ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES
JANUARY 17, 2024

CONTRACT NO. 4400028585
STATE PROJECT NO. H.014516.5
FEDERAL AID PROJECT NO. H014516
MILLS AVE & REES ST INTERSECTION IMP
ROUTE: LA 93 & LA 328
ST. MARTIN PARISH

NO DBE GOAL

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. **USE THE DOTD FORM 24-102, DATED JANUARY 1, 2023, PROVIDED WITH THE ADVERTISEMENT.**

Any questions concerning this advertisement must be sent in writing to DOTDConsultantAds80@la.gov 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)

Past Performance Evaluation Discipline(s)	% of Overall Contract	Prime	Firm B	Firm C	Firm D	Firm E	Each Discipline must total 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/or Other (please specify).

If sub-consultants are used, the prime consultant must perform greater than 50% of the work for the overall contract.

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; DOTDConsultantAds80@la.gov 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 Initial Scope of Services is estimated to be **270 days**.

COMPENSATION

The compensation type for this contract is non-negotiated lump sum.

Consultant agrees to accept a non-negotiated lump sum of **$132,255** as full compensation for Initial Services.

Additional Services, if required, shall be authorized by Supplemental Agreement.

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. The acquisition or rental of 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 (e.g., vehicles for construction engineering and inspection (CE&I) inspectors).

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.

CYBERSECURITY TRAINING

In accordance with La. R.S. 42:1267(B)(3) and the State of Louisiana's Information Security Policy, if the Consultant, any of its employees, agents, or sub-consultants will have access to State government information technology assets, the Consultant's employees, agents, or sub-consultants with such access must complete cybersecurity training annually, and the Consultant must present evidence of such compliance annually and upon request. The Consultant may use the cybersecurity training course offered by the Louisiana Department of State Civil Service without additional cost or may use any alternate course approved in writing by the Office of Technology Services.

For purposes of this Section, "access to State government information technology assets," means the possession of credentials, equipment, or authorization to access the internal workings of State information technology systems or networks. Examples would include but not be limited to State-issued laptops, VPN credentials to credentials to access the State network, badging to access the State's telecommunications closets or systems, or permissions to maintain or modify IT systems used by the State. Final determination of scope inclusions or exclusions relative to access to State government information technology assets will be made by the Office of Technology Services.

QUALITY ASSURANCE/QUALITY CONTROL

DOTD requires the selected consultant and all sub-consultants to develop a Quality Assurance/Quality Control (QA/QC) program in order to provide a mechanism by which all deliverables will be subject to a systematic and consistent review. The selected consultant shall address in its plan the review of all sub-consultant work and deliverables. **Only the selected consultant must submit their QA/QC plan to the DOTD PM within 10 business days of the award notification to the consultant (do not include QA/QC plan in the DOTD Form 24-102).** Consultants must ensure quality and adhere to established DOTD policies, procedures, standards and guidelines in the preparation and review of all deliverables. DOTD may provide limited input and technical assistance to the consultant. Any deliverables to be transmitted by the consultant shall be transmitted with a DOTD Quality Assurance/Quality Control Checklist, and a certification that the deliverables meet DOTD's quality standards.

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 or show proof of registration for the Course from the LTRC's Registration site. **Copies of training certificates or proof of registration are to be included in**

Section 20 of the proposal." It will be the prime consultant's responsibility to ensure their staff and sub-consultants complete the training. Copies of training records may be obtained from the LTRC website https://registration.ltrc.lsu.edu/login.

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 (Section 14) 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 by 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

*****ALL WORK ZONE TRAINING CERTIFICATIONS MUST BE ACTIVE*****

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 – https://bookstore.transportation.org/collection_detail.aspx?ID=110
3. ASTM Standards – https://www.astm.org/BOOKSTORE/BOS/index.html
4. CyberSecurity Training – https://forms.gle/deZGAo5hUMWeSG4P6
5. DOTD – Bridge Design and Evaluation Manual (BDEM) – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/BDEM.aspx
6. DOTD – Complete Streets – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CompleteStreets/Pages/default.aspx
7. DOTD – Construction Contract Administration Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.aspx

