

ENGINEERING AND RELATED SERVICES

February 11, 2025

**Contract No.: 4400030639**

**State Project No.: H.015982.5**

**Federal Aid Project No.: H015982**

**OFF-SYSTEM HIGHWAY BRIDGE PROGRAM CONTRACT FOR:**  
**East Flanacher Rd Over Drainage Canal**  
**East Baton Rouge Parish**

PRESENTED TO:



LOUISIANA DEPARTMENT OF  
TRANSPORTATION & DEVELOPMENT

SUBMITTED BY:

**Royal Engineers and Consultants, L.L.C.**

1501 Religious Street, Suite C

New Orleans, LA 70130

[www.royal.us](http://www.royal.us)

504.283.9400





February 11, 2025

Department of Transportation and Development Consultant Contract Services Administrator  
1201 Capitol Access Road, Room 405-E  
Baton Rouge, LA 70802-4438  
DOTDConsultantAds80@la.gov

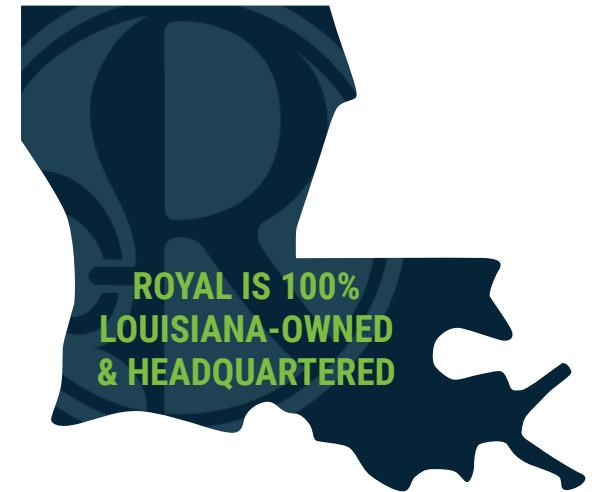
**Contract No.:** 4400030639

**State Project No.:** H.015982.5

**Federal Aid Project No.:** H015982

**Off-System Highway Bridge Program:** East Flanacher Rd Over Drainage Canal

**Parish:** East Baton Rouge



Dear Consultant Selection Committee,

Royal Engineers and Consultants, L.L.C. (Royal) respectfully requests your consideration of the enclosed proposal in response to the Louisiana Department of Transportation and Development (DOTD) advertisement for Engineering and Related Services on the East Flanacher Rd Over Drainage Canal bridge under the Off-System Highway Bridge Program (OSBR). Since 2005, Royal has delivered multi-disciplinary professional engineering design for industry, government, and the private sector across the Gulf Coast. Royal has provided engineering and related services for complex roadway and infrastructure programs throughout South Louisiana, totaling more than \$1.5 billion. Our Engineering Design group is staffed with Professional Engineers with substantial knowledge in roadway and bridge design challenges. We have designed roads, bridges and drainage structures from Iberia Parish to St. Bernard Parish, and know South Louisiana design challenges well.

Royal is an ideal partner for this bridge repair project, because of our proximity to the project location and our working knowledge of the area's infrastructure. Our office in Baton Rouge is less than 20 miles from the project location, and we have been a professional services provider to DEMCO, the electric utility provider in this area, for the last five years. For this bridge, we have partnered with T. Baker Smith, LLC for Survey and Environmental Services, and Huval & Associates, Inc. for Structural Engineering and bridge subject matter expertise.

We appreciate the opportunity to respond and look forward to working with DOTD. Please direct communication to our Primary Point of Contact, Katherine Foreman, P.E., by phone at (337) 456-5351 or via email at [kforeman@royal.us](mailto:kforeman@royal.us).

Sincerely,

  
Michael Pugh, P.E., President  
Royal Engineering and Consultants, L.L.C.

**1.5B+**  
Design & Construction Management  
Projects Since 2005



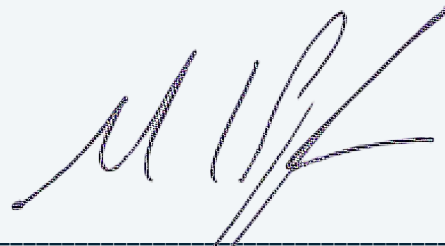


# DOTD FORM: 24-102

## PROPOSAL TO PROVIDE CONSULTANT SERVICES

(Revised December 12, 2024)

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number. 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.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                        |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>1. Contract Name</b> (as shown in the advertisement)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Off-System Highway Bridge Program, East Flanacher Rd Over Drainage Canal                                                                                                                               |                          |
| <b>2. Contract Number(s)</b> (as shown in the advertisement)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4400030639                                                                                                                                                                                             |                          |
| <b>3. State Project Number(s)</b> (if shown in the advertisement)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | H.015982.5                                                                                                                                                                                             |                          |
| <b>4. Prime Consultant Name</b> (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Royal Engineers and Consultants, L.L.C.                                                                                                                                                                |                          |
| <b>5. Prime Consultant License Number</b> (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | EF.0003328                                                                                                                                                                                             |                          |
| <b>6. Prime Consultant Mailing Address</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1501 Religious Street, Suite C, New Orleans, LA 70130                                                                                                                                                  |                          |
| <b>7. Prime Consultant Physical Address</b> (existing or to be established, if location is used as an evaluation criteria)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1501 Religious Street, Suite C, New Orleans, LA 70130                                                                                                                                                  |                          |
| <b>8. Name, Title, Phone Number, and Email Address</b> (prime consultant's contract point of contact)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Katherine Foreman, P.E., Project Engineer, (337) 456-5351, kforeman@royal.us                                                                                                                           |                          |
| <b>9. Name, Title, Phone Number, and Email Address</b> (official with signing authority for this proposal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Michael Pugh, P.E., President, (504) 283-9400, mpugh@royal.us                                                                                                                                          |                          |
| <p>10. This is to certify that all information contained herein is accurate/true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies/agrees that the following information is correct: In preparing a response, the proposer has considered all proposals submitted from qualified, potential subcontractors/suppliers, and has not, in the solicitation selection/commercial treatment of any subcontractor/supplier, refused to transact/terminate business activities, taken other actions intended to limit commercial relations with person/entity that is engaging in commercial transactions in Israel/Israeli-controlled territories, with specific intent to accomplish a boycott/divestment of Israel. The proposer also has not retaliated against any person/entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder/proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on a false response.</p> <p>Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association. In addition, proposer certifies it will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.</p> |  <p><b>Signature above shall be the same person listed in Section 9:</b></p> <p><b>Date:</b> February 11, 2025</p> |                          |
| 11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Firm(s):</b><br>N/A                                                                                                                                                                                 | <b>Firm(s)' %</b><br>N/A |

## 12. DISCIPLINE TABLE

As indicated in the advertisement, insert the completed table here. 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. The **only** past performance evaluation disciplines to be used are: listed in the drop down in each row (Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic). **Remove rows as needed.**

| DISCIPLINE(S)                                                                                                                    | % OF OVERALL CONTRACT | ROYAL ENGINEERS AND CONSULTANTS, L.L.C. | T. BAKER SMITH, LLC (TBS) | HUVAL & ASSOCIATES, INC. (HUVAL) | EACH DISCIPLINE MUST TOTAL 100% |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------|---------------------------|----------------------------------|---------------------------------|
| Bridge                                                                                                                           | 75%                   | 85%                                     | 0%                        | 15%                              | 100%                            |
| Survey                                                                                                                           | 20%                   | 0%                                      | 100%                      | 0%                               | 100%                            |
| Environmental                                                                                                                    | 5%                    | 40%                                     | 60%                       | 0%                               | 100%                            |
| Identify the percentage of work for the <b>overall contract</b> to be performed by the prime consultant and each sub-consultant. |                       |                                         |                           |                                  |                                 |
| Percent of Contract                                                                                                              | 100%                  | 65.75%                                  | 23%                       | 11.25%                           | 100%                            |

