

**ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES
JULY 19, 2023**

**CONTRACT NO. 4400027580
STATE PROJECT NO. H.013940.5
FEDERAL AID PROJECT NO. H013940
ENTITY CONTRACT FOR LA 648 & ACADIA ROAD INTERSECTION IMPROV
ROUTE: LA 648
LAFOURCHE 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.**

The contract will be between the selected consultant and **City of Thibodaux**, referred to as the "Entity".

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.

<p>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)</p>							
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%
<p>Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.</p>							
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).

Contract No. 4400027580

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 scope of services is estimated to be **1 year**.

COMPENSATION

Compensation to the consultant for the services set forth herein shall be based on actual work hours and established specific rates of compensation for the work performed and the direct expenses incurred by the consultant, with a maximum limitation of **\$100,951**.

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

Contract No. 4400027580

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/BD_EM.aspx
6. DOTD – Complete Streets –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complete_Streets/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/>

Contract No. 4400027580

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.

Contract No. 4400027580

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. 4400027580, Consultant's name", and **must be received no later than 3:00 p.m. Central Time by DOTDConsultantAds80@la.gov via email on Thursday, August 10, 2023.** 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 of LA 648 and N. Acadia Rd., in Thibodaux, Louisiana.

STAGE 1: PLANNING/ENVIRONMENTAL

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

Part I: Traffic Study

Traffic Study – The Consultant shall establish an integrated, systematic, and performance-based approach to evaluating alternative intersection control and configurations at the LA 648 and N. Acadia Road intersection in Thibodaux LA.

Since multiple intersection configurations and control alternatives may be appropriate for prevailing and expected traffic demands and operating conditions, it is important to analyze the performance impacts and benefits for each alternative. It is anticipated that the alternatives to be considered may include, but not limited to the following:

- Signalized Intersection
- Intersection Realignment
- Roundabout

The ICE Study will include the following scope of work.

Project Management

Project management will include developing team organization, progress reporting, coordination with client, project documentation and files, quality control, and quality assurance.

Monthly progress reports will be prepared to ensure that the project schedule is being kept. The report will include a progress chart indicating percent of time elapsed and percent of work completed. The report shall include changes in project schedule. The report may include a discussion of the previous month's progress, problems that were encountered, unresolved issues, and anticipated work for the next month.

Kickoff Meeting

The Consultant shall coordinate a project initiation meeting for this project to establish the foundation for continued coordination, develop a mutual understanding of the deliverables, agree

Contract No. 4400027580

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 DOTD one week prior to meeting
2. Kickoff Meeting minutes – submitted within 2 days after meeting

Initial Data Collection

All counts should be made when school is in session and should be collected according to the standard engineering practice on a Tuesday, Wednesday, or Thursday, when schools are in session (not during summer vacation, or during holidays). If counts are being taken and weather becomes a factor during the time of counts, note such conditions as well as any accidents that may have occurred.

The 7 day, 24-hour counts will be used to establish the peak periods. Locations of 7 day, 24-hour Bi-directional Classification Counts:

1. LA 648 (Percy Brown Road) at Rue Marguerite

Deliverables:

1. Appendix A – Initial Data Collection
 - a. Electronic submittal containing the 7-day 24-hour raw counts. The count locations shall be shown on an aerial map.
 - b. Peak Period Determination Chart with explanation
 - c. Any documentation, justification, etc. for any count discrepancies
 - d. QA/QC Documentation

Final Data Collection

48-hour counts with vehicle classifications shall be taken at all intersection approaches to help verify TMCs and demand. (24-hour classification counts will be acceptable).

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.

Locations of 48 hour Counts, TMCs, Peak Period Observations, and Geometric Field Check:

1. LA 648 (Percy Brown Road) at North/South Acadia Road

Growth Rate Determination

The Growth Rate shall be determined using the MPO Travel Demand Model. These models will be the currently approved base year model and the future fiscally constrained model.