8. DOTD – Consultant Contract Services Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20Manual%20rev%20Dec%202020.pdf
9. DOTD – Hydraulics Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/Documents/Hydraulics%20Manual.pdf
10. DOTD – Location and Survey Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals%20and%20Forms/Location_and_Survey_Manual.pdf
11. DOTD – Addendum "A" to the Location & Survey Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals%20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf
12. DOTD – Louisiana Standard Specifications for Roads and Bridges – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Pages/Standard%20Specifications.aspx
13. DOTD – Materials Sampling Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_MSM.aspx
14. DOTD – Minimum Design Guidelines – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda/Minimum%20Design%20Guidelines.pdf
15. 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%20Highway%20Bridge%20Program%20Guidelines.pdf
16. DOTD – Roadway Design Procedures and Details Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx
17. DOTD – Stage 1 Planning/Environmental Manual of Standard Practice – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stage_1.aspx
18. DOTD – Testing Procedures Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_TPM.aspx
19. DOTD – Traffic Engineering Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf
20. DOTD – Traffic Engineering Process and Report – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/ManualsPublications/Pages/TEPR.aspx

21. DOTD – Traffic Signal Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic%20Control/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf
22. e-CFR – Electronic Code of Federal Regulations (all applicable) – https://ecfr.io/
23. FHWA – Bridge Inspector's Reference Manual (BIRM) – website: https://www.fhwa.dot.gov/bridge/nbis.cfm manual: https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf
24. FHWA – Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) – http://mutcd.fhwa.dot.gov/
25. National Electrical Safety Code (NESC) – https://standards.ieee.org/products-services/nesc/index.html
26. NFPA 70 – National Electrical Code (NEC) – https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70
27. NEPA – National Environmental Policy Act – https://www.epa.gov/nepa

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: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx.

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 DOTDConsultantAds80@la.gov. **USE THE DOTD FORM 24-102, DATED JANUARY 1, 2023, PROVIDED WITH THE ADVERTISEMENT.** 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 **PDF file shall be labeled "CONTRACT NO. 4400028585, Consultant's name",** and **must be received no later than 3:00 p.m. Central Time by DOTDConsultantAds80@la.gov via email** on **Wednesday, February 14, 2024**. The PDF file must be attached in the email or as a hyperlink in the email or as an email through third-party file transfer websites such as Dropbox or WeTransfer.

Please note that delivery failure may occur on email files exceeding 30MB uncompressed. In addition, all emails are scanned for cybersecurity threats prior to delivery to DOTDConsultantAds80@la.gov; **therefore, allow sufficient time** for this process to take place when submitting your proposal.

ATTACHMENT A – SCOPE OF SERVICES

The project time is typical.

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

The purpose of this project is to improve the intersection at Mills Avenue (LA 94) and Rees Street (LA 328) in anticipation of extending Mills Avenue to Doyle Melancon Extension, in Breaux Bridge, Louisiana.

The Mills Avenue extension will be done as a separate project by the City of Breaux Bridge.

The services to be performed by the Consultant under this Contract are described more specifically as follows:

INITIAL SERVICES

Traffic Study

The Consultant shall coordinate and perform a traffic study to analyze the effects of the proposed roadway extension along LA 94 (E Mills Avenue) from LA 328 to Parish Road 214 (Doyle Melancon Extension). Concepts shall be developed in sufficient detail to determine geometric feasibility of the proposed improvements and anticipated right of way (ROW) needs.

The traffic analysis study shall be performed in accordance with all DOTD guidelines and policies, including but not limited to the Traffic Engineering Process and Report guidelines, Complete Streets Policy, Engineering Directives and Standards Manual (EDSM), Highway Safety Manual (HSM), DOTD's Design Guidelines and other relevant design manuals and guidelines that can be found on DOTD's website (www.dotd.la.gov).

Project Research and Data

The Consultant shall perform general research, which may include obtaining information about the need and origin of the project, existing conceptual geometric layouts (if any), transportation plan of the area, and other important issues that may currently exist. The Consultant shall research and obtain copies of all readily available safety data, documents, (crash data, safety reports, assessments, evaluations, etc.), and as-built highway plans for the project corridor and surrounding areas. Findings and impacts identified in these documents associated with the corridor and adjacent roadways shall be incorporated in the study.