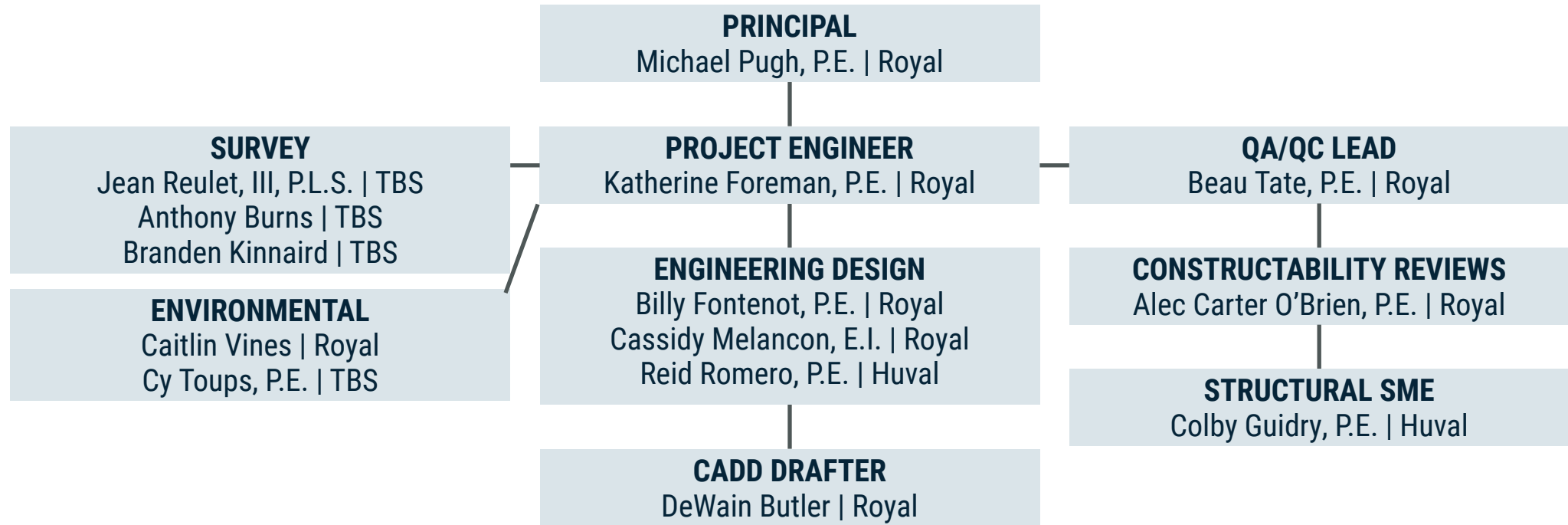
## 13. FIRM SIZE

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (must specify)" and include the classification title inside the parentheses. The DOTD Job Classification(s) to be used can be found at the following link: [http://wwwsp.dotd.la.gov/Inside\\_LaDOTD/Divisions/Engineering/CCS/Job\\_Qualification/Job%20Classifications%20with%20Descriptions.pdf](http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf)

| FIRM NAME                                    | DOTD JOB CLASSIFICATION | NUMBER OF PERSONNEL<br>COMMITTED TO THIS CONTRACT | TOTAL NUMBER OF PERSONNEL<br>AVAILABLE IN THIS DOTD JOB<br>CLASSIFICATION <i>(if needed)</i> |
|----------------------------------------------|-------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------|
| Royal Engineers and<br>Consultants, L. L. C. | Engineer                | 3                                                 | 10                                                                                           |
|                                              | Engineer Intern         | 1                                                 | 6                                                                                            |
|                                              | CADD Drafter            | 1                                                 | 3                                                                                            |
|                                              | Principal               | 1                                                 | 2                                                                                            |
|                                              | Supervisor-Eng          | 1                                                 | 3                                                                                            |
|                                              | Environmental Pro       | 1                                                 | 3                                                                                            |
| T. Baker Smith, LLC                          | Environmental Manager   | 1                                                 | 2                                                                                            |
|                                              | Party Chief             | 1                                                 | 3                                                                                            |
|                                              | Senior Technician       | 1                                                 | 4                                                                                            |
|                                              | Surveyor                | 1                                                 | 2                                                                                            |
| Huval & Associates, Inc.                     | Engineer                | 2                                                 | 18                                                                                           |

# 14. ORGANIZATIONAL CHART

Provide an organizational chart showing ALL **relevant** prime consultant and sub-consultant (if applicable) personnel assigned to the contract, area of project responsibility for each, and reporting lines for the purposes of this contract. An individual's role does not necessarily have to match their DOTD job classification identified in Section 13. **If applicable, identify all personnel performing traffic engineering analysis and/or QC of traffic engineering analysis by placing an asterisk next to their name. Include the certificates required by the Traffic Engineering Process and Report Training Requirements article of the Advertisement in Section 20. It is acceptable to use an 11x17 format for Section 14.**



# 15. MINIMUM PERSONNEL REQUIREMENTS

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

| MPR NUMBER<br><i>(Do not insert wording from ad)</i> | PERSONNEL BEING USED TO MEET THE MPR<br><i>(Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)</i> | FIRM EMPLOYED BY | TYPE OF LICENSE & DISCIPLINE MEETING MPR/CERTIFICATION & NUMBER<br><i>(Ex: PE # - Civil)</i> | STATE OF LICENSE | LICENSE, CERTIFICATION, & EXPIRATION DATE |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------|------------------|-------------------------------------------|
| 1                                                    | Michael Pugh, P.E.                                                                                                                                                | Royal            | P.E. 0030911<br>Professional Engineer, Civil                                                 | LA               | 3-31-2026                                 |
| 2                                                    | Katherine Foreman, P.E.                                                                                                                                           | Royal            | P.E. 0046031<br>Professional Engineer, Civil                                                 | LA               | 3-31-2026                                 |
| 3                                                    | Beau Tate, P.E.                                                                                                                                                   | Royal            | P.E. 0030990<br>Professional Engineer, Civil                                                 | LA               | 3-31-2026                                 |
| 4                                                    | Jean Reulet, III, P.L.S.                                                                                                                                          | TBS              | P.L.S. 0005145<br>Professional Land Surveyor                                                 | LA               | 3-31-2026                                 |
| 5                                                    | Cy Toups, P.E.                                                                                                                                                    |                  | P.E. 0033966<br>Professional Engineer, Environmental                                         | LA               | 9-30-2026                                 |

## 16. STAFF EXPERIENCE

Résumés shall be provided for all prime and sub-consultant personnel listed in Sections 14 and/or 15 of the proposal. Résumés of personnel not identified in Section 14 or Section 15 of the proposal should not be included and will not be evaluated. Résumés are **limited to 2 pages per person**. Any certificates required by the advertisement are to be placed in Section 20.

| NAME: Michael Pugh, P.E.                                                                                     |  | TITLE: Principal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       | FIRM EMPLOYED BY: Royal Engineering and Consultants, L.L.C. |  |  |
|--------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------|--|-------------------------------------------------------------------------------------|
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 20                                                          |  | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(S): 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |                                                             |  |                                                                                     |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 1997 / Civil Engineering                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                                                             |  |                                                                                     |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 30911 / LA / 3-31-2026                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | YEAR REGISTERED: 2003 | DISCIPLINE: Civil                                           |  |                                                                                     |
| CONTRACT ROLE(S)/BRIEF DESCRIPTION OF RESPONSIBILITIES: Principal (MPR 1) / Project Oversight and Governance |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                                                             |  |                                                                                     |
| EXPERIENCE DATES<br><i>(mm/yy – mm/yy)</i>                                                                   |  | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                 |                       |                                                             |  |                                                                                     |
| 28 Years of Experience                                                                                       |  | Mr. Pugh has 28 years of experience in designing roads, bridges, canal crossings, drainage infrastructure, subsurface utility, side-walks, and pedestrian facilities. Mr. Pugh also has extensive experience in oversight of Construction Engineering & Inspection (CE&I) functions of small- and large-scale roadway and bridge repair and replacement projects.                                                                                                                                                                                                                                           |                       |                                                             |  |                                                                                     |
| 05/23 – Ongoing<br><i>Featured Project</i>                                                                   |  | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>Principal. Provided oversight and project governance for an engineering design of a bridge, replacing an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish, which is off the State Highway System. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls.                                                                                                       |                       |                                                             |  |                                                                                     |
| 08/15 – 05/22<br><i>Featured Project</i>                                                                     |  | <b>Magistrate Street at Corrine Canal   St. Bernard Parish, LA</b><br>Principal. Responsible for engineering design for repairs, restorations and/or replacement of bridge to its Pre-Katrina condition while preserving the historical value and original intent of the facility. Replaced existing culverts with precast Con-Span structures. Bridge design replaced the preexisting two (2) – 60” corrugated metal pipe culverts with a 26’-0” wide 72’-0” long clear span, precast concrete structure.                                                                                                  |                       |                                                             |  |                                                                                     |
| 08/15 – 02/20<br><i>Featured Project</i>                                                                     |  | <b>Gallo Drive Bridge at Arpent Canal   St. Bernard Parish, LA</b><br>Principal. Responsible for oversight of design and CE&I services for this project, which replaced the Gallo Drive at 20 Arpent Canal Bridge in St. Bernard Parish. The Gallo Drive Bridge scope included a full replacement of the existing two (2) – 60” concrete pipe culverts with a 26’-0” wide clear span, precast concrete structure.                                                                                                                                                                                           |                       |                                                             |  |                                                                                     |
| 02/12 – 04/15<br><i>Featured Project</i>                                                                     |  | <b>Plaza / Arpent Bridge   St. Bernard Parish, LA</b><br>Principal. Royal performed design and construction management services for the replacement of the Plaza /Arpent bridge. The existing culvert configuration was found to be inadequate to handle the increased flow of water during major rain events. The new bridge is 52 ft x 32 ft, and included removal and replacement of 400 sy of roadway pavement, 1250 ft concrete piles; and installation of 56 feet of concrete pipe, over 100 LF of guard rail, a handicap ramp, 5” rollover, 6” and 8” barrier concrete curb, and 190 LF of handrail. |                       |                                                             |  |                                                                                     |