Deliverables:

All data should be submitted electronically in addition to any hard copies noted below:

1. Chapter 1 – Explanation of the methodology for collecting data.
2. Appendix B – Final Data Collection
 - 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)
 - g. Raw Turning Movement Counts (TMCs) with Demand shown separately
 - h. Final Existing Volumes (year 2023)
 - i. No Build Volumes (year 2043)
 - j. Peak Period Observations
 - k. Geometric Field Checklist
 - l. QA/QC Checklist and documentation – signed and dated

Existing Safety Analysis

The Consultant shall pull all crash history within the limits of this study for the latest 5 years of available certified data for the project study area (2017-2021). A crash summary analysis for all 5 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 5-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 5-years of data, a detailed crash analysis shall be performed for all 5-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.

Contract No. 4400027580

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.

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

Deliverables:

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

Existing and No Build Analysis

HCS7 and/or Sidra shall be used to analyze all TMC locations. The existing year is 2023. The future year is 2043. The analyses shall include the following MOEs per movement:

- V/C ratios
- 95th percentile queue lengths
- 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.

Tier 1 Analysis

The Consultant shall perform a Tier 1 Analysis of the Existing and No Build Analysis results to identify alternatives for further investigation that address the purpose and need while considering project constraints. All alternatives must be compiled in a matrix format for examination.

Alternatives selected for inclusion in the Comparison Matrix will be ranked using high-level criteria such as, but not limited to, Operations, Right Of Way (ROW), Cost, and Environmental Impacts. Criteria used should be quantified with thresholds that allow for a scored comparison between all alternatives and will vary depending on the defined problem. All alternatives considered shall include documentation explaining why they were recommended for advancement to Tier 2 or removed from further consideration. Depending on complexity, this could be a Notes column in the Evaluation Matrix or several paragraphs of explanation.

All alternatives will be compiled in a table format with a description and/or figure of each alternative and its associated ranking within the defined criteria. Selected alternatives should be based on a comparative evaluation using the total ranking.

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, etc.)
 - 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

Existing and No Build Results Meeting

The Consultant shall coordinate a meeting to discuss the findings of the existing and no build analysis.

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

Deliverables:

Meeting minutes submitted within 3 days.

Preliminary Tier 2 Alternative Analysis

- Footprint layouts on an aerial of potential alternatives at critical areas showing high-level physical impacts along the corridor.
- Redistributed volumes
- Meeting (optional)
- 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)

Final Alternative Analysis

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

Deliverables:

All data should be submitted via electronic copy. Hard copies noted below are additional:

1. Appendix E – Alternative Analysis
 - a. Tier 1 Matrix with documentation.
 - b. Tier 2 Analysis and Documents
 - i. 11 X 17 Map(s) showing redistributed future year volumes for each alternative (if needed)
 - ii. 11 x 17 Map(s) showing queues on an aerial comparing all alternatives and No Build alternative (hard copy and pdf)
 - iii. Electronic copy of Analysis for Operations
 - iv. Software Reports/Output for Analysis of Intersections – Only relevant reports with inputs and Measures of Effectiveness (MOE) are needed. (pdf)
 - v. Intersection Summaries – each intersection with Turning Movement Counts (TMCs) and/or modifications:
 - vi. A detailed description of new and modified intersections (paint a picture)
 - vii. 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.)
 - viii. Safety Analysis (showing existing crash diagram with alternatives drawn and the potential crashes that may be eliminated with that alternative)
 - ix. MOE Table of Results
 - x. Summary Table of Results compared to No Build and all other Alternatives
 - xi. Critical Geometry Layout (of entire corridor) (11X 17 hard copy(s), pdf and CADD files (not a line and grade)
 - xii. Design Guideline Report
 - xiii. Documentation of any default changes from No Build to Alternative Analysis
 - xiv. Comparative Evaluation Matrix with documentation and calculations
 - xv. QA/QC Documentation
2. Introduction of Final Report
3. Chapter 3 – Alternative Analysis Summary
4. Executive Summary

Final Report

Deliverable:

Sealed Report (Draft must be approved before final submission).

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.

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

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

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.