1. Project Initiation Meeting

The Consultant shall coordinate a project initiation meeting for this project at the DOTD District office in Lafayette, LA. The Consultant shall be responsible for the coordination of the meeting logistics, including the preparation of an invitee list for Entity and DOTD approval prior to the meeting invitations being sent out. The purpose of this meeting is to establish the foundation for continued coordination, develop a mutual understanding of the deliverables, agree on the procedures to follow, and discuss the Measures of Effectiveness (MOEs) to be compared for analyses.

Any requests or exchange of information from either party necessary to complete the scope of services shall be done at this meeting. The Consultant shall be responsible for conducting the meeting as well as preparing and distributing meeting minutes to all members present.

Deliverables:

1. Agenda – submitted to the Entity and DOTD one week prior to meeting
2. Kickoff Meeting minutes – submitted within 2 days after meeting

2. Initial Data Collection

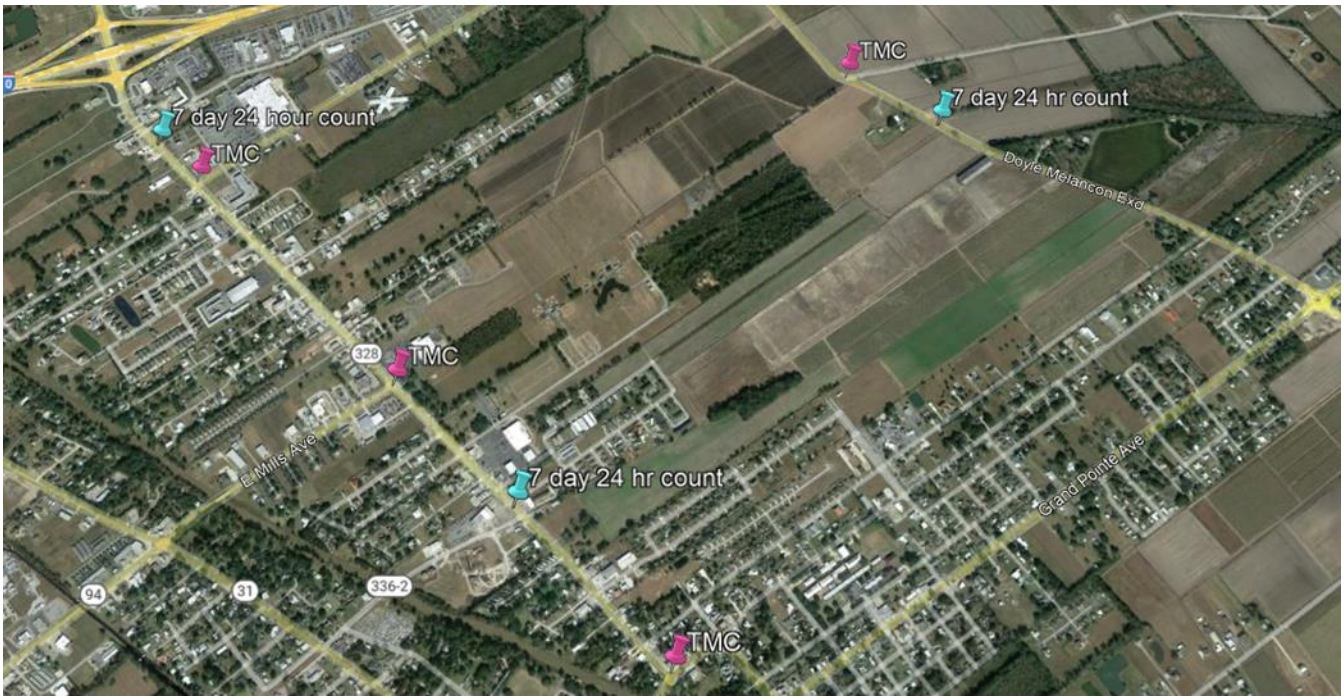
The Consultant shall use the peak period determined as part of the LA 328 (Rees St) Corridor Study, State Project H.013023, April 2020.