|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>04/19 - 05/24</b><br/><i>Featured Project</i></p> | <p><b>East Hardy Bridge Design and Replacement   Hattiesburg, MS</b><br/>Principal. Served as QA/QC Lead for the team hired to provide Engineering services for bridge design, layout, specifications and probable cost. The existing East Hardy Street Bridge is a two-lane bridge located on the Leaf River in Hattiesburg, MS that was identified for replacement through the Emergency Road and Bridge Repair Fund. Mr. Pugh participated in Design Reviews and served as Civil Engineering Subject Matter Expert.</p> |
| <p><b>02/15 - 09/23</b></p>                             | <p><b>Missouri Street at Corinne Canal   St. Bernard Parish, LA</b><br/>Principal. Oversight and technical review of design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Missouri at Corrine Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing two (2) – 60” corrugated metal pipe culverts with a 26’-0” wide 72’-0” long clear span, precast concrete structure.</p>                               |
| <p><b>02/15 - 11/16</b></p>                             | <p><b>Paul Drive at 20 Arpent Canal   St. Bernard Parish, LA</b><br/>Principal and Engineer of Record. Led design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Paul Drive at 20 Arpent Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing three (3) – 72” Concrete Pipe Culverts with a 28’-0” wide 64’- 0” long clear span, precast concrete structure.</p>                                          |
| <p><b>02/15 - 02/20</b></p>                             | <p><b>Mumphrey Road at 20 Arpent Canal   St. Bernard Parish, LA</b><br/>Principal. Oversight and technical review of design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Mumphrey Rd at 20 Arpent Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing two (2) – 60” Concrete Pipe Culverts with a 26’-0” wide 72 clear span, precast concrete structure.</p>                                           |

|                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                           |                   |
|----------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------|-------------------|
| NAME: Katherine Foreman, P.E.                                                                |  | TITLE: Engineer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       | FIRM EMPLOYED BY: Royal Engineers and Consultants, L.L.C. |                   |
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 8                                           |  | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                                                           |                   |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2017 / Civil Engineering                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                           |                   |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 46031 / LA / 3-31-2026                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | YEAR REGISTERED: 2021 |                                                           | DISCIPLINE: Civil |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Engineer (MPR 2)/ Project Engineer |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                                           |                   |
| EXPERIENCE DATES<br><i>(mm/yy – mm/yy)</i>                                                   |  | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                                                           |                   |
| 8 Years of Experience                                                                        |  | Ms. Foreman has 8 years of experience in civil engineering design on project types including roadways, bridges, bridge approaches, storm drainage systems, asphalt and concrete road design, sidewalks, potable water distribution systems, gravity sewer systems, flood control structures, commercial and residential site design, foundation design, and retaining walls. Her expertise includes familiarity with DOTD design manuals and specifications, ADA requirements, and AASHTO standards. She can use various software packages for H and H design and analysis such as HEC-HMS, HEC-RAS, DOTD HYDR programs, HY8, and Autodesk Storm and Sanitary Analysis. Ms. Foreman has significant experience preparing plans and specifications to meet DOTD standards, Unified Facilities Criteria (UFC), and local municipal codes.<br><b>CERTIFICATIONS:</b> Traffic Control Supervisor, Traffic Control Technician |                       |                                                           |                   |
| 05/23 – Ongoing<br><i>Featured Project</i>                                                   |  | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>Engineer of Record. Provided engineering and related services required to develop plans to replace an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish, which is off the State Highway System. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls. The proposed structure will tie-in to the existing concrete lined Suburban Canal.                                                                                                                                                                                                                                                                                                                                     |                       |                                                           |                   |
| 08/15 – 05/22<br><i>Featured Project</i>                                                     |  | <b>Magistrate Street at Corrine Canal   St. Bernard Parish, LA</b><br>Engineer Intern. The Magistrate Street at Corrine Canal Bridge consisted of a Hazard Mitigation project to replace the preexisting two (2) – 60” corrugated metal pipe culverts with a 26’-0” wide, 72’-0” long clear span, precast concrete structure. Responsible for hydraulic analysis, site layout and grading, foundation design, wingwall design, and coordinating development of plans. During construction, responsibilities included submittal reviews (pile loads and con-span wingwall), engineering design for repairs, restorations and/or replacement of bridge to its Pre-Katrina condition while preserving the historical value and original intent of the facility.                                                                                                                                                             |                       |                                                           |                   |
| 08/15 – 02/20<br><i>Featured Project</i>                                                     |  | <b>Gallo Drive Bridge at Arpent Canal   St. Bernard Parish, LA</b><br>Engineer Intern. Responsible for the design for this project, which replaced the Gallo Drive at 20 Arpent Canal Bridge in St. Bernard Parish. The Gallo Drive Bridge scope included a full replacement of the existing two (2) – 60” concrete pipe culverts with a 26’-0” wide clear span, precast concrete structure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                                                           |                   |





