details
- Summary Sheets
- Summary of Estimated Quantities
- Miscellaneous Details & General Notes
- Temporary Erosion Control
- Temporary Construction Signs, Suggested Sequence of Construction/Detour Route Signing
- Cross-Sections (Earthwork)
- Geometric Details
- Plan/Prof Sheets
- Drainage Plan/Profile Sheets
- Existing Drainage Map
- Design Drainage Map
- Summary of Drainage Structures
- Pavement Marking Sheets
- Construction Cost Estimate
- Bridge Sheets as outlined in the LA DOTD Bridge Design and Evaluation Manual

The Consultant shall develop final plans and all associated forms and reports for each project outlined above.

Deliverables:

- 30% Final Plans
- 60% Final Plans
- JPR Meeting Attendance
- 90% Final Plans
- Final Plan Review Meeting Attendance
- 98% Final Plans for plan quality unit
- Plan development required documentation
- 100% Final Plans
- Final Transportation Management Plan Checklist
- Final Bridge Design Criteria
- Final Design Report
- Final Design Waivers or Design Exceptions (if required)
- Final Construction Cost Estimate
- As-Design Rating Report and Summary Sheet
- Calculation Book
- Design and Rating Software files

Additional Comments:

Electronic files will be in MicroStation and Inroads formats. Plans shall be CADD Conformed and submitted with the 100% Preliminary Plan and 100% Final Plan Submittals.

The Consultant shall be required to provide the DOTD Project Manager with Meeting Minutes for all meetings (including Plan in Hand and Final Plan Review) conducted with DOTD and/or Agency Stakeholders no later than three (3) business days.

The Consultant shall keep a log of all Agency provided comments and shall provide DOTD with a disposition of comments response following each plan submittal.

The Consultant shall provide the Department 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.

The Consultant shall ensure that a Preliminary and Final QA/QC Checklist is submitted at the completion of Preliminary and Final Plans.

If additional survey is required at the UPRR bridge sites (Recall Nos. 007490 and 007500) or if updates are required, this will be addressed by Supplemental Agreement.

ADDITIONAL SERVICES

Construction Support, if required, shall be established by a Supplemental Agreement and compensation will be based on specific rates of compensation.

SERVICES TO BE PERFORMED/ITEMS TO BE PROVIDED BY DOTD

If available, DOTD will provide the following information as applicable:

- Access to As-built plans if available
- Standard Plans and Special Details
- Access to Latest inspection reports
- Access to Latest rating reports
- Traffic and Accident Data
- Pavement Design
- Soil borings
- Geotechnical Design
- Access to General Files for viewing available plans, details, and records

ELECTRONIC DELIVERABLES

Consultant hereby agrees to produce electronic deliverables in conformance with DOTD Software and Deliverable Standards for Electronic Plans document in effect as of the effective date of the most recent contract action or modification, unless exempted in writing by the Project Manager. Consultant is also responsible for ensuring that sub-consultants submit their electronic deliverables in conformance with the same standards. DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. 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 Consultant to purchase additional software. Prior to proceeding with plan development, Consultant shall contact the Project Manager for any special instructions regarding project-specific requirements.

In the event that any Digital Plan Delivery Standard conflicts with written documentation, including DOTD plan-development Manuals, the Digital Plan Delivery Standard governs. Consultant is responsible for contacting the Project Manager should questions arise.

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 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.







ATTACHMENT B – MINIMUM PERSONNEL REQUIREMENTS (MPRs)

The following requirements must be met at the time the proposal is submitted:

- 1. At least one (1) principal of the prime consultant shall be a registered professional engineer in the state of Louisiana.
- 2. At least one (1) principal or other responsible member of the prime consultant shall be currently registered in the state of Louisiana as a professional engineer in civil engineering.
- 3. At least one (1) principal or responsible member of the prime consultant shall be a professional civil engineer, registered in the state of Louisiana, and shall have a minimum of ten (10) years of experience in responsible charge of structural design involving bridge structures.
- 4. At least one (1) professional land surveyor, registered in the state of Louisiana, shall have a minimum of five (5) years of experience in conducting topographic surveys.
- 5. At least one (1) professional land surveyor, registered in the state of Louisiana, shall have a minimum of five (5) years of experience in conducting property surveys and preparing Right of Way Maps for DOTD.
- 6. At least one (1) professional civil engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience in roadway design.

<u>MPRS ARE TO BE MET BY SEPARATE INDIVIDUALS OF THE PRIME</u> <u>CONSULTANT, UNLESS STATED OTHERWISE BELOW.</u>

MPR Nos. 1 through 3 may be met by the same person.

MPR Nos. 4 and 5 may be met by the same person.

MPR Nos. 4 through 6 may be satisfied through the use of a sub-consultant(s).

NOTE: WHEN SATISFYING A MINIMUM PERSONNEL REQUIREMENT, PLEASE ENSURE THE RÉSUMÉ REFLECTS REQUIRED EXPERIENCE AS REQUESTED.

• Please note the number of MPRs are minimal; however, all relevant personnel necessary to perform the Scope of Services must be identified in Section 14 of the DOTD Form 24-102 and their resumes included in Section 16 of the DOTD Form 24-102.