3. Final Data Collection

The Consultant shall use the 2018 counts collected as part of the LA 328 (Rees St) Corridor Study, State Project H.013023, April 2020. Additionally, the Consultant shall collect a spot validation check at LA 328 (Rees St) and LA 94 (Mills St) to determine that the 2018 counts are still valid.

Turning Movement Counts (TMCs) with classifications and demand shall be conducted on each intersection listed below during the AM and PM peak periods. Count all movements, including vehicular, pedestrian, and bicycle. During the observations, please note if, when and how long train is on tracks.

Locations of TMCs, observations, geometric field check (see count map below)	
1	LA 328 (Rees St) @ E Mills Ave
2	Latiolais Dr @ Doyle Melancon Ext. (Par Rd 214)
3	Lion Castille Rd @ Doyle Melancon Ex (Par Rd 214)



Growth Rate Determination

Shall utilize the growth rates established in LA 328 (Rees St) Corridor Study, State Project H.013023, April 2020.

Deliverables:

1. **Chapter 1** – Explanation of the methodology for collecting data.
2. **Appendix B** – Final Data Collection
   All data should be submitted electronically in addition to any hard copies noted below:
   a. Growth Rate Determination – Justification of growth rate determination and any sources that were used to obtain the growth rate(s).
   b. Any documentation, justification, explanation for any count discrepancies. All locations shall be correct and easily followed
   c. Volume check: Provide raw count figures with balanced volumes differences
   d. Raw Turning Movement Counts (TMCs) and 48 hour counts all with classifications
   e. Demand Calculation table

f. Maps (hard copy)
   i. Raw Turning Movement Counts (TMCs) with Demand shown separately
   ii. Final Existing Volumes
   iii. No Build Volumes (grown 20 years)
g. Peak Period Observations (shall also capture pedestrian activities and railroad crossing safety observations that will not be captured by the TMC)
h. Geometric Field Checklist
i. Railroad information- if observations noticed rail crossing on Mills St affected Rees St intersection operations.
j. QA/QC Checklist and documentation – signed and dated

4. Existing Safety Analysis

The Consultant shall pull all crash history within the limits of this study for the latest 3 years of available certified data for the project study area. A crash summary analysis for all 3 years shall show trends of crash rates, location, and severity (see DOTD Safety Section CATScan Tool) and compare to the statewide averages, where applicable. Quality Assurance shall be performed to a Quality Assurance Index (QAI) of 90% in the CATScan Tool. If a consistent trend is present throughout the 3-years of data, the trend information shall be submitted to DOTD prior to performing any detailed crash analysis. After DOTD concurrence of the trend information, a detailed crash analysis shall be performed for 1-year of typical data, in which all crash reports will be read in detail. If a consistent trend cannot be determined through the 3-years of data, a detailed crash analysis shall be performed for all 3-years for the project study area. The detailed crash analysis shall consist of a review of the crash reports in detail to determine the type of collision based on the reporting officer's description. A report shall be submitted to DOTD Highway Safety Section for any crash reports within the latest year of data (1 year) that are found to be erroneous. The Consultant shall prepare QA/QC documentation for the review and approval of DOTD.

The Consultant shall also pull the latest 5 years of pedestrian crashes within the limits of the study area. Also, summarize any trends, if found, for pedestrians.

Note: Crashes shall be pulled as far as the existing analysis is showing queuing for all intersections.

Deliverables:

Appendix C – Existing Safety Analysis
1. CATScan Tool
2. Crash Report Documentation – crash history, corrected component of crashes and provide individual summary of crash report narratives
3. Collision Diagram
4. Crash Analysis Summary - summary of crash reports explaining results
5. Existing Safety Analysis QA/QC Checklist

5. Existing and No Build Analysis

HCS7 shall be used for analysis. HCS multi-period analysis shall be performed at all signalized intersections. The analyses shall include the following MOEs per movement: V/C ratios, 95th percentile queue lengths, and critical movement control delay (sec/veh). HCM Analysis results must be verified with the collected field data to ensure validity and accuracy. All defaults must be justified and documented.