|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>02/15 – 09/23</b> | <b>Missouri Street at Corinne Canal   St. Bernard Parish, LA</b><br>Engineer Intern. Provided engineering services for repairs/restorations/replacement of bridge, replacing culvert with a pre-cast Con-Span structure, performing hydraulic analysis, site layout/grading, foundation/wingwall design, plan coordination, and submittal reviews.                                                                                                                                                                                                                                                                                                               |
| <b>02/15 – 11/16</b> | <b>Paul Drive at 20 Arpent Canal   St. Bernard Parish, LA</b><br>Engineer Intern. Supported design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Paul Drive at 20 Arpent Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing three (3) – 72" Concrete Pipe Culverts with a 28'-0" wide 64'- 0" long clear span, precast concrete structure.                                                                                                                                                                                                   |
| <b>11/20 – 06/24</b> | <b>Indian Creek Low Water Crossing   Fort Polk, LA</b><br>Project Manager. Led the Royal team providing engineering services to design a new roadway low water crossing structure and to design repairs to the existing Sagebrush Road. Responsibilities include serving as the primary point of contact between Royal and DCMS, Inc., coordinating closely with the construction Contractor for the project throughout design of the project, designing the horizontal geometry of proposed new road, and supporting the design team with various design tasks such as Hydraulic Modeling, culvert sizing, and development of plans and specifications.         |
| <b>08/15 - 01/22</b> | <b>Iberia Street Sidewalk   Youngsville, LA</b><br>Engineer Intern on team providing engineering design and construction management for the DOTD TAP-funded H.013443 Iberia Street Sidewalk, Ph 1 project in Youngsville, LA. The project consisted of installation of RCP drainage piping within the existing roadside ditches and a six-foot wide concrete sidewalk including two pedestrian bridges crossing waterways on the south side of Iberia St. from School St. to Sugar Mill Pond Subdivision, allowing for greater interconnectivity of pedestrian travel. Ms. Foreman provided design support for proper sizing of the proposed subsurface drainage |
| <b>08/15 – 11/21</b> | <b>Polly Lane Extension   Lafayette Consolidated Government</b><br>Engineer Intern. Provided engineering design for the connection of both dead-end streets of Polly Lane. The approximate length of the new roadway is 1,080 linear feet and the length of improvements to existing roadway is 930 linear feet. Provided engineering design, analyses, and construction management for connection of both dead-end streets of Polly Lane and storm drainage system design.                                                                                                                                                                                      |
| <b>06/15 – 06/17</b> | <b>City of Youngsville Engineering Design   Youngsville, LA</b><br>Engineer Intern. Performed design, bidding, and construction management for the rehabilitation of Détente Road.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| NAME: Beau Tate, P.E.                                                                               |  | TITLE: Senior Engineer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | FIRM EMPLOYED BY: Royal Engineers and Consultants, L.L.C. |  |  |
|-----------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------|--|-------------------------------------------------------------------------------------|
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 17                                                 |  | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                           |  |                                                                                     |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 1998 / Environmental Engineering, Minor- Civil Engineering |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                           |  |                                                                                     |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 30990 / LA / 3-31-2026                        |  | YEAR REGISTERED: 2004                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | DISCIPLINE: Civil                                         |  |                                                                                     |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Supervisor-Eng (MPR 3) / QA/QC Lead       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                           |  |                                                                                     |
| EXPERIENCE DATES<br><i>(mm/yy – mm/yy)</i>                                                          |  | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                           |  |                                                                                     |
| 27 Years of Experience                                                                              |  | Mr. Tate is a Senior Engineer with a long career in infrastructure design. Mr. Tate has been the Engineer of Record on numerous projects involving asphalt and concrete road design, bridges and canal crossings, low water crossings, sidewalks, flood control structures, commercial and residential site design, foundation design, and retaining walls.                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                           |  |                                                                                     |
| 05/23 – Ongoing<br><i>Featured Project</i>                                                          |  | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>Supervisor-Eng. Served as QA/QC Lead for the design of a replacement an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls. The proposed structure will tie-in to the existing concrete lined Suburban Canal.                                                                                                                                                                                                                                 |  |                                                           |  |                                                                                     |
| 08/15 – 05/22<br><i>Featured Project</i>                                                            |  | <b>Magistrate Street at Corrine Canal   St. Bernard Parish, LA</b><br>Engineer of Record. The Magistrate Street at Corrine Canal Bridge consisted of a Hazard Mitigation project to replace the preexisting two (2) – 60" corrugated metal pipe culverts with a 26'-0" wide, 72'-0" long clear span, precast concrete structure. Responsible for hydraulic analysis, site layout and grading, foundation design, wingwall design, and coordinating development of plans. During construction, responsibilities included submittal reviews (pile loads and con-span wingwall), engineering design for repairs, restorations and/or replacement of bridge to its Pre-Katrina condition while preserving the historical value and original intent. |  |                                                           |  |                                                                                     |
| 08/15 – 02/20<br><i>Featured Project</i>                                                            |  | <b>Gallo Drive Bridge at Arpent Canal   St. Bernard Parish, LA</b><br>Engineer of Record. Responsible for the design for this project, which replaced the Gallo Drive at 20 Arpent Canal Bridge in St. Bernard Parish. The Gallo Drive Bridge scope included a full replacement of the existing two (2) – 60" concrete pipe culverts with a 26'-0" wide clear span, precast concrete structure.                                                                                                                                                                                                                                                                                                                                                 |  |                                                           |  |                                                                                     |
| 04/19 - 05/24<br><i>Featured Project</i>                                                            |  | <b>East Hardy Bridge Design and Replacement   Hattiesburg, MS</b><br>Engineer. Provided oversight for bridge and roadway design efforts including layout, specifications and probable cost. The existing East Hardy Street Bridge is a two-lane bridge located on the Leaf River in Hattiesburg, MS that was identified for replacement through the Emergency Road and Bridge Repair Fund.                                                                                                                                                                                                                                                                                                                                                      |  |                                                           |  |                                                                                     |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>11/20 – 06/24</b> | <b>Indian Creek Low Water Crossing and Road Repairs   Fort Polk, LA</b><br>Senior Engineer. Oversight of design of gravel roadways and repairs and hydraulic analysis of low water crossing for a Design-Build project for the U.S. Army Corps of Engineers (USACE) located near Fort Polk, LA. The project restored and widened approximately 2.4 miles of the existing Sagebrush Road and will include construction of a 1.2 mile new roadway and low water crossing structure to provide connectivity across Indian Creek. Project features included an aggregate roadway and road base, open ditch drainage, reinforced concrete culvert crossing, reinforced concrete low water crossing structure, object markers and signage, and gates. |
| <b>02/15 - 09/23</b> | <b>Missouri Street at Corinne Canal   St. Bernard Parish, LA</b><br>Engineer of Record. Led design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Missouri at Corrine Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing two (2) – 60” corrugated metal pipe culverts with a 26’-0” wide 72’-0” long clear span, precast concrete structure.                                                                                                                                                                                                                                                                                 |
| <b>02/15 - 11/16</b> | <b>Paul Drive at 20 Arpent Canal   St. Bernard Parish, LA</b><br>Engineer. Supported design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Paul Drive at 20 Arpent Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing three (3) – 72” Concrete Pipe Culverts with a 28’-0” wide 64’- 0” long clear span, precast concrete structure.                                                                                                                                                                                                                                                                                         |
| <b>02/15 - 02/20</b> | <b>Mumphrey Road at 20 Arpent Canal   St. Bernard Parish, LA</b><br>Engineer of Record. Led design for repairs, restorations and/or replacement of a Parish-owned roadway and canal crossing with a precast Con-Span structure. The Mumphrey Rd at 20 Arpent Canal Crossing consisted of a Hazard Mitigation project to replace the pre-existing two (2) – 60” Concrete Pipe Culverts with a 26’-0” wide 72 clear span, precast concrete structure.                                                                                                                                                                                                                                                                                             |
| <b>04/14 – 05/15</b> | <b>Vie Terre Beau Bridge Repair   Acadia Parish, LA</b><br>Engineer of Record. Royal performed damage assessments and provided engineering design, surveying, bidding, and construction phase services to restore the Vie Terre Beau Bridge at Bayou Nezpique.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



|                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                                                           |  |                                                                                     |
|-----------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------|--|-------------------------------------------------------------------------------------|
| NAME: Billy Fontenot, P.E.                                                              |  | TITLE: Senior Engineer                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       | FIRM EMPLOYED BY: Royal Engineers and Consultants, L.L.C. |  |  |
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 3                                      |  | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 10                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                                                           |  |                                                                                     |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2012 / Civil Engineering                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                                                           |  |                                                                                     |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 41036 / LA / 3-31-2025            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | YEAR REGISTERED: 2016 | DISCIPLINE: Civil                                         |  |                                                                                     |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Engineer / Engineering Design |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                                                           |  |                                                                                     |
| EXPERIENCE DATES<br><i>(mm/yy – mm/yy)</i>                                              |  | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                     |                       |                                                           |  |                                                                                     |
| 13 Years of Experience                                                                  |  | Mr. Fontenot has 13 years of experience in civil/structural engineering, construction consulting, and structural inspection/repair. He performed on-site structural deficiency inspections for statewide projects and engineered safe, economic approaches to specific construction problems related to various heavy construction projects.<br><b>CERTIFICATIONS:</b> ATSSA Traffic Control Supervisor, ATSSA Traffic Control Technician, Certified Flagger                                    |                       |                                                           |  |                                                                                     |
| 05/23 - Ongoing<br><i>Featured Project</i>                                              |  | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>Engineer. Responsible for overseeing the structural component of the design of box culverts, headwalls, and wingwalls to replace the existing slab span bridge in support of engineering design plans to replace an existing slab span bridge. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls. |                       |                                                           |  |                                                                                     |
| 11/22 – Ongoing                                                                         |  | <b>East Bank Sediment Transport Corridor Road Reconstruction and Canal Crossings   Plaquemines and St. Bernard Parish</b><br>Engineer. Responsible for design of sheet pile bulk heads, bank stability of canal crossings, structural design of pipe culverts crossing below a major highway, and general QA/QC of final design drawing package.                                                                                                                                                |                       |                                                           |  |                                                                                     |
| 06/12 – 07/18<br><i>Previous Employer</i>                                               |  | <b>I-10 Lake Pontchartrain Bridge Deck Patching and Girder Painting   New Orleans, LA</b><br>Engineer Intern. Performed field inspection, created assessment reports, used as-built plans and CAD software to design traffic control detour paths, refined rehabilitation plans for final submittal, and planned inspection/quantification.                                                                                                                                                     |                       |                                                           |  |                                                                                     |
| 06/12 – 07/16<br><i>Previous Employer</i>                                               |  | <b>Yscloskey Vertical Lift Bridge Painting   St. Bernard Parish, LA</b><br>Engineer Intern. Designed paint containment/geometric site layout support system, detailed phasing plans, site survey/layout using total station/automatic level, and roadway/water-fairing traffic coordination to optimize productivity.                                                                                                                                                                           |                       |                                                           |  |                                                                                     |
| 06/12 – 07/17<br><i>Previous Employer</i>                                               |  | <b>In-Depth Bridge Inspection of Complex Structures   St. Landry Parish, LA</b><br>Engineer Intern. Performed inspection of deck and super/substructure of approach spans on Krotz Springs Bridge, coordinated inspector meetings and equipment rentals, staffed personnel, and provided assessment reports.                                                                                                                                                                                    |                       |                                                           |  |                                                                                     |
| 06/12 – 07/17<br><i>Previous Employer</i>                                               |  | <b>Inner Harbor Canal Bridge Rehabilitation   DOTD Contract H.003182   Algiers, LA</b><br>Engineer Intern. Designed traffic control and signage within DOTD standards, assisted quantity checks, used as-builtplans and CAD software to design traffic control detour paths, and refined rehabilitation plans for final submittal.                                                                                                                                                              |                       |                                                           |  |                                                                                     |

|                                                                                               |                         |                                                           |                   |                                                                                     |
|-----------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|
| NAME: Alec Carter O'Brien, P.E.                                                               | TITLE: Project Engineer | FIRM EMPLOYED BY: Royal Engineers and Consultants, L.L.C. |                   |  |
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 5                                            |                         | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 10   |                   |                                                                                     |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2013 / Civil Engineering                             |                         |                                                           |                   |                                                                                     |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 43647 / LA / 3-31-2026                  |                         | YEAR REGISTERED: 2019                                     | DISCIPLINE: Civil |                                                                                     |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Engineer / Constructability Reviews |                         |                                                           |                   |                                                                                     |

| <b>EXPERIENCE DATES</b><br><i>(mm/yy – mm/yy)</i> | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>15 Years of Experience</b>                     | Mr. O'Brien is a licensed Engineer with 15 years of heavy civil, roadway, drainage, and bridge construction management experience. Mr. O'Brien routinely performs as needed Constructability Reviews for Engineering Design projects on behalf of Royal's design team. Mr. O'Brien has led, from Project Kickoff to Closeout, dozens of CE&I and Construction Management projects for DOTD, FEMA, the Port of New Orleans, and various municipalities. He has extensively worked in structural concrete, asphalt paving, PCCP, catch basins, drainage, bridge, and sidewalk projects.<br><b>CERTIFICATIONS:</b> ATSSA Traffic Control Supervisor, ATSSA Traffic Control Technician, and Certified Flagger |
| <b>05/23 – Ongoing</b><br><i>Featured Project</i> | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>Engineer. Serves on the QA/QC team responsible for Constructability Reviews for the replacement of an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls. The proposed structure will tie-in to the existing concrete lined Suburban Canal.                                                                                                                                                             |
| <b>06/23 – Ongoing</b>                            | <b>Lafayette Parish Non-State Pavement Markings (CE&amp;I)   DOTD Contract H.015018.5 (Entity)</b><br>Engineer. Provides CE&I services for the construction and restriping of 14 miles of roadway along Cajundome Blvd., East Pinhook Rd./Teurlings Ave., Kaliste Saloom Rd., Mudd Ave., and Gendarme Rd. Responsible for CE&I deliverables, including management of inspectors, compliance with plans and specifications, QA/QC, reporting and document control, RFIs, change order requests, and as-builts.                                                                                                                                                                                             |
| <b>05/24 – Ongoing</b>                            | <b>Crescent City Connection Decorative Lighting Project (CE&amp;I)   DOTD Contract H.015504.6</b><br>Engineer. Responsible for all CE&I deliverables for a new, LED, decorative lighting system for the Crescent City Connection bridge at a cost of \$20.7million. Hurricane Ida surged the electrical system resulting in an installation that features lights on the trusses and illuminating the piers.                                                                                                                                                                                                                                                                                               |
| <b>06/23 – Ongoing</b>                            | <b>US 90Z Harvey Canal Tunnel Rehabilitation (CE&amp;I)   DOTD Contract H.010673</b><br>Engineer. Responsible for CE&I deliverables for the rehabilitation of the Harvey Canal Tunnel and its approaches along US 90Z in Jefferson Parish. The approximately \$50million rehabilitation includes new tile lining, drainage pumps, pavement, structural, electrical and ventilation systems. Manages inspectors, performs QA/QC of field reports, and maintains project schedule.                                                                                                                                                                                                                          |

|                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                        |                                                           |                 |
|------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------|-----------------|
| NAME: Cassidy Melancon, E.I.                                                                   |  | TITLE: Engineer Intern                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        | FIRM EMPLOYED BY: Royal Engineers and Consultants, L.L.C. |                 |
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 3                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 0 |                                                           |                 |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2020 / Civil Engineering                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                        |                                                           |                 |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 34626 / LA / 3-31-2025                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                        | YEAR REGISTERED: 2020                                     | DISCIPLINE: N/A |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Engineer Intern / Engineering Design |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                        |                                                           |                 |
| EXPERIENCE DATES<br><i>(mm/yy – mm/yy)</i>                                                     |  | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><i>(“designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        |                                                           |                 |
| 3 Years of Experience                                                                          |  | Ms. Melancon is an Engineer Intern with 3 years of experience in the industry which includes assisting engineering design and project management services. Her responsibilities in engineering range from various design tasks regarding drainage, roadway, and structural analyses to drafting and maintaining project files. Her project management assistance has included tasks such as reviewing inspector observations, design plans and quantities. Ms. Melancon’s accomplishments include the structural design of box culverts and retaining walls.                                                                                                                                                                                  |                                                        |                                                           |                 |
| 05/23 – Ongoing<br><i>Featured Project</i>                                                     |  | West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009<br>Engineer Intern. Responsible for supporting engineering design plans to replace an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls.                                                                                                                                                                                                                                                                                                             |                                                        |                                                           |                 |
| 04/22 – 12/24                                                                                  |  | East Bank Sediment Transport Corridor Road Reconstruction and Canal Crossings   Plaquemines and St. Bernard Parish<br>Engineer Intern. Responsible for supporting structural design of box culverts and retaining walls, guardrail design, temporary traffic control plans, and preparing quantity takes and cost estimates for the design of roadway regrading and reconstruction to facilitate installation of a permanent pipeline casing adjacent to the Mississippi River Levee. The permanent pipeline casing is required as part of a proposed corridor through Plaquemines and St. Bernard Parishes that would deliver dredged sediment from point bars within the Mississippi River to marsh creation areas within the Breton Sound. |                                                        |                                                           |                 |
| 09/22 – 09/23                                                                                  |  | Ashland and Detiveaux Road Repairs   South Louisiana Electric Cooperative Association (SLECA)<br>Engineer Intern. Provided engineering design calculations and permitting support for two roadways providing access to SLECA’s electrical distribution infrastructure in Houma, LA: Detiveaux Rd., a 1.5 mile long aggregate roadway providing access to the Bayou Dularge Main Feed, and Ashland Rd., a 2.3 mile long aggregate roadway providing access to the Ashland Substation. For the Ashland Road section, responsible for plan development, creating a topographic survey surface using point elevation data, and performing a Hydrologic Modification Impact Analysis (HMIA) to support the Coastal Use Permit process.             |                                                        |                                                           |                 |





|                                                                                                    |                            |                                                                  |                        |
|----------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------------------------------|------------------------|
| <b>NAME:</b> DeWain Butler                                                                         | <b>TITLE:</b> Lead Drafter | <b>FIRM EMPLOYED BY:</b> Royal Engineers and Consultants, L.L.C. |                        |
| <b>YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER:</b> 3                                          |                            | <b>YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s):</b> 17   |                        |
| <b>DEGREE(S) / YEARS / SPECIALIZATION:</b> N/A / N/A / N/A                                         |                            |                                                                  |                        |
| <b>ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE:</b> N/A / N/A / N/A                       |                            | <b>YEAR REGISTERED:</b> N/A                                      | <b>DISCIPLINE:</b> N/A |
| <b>CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES:</b> CADD Drafter / CADD Plan Drawings |                            |                                                                  |                        |