Deliverables:

1. **Appendix D** – Existing and No Build Analysis
    a. Software reports/Output for Existing and No Build Conditions (only relevant sheets)
    b. Electronic files of analyses
    c. Analysis results of MOEs on a map with road name, control type, and north arrow of the corridor (11X17)
    d. Queue maps of intersections (field vs software- if there is a difference explain)
    e. Intersection descriptions (for each TMC location)
    f. Detailed description of intersection, nearby land use and issues for those not familiar with area
    g. Aerial of intersection (showing existing lane configuration, peak hour TMCs, commercial/residential drives and any other notable feature such as but not limited to bus stops, crosswalks, train crossings etc.)
    h. Summary of peak period observations (queues, issues, including railroad crossing safety observations)
    i. Summary of crash history
    j. MOE table of results
    k. QA/QC documentation
2. **Chapter 2** – Interpretation of data and analysis of overall study area
3. **Tier 1 Analysis**
    a. Summary of Screening Criteria
    b. Critical Intersection Type Matrix and Results
    c. Any additional tools and outputs used in decision making process

6. Existing and No Build Results Meeting

A. Present and discuss Existing and No Build, including any safety or capacity issues for the study area.
B. Present and discuss high-level alternatives that address issues found in Chapter 2 (Preliminary Tier 1 results).
C. Discuss tool selection for Alternative Analysis.

Deliverables:

Meeting minutes submitted within 3 days.

7. Preliminary Tier 2 Alternative Analysis

A. Footprint layouts on an aerial of potential alternatives at critical areas showing high-level physical impacts along the corridor.
B. Redistributed volumes, if needed
C. Meeting (optional)
D. Recommend weight factors and ratings scale for Alternative Comparative Evaluation Matrix.

Deliverables:

1. Redistributed Volume Map
2. High-level sketches and analysis
3. Meeting Minutes within 3 days (if meeting held)

8. Final Alternative Analysis

Tier 2 Analysis of future year using approved software from the Existing and No Build Meeting.

Deliverables:

1. **Appendix E** – Alternative Analysis
   All data should be submitted via electronic copy. Hard copies noted below are additional:
   1. Tier 1 Matrix with documentation.
   2. Tier 2 Analysis and Documents
      a. 11 X 17 Map(s) showing redistributed future year volumes for each alternative (if needed)
      b. 11 x 17 Map(s) showing queues on an aerial comparing all alternatives and No Build alternative (hard copy and pdf)
      c. Electronic copy of Analysis for Operations
      d. Software Reports/Output for Analysis of Intersections – Only relevant reports with inputs and Measures of Effectiveness (MOE) are needed. (pdf)
      e. Intersection Summaries – each intersection with Turning Movement Counts (TMCs) and/or modifications:
         i. A detailed description of new and modified intersections (paint a picture)
         ii. Aerial of intersection showing proposed lane configuration, proposed and existing Right of Way (ROW), and proposed and existing Control of Access (COA). (Configuration must meet the requirements of the Control of Access Policy for the future I-49 expansion.)

iii. Safety Analysis (showing existing crash diagram with alternatives drawn and the potential crashes that may be eliminated with that alternative
iv. MOE Table of Results

f. Summary Table of Results compared to No Build and all other Alternatives
g. Critical Geometry Layout (of entire corridor) (11X 17 hard copy(s), pdf and CADD files (not a line and grade)
h. Design Guideline Report
i. Documentation of any default changes from No Build to Alternative Analysis
j. Comparative Evaluation Matrix with documentation and calculations

3. QA/QC Documentation

2. Introduction of Final Report
3. Chapter 3 – Alternative Analysis Summary
4. Executive Summary

9. Final Report

Deliverable:

Sealed Report (Draft must be approved before final submission)

- 2 hard copies and 2 electronic copies

ADDITIONAL SERVICES

The scope of services and compensation for the following additional services will be authorized by Supplemental Agreement(s):

Surveying Services

Topographic Survey

Topographic Survey shall consist of all services required to make a topographic survey, in English units of measure, as required for the proper design and layout of the Project. DOTD's requirements which shall govern this survey are specified in the current edition 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. The Consultant shall request, in writing, from the Project Manager a copy of this manual for the Consultant's information and guidance as to normal DOTD procedures in the conduct of topographical surveys. Deviations from the normal procedures must be authorized in writing by the Project Manager.

The survey shall 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 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. The Consultant's attention is specifically directed to the 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.