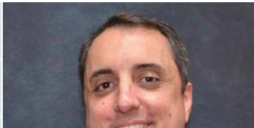


| <b>EXPERIENCE DATES</b><br><i>(mm/yy – mm/yy)</i> | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>20 Years of Experience</b>                     | Mr. Butler has 20 years of experience drafting plans and specifications for Architecture and Engineering Design projects. Mr. Butler has technical capabilities in AutoCad Civil 3d and Revit design softwares.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>05/23 – Ongoing</b><br><i>Featured Project</i> | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>CADD Drafter. Responsible for supporting engineering design plans to replace an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish. The proposed replacement structure is a two (2), 12-ft by 12-ft Reinforced Concrete Box Culverts with concrete headwalls and wingwalls.                                                                                                                                                                                                                                                                                           |
| <b>11/22 – 06/24</b>                              | <b>Indian Creek Low Water Crossing and Road Repairs   Fort Polk, LA</b><br>CADD Drafter. Responsible for supporting design of plans and specifications for the design of gravel roadways and hydraulic analysis of low water crossing for a Design-Build project for the U.S. Army Corps of Engineers (USACE) located near Fort Polk, LA. The project restored and widened approximately 2.4 miles of the existing Sagebrush Road, built a 1.2 mile new roadway, and designed a Low Water Crossing (LWC) structure to provide connectivity across Indian Creek.                                                                                                                                                                 |
| <b>08/22-01/23</b>                                | <b>Visitor Control Center and Commercial Inspection Facilities   Naval Air Station Joint Reserve Base Belle Chasse, LA</b><br>Drafter/Designer. Responsibilities included create drawings for a 30/50% submittal on a design-build project. Deliverables included a construction set of drawings/plans using all required UFC codes for a new visitor control center building, commercial vehicle facility, duress alarm system, overhead canopy for commercial vehicle inspection, signage, and LED lane control signal lights, elevated access control lane islands, permanent passive barriers, traffic control arms, traffic signalization, phasing to maintain existing operation levels, and all utilities and pavements. |
| <b>Prior to 2022</b><br><i>Previous Employer</i>  | <b>Various Clients for Former Employer   Various locations in South Louisiana</b><br>AutoCAD Drafter/Designer. Created CAD files and project files for projects that included deliverables such as geotechnical plans and profiles, USACE permit maps, civil plans and profiles, civil sections, right-of-way maps, soil boring and CPT location maps, soil classification maps and wetland determination maps, potentiometric maps; land use maps; and cross sections.                                                                                                                                                                                                                                                         |

| NAME: Caitlin Vines                                                                                            | TITLE: Environmental Scientist                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | FIRM EMPLOYED BY: Royal Engineers and Consultants, L.L.C. |                 |  |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 3                                                             | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                           |                 |                                                                                     |
| DEGREE(S) / YEARS / SPECIALIZATION: MS / 2017 / Forestry   BS / 2014 / Natural Resource Ecology and Management |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                           |                 |                                                                                     |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: N/A / N/A / N/A                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | YEAR REGISTERED: N/A                                      | DISCIPLINE: N/A |                                                                                     |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Environmental Pro / NEPA Compliance                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                           |                 |                                                                                     |
| EXPERIENCE DATES<br><i>(mm/yy – mm/yy)</i>                                                                     | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                           |                 |                                                                                     |
| 10 Years of Experience                                                                                         | Ms. Vines is an Environmental Scientist providing consulting, permitting, and subject matter expertise in environmental compliance matters that present in infrastructure projects. Ms. Vines is knowledgeable in the regulatory framework of the National Environmental Policy Act (NEPA). Ms. Vines provides in-depth desktop review of natural resources and applies for necessary project permits and/or collaboratively drafts environmental assessments as needed. She is well versed in both state and federal regulatory frameworks applicable to project locations, including NEPA, the Coastal Zone Management Act, the Endangered Species Act, the Magnuson-Stevens Act, the National Historic Preservation Act, the Marine Mammal Protection Act, the Bald and Golden Eagle Protection Act, and others.<br><b>CERTIFICATIONS:</b> Wetland Delineation Certification |                                                           |                 |                                                                                     |
| 05/23 – Ongoing<br><i>Featured Project</i>                                                                     | <b>West Metairie Avenue Over S. Suburban Canal Off System Bridge (OSBR)   DOTD: Contract H.015009</b><br>Environmental Pro. Responsible for research of project location and area features to assess environmental concerns. Prepared the OSBR Environmental NEPA Checklist. Prepared Solicitation of Views to send to federal and state agencies to provide notice required by NEPA of the proposed impact of the project.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                           |                 |                                                                                     |
| 05/22 – Ongoing                                                                                                | <b>Hurricanes Laura and Delta Disaster Recovery   JDEC</b><br>Environmental Scientist. Establishes NEPA compliance for an \$800+ million electric transmission and infrastructure repair for a southwest Louisiana utility cooperative in its rebuild from Hurricanes Laura and Delta. Leads coordination with FEMA, GOHSEP, NOAA, USFWS, and USACE on an as-needed basis as individual project locations require. Obtains all federal/state/local permits/authorizations, anticipates regulatory requirements, and applies for necessary permits on the client’s behalf. Responsible for supporting project managers in Programmatic Environmental Assessment (PEA) development and in coordinating all Environmental and Historic Preservation (EHP) compliance.                                                                                                              |                                                           |                 |                                                                                     |
| 10/23 – Ongoing                                                                                                | <b>Atchafalaya Basin Master Plan Development   CPRA</b><br>Environmental Scientist. Serves as the Project Development Task Lead for the Atchafalaya Master Plan. Responsible for identifying and developing Future Without Action (FWOA) and Candidate projects, developing content for the public project solicitation survey, coordinating with team members on generating project attributes and assumptions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                           |                 |                                                                                     |
| 09/18– 04/22<br><i>Previous Employer</i>                                                                       | <b>Coastal Restoration Program   CPRA</b><br>Scientist Supervisor. Trained a team of scientists led efforts to promulgate complex regulations and standards in collaboration with state and federal agencies. Coordinated environmental compliance for Deepwater Horizon Natural Resource Damage Assessment (NRDA) coastal restoration projects throughout Louisiana.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           |                 |                                                                                     |



|                                                                                            |  |                                      |  |                                                                |                           |
|--------------------------------------------------------------------------------------------|--|--------------------------------------|--|----------------------------------------------------------------|---------------------------|
| <b>NAME:</b> Jean Reulet, III, P.L.S.                                                      |  | <b>TITLE:</b> Senior Project Manager |  | <b>FIRM EMPLOYED BY:</b> T. Baker Smith, LLC                   |                           |
| <b>YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER:</b> 3                                  |  |                                      |  | <b>YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s):</b> 13 |                           |
| <b>DEGREE(S) / YEARS / SPECIALIZATION:</b> BS / 2011 / Geomatics                           |  |                                      |  |                                                                |                           |
| <b>ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE:</b> PLS.5145 / LA / 3-31-2026     |  |                                      |  | <b>YEAR REGISTERED:</b> 2015                                   | <b>DISCIPLINE:</b> P.L.S. |
| <b>CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES:</b> Surveyor (MPR 4) / Survey |  |                                      |  |                                                                |                           |





| <b>EXPERIENCE DATES</b><br><i>(mm/yy – mm/yy)</i> | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>16 Years of Experience</b>                     | Jean Reulet, III, P.L.S. has served in various roles as a professional land surveyor since 2011. His field experience for LADOTD projects began in 2011 where he has been involved in dozens of survey projects of various sizes across the State of Louisiana. He has participated in all stages of Topographic Survey and Right of Way Map preparation from field data collection to final deliverables according to the LADOTD's Location and Survey Manual. This experience has enabled Jean to develop a very thorough QA/QC process which has been used to train a highly skilled project team. Jean is experienced in the use of cutting-edge technology such as terrestrial and mobile LIDAR methods for collecting topographic and structural data in an efficient and safe manner.                                                                                                                             |
| <b>06/23 - Ongoing</b>                            | <b>Contract 44-25027, Infrastructure Investment and Jobs Act (IIJA) Off System Bridge Program District 08; LADOTD; District 08, LA – Sr. Project Manager/Surveyor of Record.</b> Oversaw the completion of topographic surveys, property surveys, and right of way maps for the replacement of 12 bridges. Responsible for field crew coordination, project QA/QC, title research, and deliverables preparation. Surveys were performed to LADOTD Location and Survey standards.                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>09/21 – 01/23 Ph I</b>                         | <b>Contract 44-17598, Rural Bridge Replacement Initiative, Ph I (47 bridge structures); LADOTD; Districts 04, 05, 08, 58 – Survey Project Manager.</b> Coordinated field crews, processed data daily, and provided QA/QC of deliverables. TBS performed control, topographic, and right of way surveys for the replacement of 47 bridge structures in northern Louisiana. Data was captured to detail the existing bridges themselves, roadways on either side, and surrounding terrain to ensure proper tie into to existing surfaces. Cross sections of the channels they cross were also surveyed to provide information for hydraulic modeling. Data is then processed and QA/QC performed and coordinated with in-house engineers designing the replacement bridges. Property surveys of affected tracts of land were also surveyed for any takings or servitudes, and these lines portrayed on right of way maps.  |
| <b>07/21 – 05/23 Ph II</b>                        | <b>Contract 44-19336, Rural Bridge Replacement Initiative, Ph II (40 bridge structures); LADOTD; Districts 04, 05, 08, 58 – Survey Project Manager.</b> Coordinated field crews, processed data daily, and provided QA/QC of deliverables. TBS performed control, topographic, and right of way surveys for the replacement of 40 bridge structures in northern Louisiana. Data was captured to detail the existing bridges themselves, roadways on either side, and surrounding terrain to ensure proper tie into to existing surfaces. Cross sections of the channels they cross were also surveyed to provide information for hydraulic modeling. Data is then processed and QA/QC performed and coordinated with in-house engineers designing the replacement bridges. Property surveys of affected tracts of land were also surveyed for any takings or servitudes, and these lines portrayed on right of way maps. |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>04/21 - 06/21</b><br><i>Previous Employer</i> | <b>H.014322, Centurion over Drainage Bayou, Topographic Survey; LADOTD; Baton Rouge, LA</b> – Survey Manager. Managed field crews, performed title research, data processing, QAQC and prepared topographic survey deliverables for the design and construction of a bridge in Baton Rouge, LA.                                                                                                                  |
| <b>04/21 - 06/21</b><br><i>Previous Employer</i> | <b>H.014255, Beeson Road Over Flagon Bayou Tributary, Topographic Survey; LADOTD; Ball, LA</b> – Survey Manager. Managed field crews, performed title research, data processing, QAQC and prepared topographic survey deliverables for the design and construction of a bridge in Ball, LA.                                                                                                                      |
| <b>12/21 - 02/22</b>                             | <b>Lock No. 3 Road Bridge, Topographic Survey; St. Tammany Parish; St. Tammany Parish, LA</b> – Project Manager. Managed field crews, performed title research, data processing, QAQC and prepared topographic survey deliverables according to LADOTD Off System Bridge guidelines for the design and construction of a bridge in Sun, LA.                                                                      |
| <b>01/23 - 06/23</b>                             | <b>Country Estates Dr. Over St. Louis Bayou; Terrebonne Parish Consolidated Government; Terrebonne Parish, LA</b> – Project Manager. Performed Title Research and Prepared Right of Way maps for the Replacement of a bridge on Country Estates Drive in Terrebonne Parish, LA.                                                                                                                                  |
| <b>09/22 – 08/23</b>                             | <b>S.P. No. H.014414, LA 22: Bedico Creek–Pine Creek; LADOTD; St. Tammany Parish, LA</b> – Sr. Project Manager. Performed field crew coordination, data processing, project QA/QC and management for Topographic Survey and Existing Drainage Map. Project involves the widening of LA 22 and improvements to the intersection of LA 22 and Perrilloux Road.                                                     |
| <b>08/22 - 08/24</b>                             | <b>MA-20-01: Move Ascension, Bluff Road, LA 73 Connector, Ascension Parish Government, Ascension Parish, LA</b> – Project Manager. Provided Topographic surveying and Right-of-Way mapping for the Bluff Road – La 73 Connector Project as part of the Move Ascension Program. The survey was approximately 7,000 feet long and as wide as 300 feet for the design of a roadway to connect LA 73 and Bluff Road. |
| <b>11/23 - 06/24</b>                             | <b>S.P. No. H.015576, LA 447 &amp; LA 1025: Roundabout; LADOTD; Livingston Parish, LA</b> – Sr. Project Manager. Responsible for field crew oversight, data processing and review, and deliverables preparation. Performed Topographic survey for the design and construction of a roundabout at the intersection LA 447 and LA 1025 near Walker, Louisiana.                                                     |
| <b>07/21 – 01/22</b>                             | <b>S.P. No. H.013116, LA 20 Widening: LA 307 to S. Vacherie, LADOTD, St. James &amp; Lafourche Parishes, LA</b> – Project Surveyor. Performed quality control for the Final R/W Maps for the asymmetrical widening of a 2.7 mile stretch of LA 20 near Vacherie, LA.                                                                                                                                             |
| <b>09/22 – 06/23</b>                             | <b>S.P. No. H.015405, Keller Street Bridge Replacement; St. Tammany Parish Government; St. Tammany Parish, LA</b> – Sr. Project Manager. Performed field crew coordination, data processing, project QA/QC and management for Topographic Survey for this bridge replacement project.                                                                                                                            |
| <b>01/18 – 04/20</b><br><i>Previous Employer</i> | <b>I-10: LA 415 to Essen Lane – East and West Baton Rouge Parishes</b> – Sr. Project Manager. Responsible for field crew oversight, data processing and review, and deliverables preparation. Performed Topographic survey for the widening of I-10 through Baton Rouge.                                                                                                                                         |
| <b>11/19 – 12/20</b><br><i>Previous Employer</i> | <b>S.P. No. H.001344.5, US 190: LA 437-US 190 BUS (Ph 1); LADOTD; St. Tammany Parish, LA</b> – Sr. Project Manager. Performed data processing, title research and project QAQC for Property Surveys and Right of way Maps.                                                                                                                                                                                       |

|                                                                                             |                                                                |                                                    |                                                                                     |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>NAME:</b> Anthony Burns                                                                  | <b>TITLE:</b> Project Manager                                  | <b>FIRM EMPLOYED BY:</b> T. Baker Smith, LLC       |  |
| <b>YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER:</b> 2                                   | <b>YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s):</b> 19 |                                                    |                                                                                     |
| <b>DEGREE(S) / YEARS / SPECIALIZATION:</b> N/A / N/A / N/A                                  |                                                                |                                                    |                                                                                     |
| <b>ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE:</b> N/A / N/A / N/A                |                                                                | <b>YEAR REGISTERED:</b> N/A <b>DISCIPLINE:</b> N/A |                                                                                     |
| <b>CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES:</b> Senior Technician / Survey |                                                                |                                                    |                                                                                     |