Drainage Map

A drainage map shall be required. Please refer to the DOTD Location and Survey Photogrammetry Unit for detailed instructions of what is required on the drainage map.

Property Survey

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. The Property Survey Plat shall show all surveyed property lines and existing right-of-way with ties to project centerline. Upon completion of the property survey, the Consultant will notify the Location and Survey Administrator, in writing, and provide the following:

1. ASCII file listing coordinates and descriptions of all found monuments
2. PDF copy of all documents (plats, maps, etc) used to determine property line locations
3. PDF copy of title take-offs or title research reports used to determine property line locations
4. MicroStation DGN file of the Property Survey Plat
5. PDF file of the Property Survey Plat

Right-of-Way (R/W) Maps

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 Addendum A, 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 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.

Base Right of Way Map deliverables shall be:

1. Two full size paper copies of the Base Map
2. PDF copy of the Base Map including all sheets named "*H.xxxxxx_60% Base Map_yymmdd.PDF*"

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 Addendum A. 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 on project centerline at each end of each map sheet and P.C.'s, P.I.'s and P.T.'s of project centerline curves.

Final Right of Way Map deliverables shall be:

1. The original matte films
2. MicroStation DGN file of the Right of Way Map
3. PDF Copy of the Final Right of Way Map named *"H.XXXXXX_FINAL ROW Map_yymmdd.PDF"*
4. PDF copy of each required Full Title Research Report with affected Parcel Numbers listed in the upper right hand corner named *"H.XXXXXX_Parcel X.PDF"*
5. ASCII file containing the DOTD COGO program input commands for creating parcel descriptions suitable for use by the DOTD's Real Estate Section named *"H.XXXXXX.IN"*

Title Take-Off

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 Title Take-Off may be obtained for each parcel, if necessary, to expedite commencement of field work. The Title Take-Off is not considered a part of the Title Research Report and may be performed by the surveyor.

Traffic Services

Traffic Data

Shall consist of all services required to obtain traffic volumes and classification counts needed for pavement design.

Geotechnical Services

Subsurface Investigation for Pavement Structure Design

Shall consist of all services required to obtain shallow soil borings. Shallow soil borings shall identify the different layers of the soil strata every foot or strata break at the discretion of the lab

engineer of record using AASHTO classification system and the following tests shall be performed: Atterberg Limits, sieve analysis, hydrometer tests, percent of organics, density, moisture content and water table depth. Shallow soil investigations that require in situ strength parameters shall be tested using the dynamic cone penetrometer (DCP) according to DOTD-TR 645-10.

The following guidelines should be followed to determine the geotechnical investigation requirements:

New Construction and Widened Areas

A subgrade soil survey is to be performed at proposed new construction and widening areas to determine existing soil properties. Shallow soil borings for new pavement construction, including the widening of existing pavements, are taken approximately every 1,000 feet along the new roadway alignment. The depth of each boring should be at least 8 feet below the finished roadway elevation or natural ground, whichever is greater, with additional testing requirements for areas of cut/fill greater than 10 feet. DCP testing should be performed every 2,000 feet (or at every other boring location) to a minimum depth of 36 inches into the subgrade.

Reconstruction and Overlay Sections

For reconstruction and overlay areas, shallow soil borings are taken approximately every 1,000 feet along the alignment (or next to the existing shoulders) to a depth of 4 feet below the existing roadway and no less than 2 feet below the bottom of the base course, whichever is greater. Pavement cores shall be taken at proposed overlay locations to determine existing pavement surface type, existing base material type and their corresponding thicknesses. Pictures of the pavement core samples shall be provided with the lab report. DCP testing should be performed every 2,000 feet (or at every other pavement core/boring location) to a minimum depth of 36 inches into the subgrade.

Pipe Crossings/Pipe Locations

PH & Resistivity information should be obtained at pipe crossings/locations to determine the material of the pipe that is to be used for the project.

Preliminary Plans

Shall consist of all engineering services required for the completion of Preliminary Plans and cost estimates for the project, all under a schedule for completion which shall be in conformity with the contract time specified elsewhere in this contract or established by Supplemental Agreement. Specifically, the work under this part consists of the following major items:

1. The assembly and study of existing data, including improvement studies, boring information, if any, traffic data available through DOTD, and such other data as can be located through efforts of the Consultant.

2. The preparation of location plans for subgrade soil borings that, in the judgment of the Consultant, may be necessary for design of the Project. The Consultant shall also prepare additional location plans as may be required by DOTD for conducting additional borings deemed necessary by DOTD.
3. The design format for this improvement shall comply with the criteria prescribed in 23 CFR 625, Design Standards for Highways. The format of the plans shall conform to the standards used by DOTD in the preparation of its contract plans for items of work of similar character, including plans for all drainage and utilities affected.
4. Design for Preliminary Plans shall be done in English units of measurement.

The Consultant cannot proceed to final plans until environmental has been cleared.

Final Plans

Shall consist of all services required for the preparation of Final Plans, specifications, and estimates, all meeting the standard requirements of DOTD as to general format and content. The schedule for all deliverables will be set by the DOTD Project Manager. All submittals are subject to review by the LPA and DOTD. Specifically, the work under this section consists of the following major items:

1. The design and preparation of completed detailed Final Plans drawn to acceptable scales for the Project. At a minimum, the plans shall include designs and/or details for all grading, pavement, drainage, intersections, traffic control and structures.
2. Preparation and submittal of construction cost estimates based on the Final Plans.
3. Submittal of stamped, signed Final Plans are to be accompanied by PDF's of the plan sheets and shall be properly indexed, neatly arranged and contain a copy of all design computations used in developing the pay quantities and the drainage design data for culverts and storm sewers, as applicable. The submittal shall be accompanied by a written certification from the Consultant that a detailed check of such computations by qualified personnel has been made prior to submission. At any stage of the plan development process, plan delivery by other methods may be required. That includes, but is not limited to, the uploading of the plans to ProjectWise.
4. Submittal of the completed Constructability Review Form, the Design Report, the QA/QC Checklist, the Contract Time Worksheet and the Storm Water Pollution Prevention Plan (SWPPP).
5. Plan sheets shall be full size (22" x 34"). Provide a 0.50" margin on the top, bottom and right hand side of the sheet and a 2" margin on the left hand side of the sheet. The compensation value is predicated upon the development of preliminary and final plans for a full size (22" x 34") plan set.
    a. The title sheet shall be provided on a matte film with a minimum thickness of 3.5 mils. All other sheets shall be provided on high quality, opaque, white bond paper with a minimum 20 pound weight and a minimum 92% brightness.

6. All plans submitted by the Consultant shall conform to the quality standards adopted by DOTD and DOTD's Chief Engineer may reject any plans not conforming to these standards.
7. Design for Final Plans shall be done in English units of measure.

STAGE 5: CONSTRUCTION

Construction Support

Shall consist of all services required to review and address all Requests for Information (RFIs) from the DOTD's Construction Contractor that concern plan/specification clarity or plan/specification error. The Consultant shall be required to respond to all RFI's within forty-eight (48) hours.

Cost recovery for all RFI's due to plan/specification clarity or plan/specification error shall be as noted in the Errors and Omissions clause as established in this Original Contract.

In order to provide efficient construction contract administration and minimize construction delay costs, the Consultant may be required to provide construction on-call support in order to complete the Project. The Consultant shall be available to assist DOTD with information meetings with the Contractor with a twenty-four (24) hour notice. These meetings shall be authorized by DOTD. The Consultant shall be required to respond to and deliver requested minor design changes and plan/specification corrections within seven (7) calendar days. DOTD has not retained the Consultant to make detailed inspections or to provide exhaustive or continuous project review and observation services. This item shall be used only when directed and authorized by the DOTD's Project Manager and/or the Project Engineer/Coordinator. The Consultant does not guarantee the performance of, and shall have no responsibility for, the acts or omissions of any contractor, subcontractor, supplier or any other entity furnishing material or performing any work on the project.

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 five (5) years of experience in responsible charge of the preparation of roadway plans.
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 responsible charge of performing topographic surveys.

MPRS ARE TO BE MET BY SEPARATE INDIVIDUALS, UNLESS STATED OTHERWISE BELOW.

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

MPR No. 4 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.