| <b>EXPERIENCE DATES</b><br><i>(mm/yy – mm/yy)</i> | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>21 Years of Experience</b>                     | Anthony Burns has over 21 years of experience as a rodman, party chief, and project manager with numerous LA DOTD and City-Parish projects involving topographic, right of way, and boundary surveys. His experience includes conventional and terrestrial LiDAR, and mobile LiDAR scanning. He is thoroughly familiar with LA DOTD Location and Survey Procedures, manuals, and software programs with respect to all requirements. He manages our survey field crews and equipment. He holds ATSSA Traffic Control Technician (TCT), Traffic Control Supervisor (TCS), and Flagger certifications, and is TWIC and OSHA certified. |
| <b>05/23 - Ongoing</b>                            | <b>Contract 44-25027, Infrastructure Investment and Jobs Act (IIJA) Off System Bridge Program District 08; LADOTD; District 08, LA—</b> Project Manager. Assisted in the completion of topographic surveys, property surveys, and right of way maps for the replacement of 12 bridges. Assisted with field crew coordination, data processing, project QA/QC, and deliverables preparation. Surveys were performed to LADOTD Location and Survey standards.                                                                                                                                                                          |
| <b>10/22 - 10/23</b>                              | <b>Contract 44-17598, Contract 44-19336, Rural Bridge Replacement Initiative, Ph I and Ph II (87 bridge structures); LADOTD; Districts 04, 05, 08, 58 —</b> Survey Technician. Responsible for review of topographic surveys. ( <b>Location: LADOTD District 08</b> )                                                                                                                                                                                                                                                                                                                                                                |
| <b>09/22 – 06/23</b>                              | <b>S.P. No. H.015405, Keller Street Bridge Replacement; St. Tammany Parish Government; St. Tammany Parish, LA —</b> Project Manager. Performed field crew coordination and data processing for Topographic Survey for this bridge replacement project.                                                                                                                                                                                                                                                                                                                                                                               |
| <b>09/22 – 08/23</b>                              | <b>S.P. No. H.014414, LA 22: Bedico Creek–Pine Creek; LADOTD; St. Tammany Parish, LA —</b> Project Manager. Responsible for review of topographic surveys, performed data processing, and managed the crews on this project.                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>04/21 – 07/21</b><br><i>Previous Employer</i>  | <b>S.P. No. H.009300, Hooper Road Widening (LA 3034 – LA 37); LADOTD; East Baton Rouge Parish, LA —</b> Project Manager/Field Crew Manager. Responsible for a topographic survey and subsurface utility engineering for a one mile stretch of LA Hwy 408.                                                                                                                                                                                                                                                                                                                                                                            |
| <b>11/23 - 06/24</b>                              | <b>S.P. No. H.015576, LA 447 &amp; LA 1025: Roundabout; LADOTD; Livingston Parish, LA —</b> Project Manager. Responsible for field crew oversight and data processing and review. Performed Topographic survey for the design and construction of a roundabout at the intersection LA 447 and LA 1025 near Walker, Louisiana.                                                                                                                                                                                                                                                                                                        |
| <b>01/18 – 04/20</b><br><i>Previous Employer</i>  | <b>S.P. No. H.004100, I-10: LA 415 to Essen Lane; LADOTD; East and West Baton Rouge Parishes, LA —</b> Project Manager. Responsible for field crew oversight, and data processing and review. Performed Topographic survey for the widening of I-10 through Baton Rouge.                                                                                                                                                                                                                                                                                                                                                             |

|                                                  |                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>04/14 – 10/19</b><br><i>Previous Employer</i> | <b>S.P. No. H.002151.5, LA 339 &amp; LA 339S Bayou Parc; LADOTD; Lafayette Parish, LA</b> – Project Manager. Performed data processing, title research and project QAQC for Property Surveys and Right of way Maps.                                                                                                                              |
| <b>03/17 – 04/18</b><br><i>Previous Employer</i> | <b>S.P. No. H.004987, US 190 Collins Blvd. Widening; LADOTD; St. Tammany Parish, LA</b> – Sr. Project Manager; Responsible for Topographic survey, field crew coordination and project QAQC for the widening of a three-mile portion of US 190 in Covington, LA. DTM width was approximately 300ft.                                              |
| <b>02/15 – 04/16</b><br><i>Previous Employer</i> | <b>S.P. Nos. H.011137 and H.011152, I-12 (LA 21 to US 190) &amp; I-12 (US 190 to LA 59); LADOTD; St. Tammany Parish, LA</b> – Project Manager/Field Crew Manager. Responsible for topographic survey on this project.                                                                                                                            |
| <b>05/15 – 11/15</b><br><i>Previous Employer</i> | <b>S.P. No. H.011224, US 190 Guardrail/Rutting Rep. (Ph I); LADOTD; Pointe Coupee Parish, LA</b> – Project Manager/Field Crew Manager. Responsible for topographic survey along five portions of US 190. The project was located in Pointe Coupee Parish from LA 1 westward approximately 18.5 miles to the east side of the Atchafalaya Bridge. |
| <b>04/20 – 11/20</b><br><i>Previous Employer</i> | <b>S.P. No. H.000688, US 11 Norfolk Southern RR Overpass (HBI); LADOTD; St. Tammany Parish, LA</b> – Project Manager. Responsible for field crew oversight, data processing and review and deliverables preparation. Performed a Topographic Survey for the replacement of the US 11 Overpass over the Norfolk Southern Railroad.                |

| <b>NAME:</b> Branden Kinnaird                                                         | <b>TITLE:</b> Party Chief                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>FIRM EMPLOYED BY:</b> T. Baker Smith, LLC |  |                        |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------|------------------------|
| <b>YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER:</b> 2                             | <b>YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s):</b> 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                     |                        |
| <b>DEGREE(S) / YEARS / SPECIALIZATION:</b> N/A / N/A / N/A                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                              |                                                                                     |                        |
| <b>ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE:</b> N/A / N/A / N/A          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>YEAR REGISTERED:</b> N/A                  |                                                                                     | <b>DISCIPLINE:</b> N/A |
| <b>CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES:</b> Party Chief / Survey |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                              |                                                                                     |                        |
| <b>EXPERIENCE DATES</b><br><i>(mm/yy – mm/yy)</i>                                     | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br><i>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</i>                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                                                                     |                        |
| <b>6 Years of Experience</b>                                                          | Branden Kinnaird has extensive experience performing surveys according to the LADOTD Location and Survey Manual. He has a thorough understanding of LADOTD feature coding, control setting procedures, and data collection methodology. Branden has utilized conventional surveying equipment, Real- Time Kinematic GPS equipment, and terrestrial LiDAR for field data collection. In addition to his topographic survey experience, Branden is also very familiar with the principles and procedures for boundary surveying. He has been involved in projects on the state and local levels, as well as for private clients. |                                              |                                                                                     |                        |
| <b>05/23 - Ongoing</b>                                                                | <b>Contract 44-25027, Infrastructure Investment and Jobs Act (IIJA) Off System Bridge Program District 08; LADOTD; District 08, LA – Party Chief.</b> Laramie established project control, performed topographic surveys and recovered boundary monumentation for the development of Right-of-Way maps. Surveys were performed to LADOTD Location and Survey standards for the replacement of 12 bridges.                                                                                                                                                                                                                      |                                              |                                                                                     |                        |
| <b>06/23 - Ongoing</b>                                                                | <b>IIJA Off-System Bridge Replacement Program; Contract No. 44-25027; LADOTD; Statewide – Party Chief.</b> Branden established project control, performed topographic surveys and recovered boundary monumentation for the development of Right-of-Way maps. Surveys were performed to LADOTD Location and Survey standards for the replacement of 12 bridges.                                                                                                                                                                                                                                                                 |                                              |                                                                                     |                        |
| <b>04/21 - 06/21</b><br><i>Previous Employer</i>                                      | <b>H.014322: Centurion over Drainage Bayou, Topographic Survey; LADOTD; Baton Rouge, LA – Party Chief.</b> Collected Topographic data and recovered boundary monumentation for the design and construction of a bridge in Baton Rouge, LA.                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                                                                     |                        |
| <b>04/21 - 06/21</b><br><i>Previous Employer</i>                                      | <b>H.014255: Beeson Road Over Flagon Bayou Tributary, Topographic Survey; LADOTD; Ball, LA – Party Chief.</b> Collected Topographic data and recovered boundary monumentation for the design and construction of a bridge in Ball, LA.                                                                                                                                                                                                                                                                                                                                                                                         |                                              |                                                                                     |                        |
| <b>09/22 – 05/23</b>                                                                  | <b>S.P. No. H.014264, LA 556: Bridges Near Choudrant; LADOTD; Jackson and Lincoln Parishes, LA – Party Chief.</b> Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              |                                                                                     |                        |
| <b>09/22 – 12/22</b>                                                                  | <b>S.P. No. H.014238, LA 818: Barnet Springs &amp; Creek Bridges; LADOTD; Lincoln Parish, LA – Party Chief.</b> Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              |                                                                                     |                        |
| <b>10/22 – 11/22</b>                                                                  | <b>S.P. No. H.014239, LA 589: Alligator Bayou Bridge; LADOTD; West Carroll Parish, LA – Party Chief.</b> Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                              |                                                                                     |                        |



|                                                  |                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>06/20 – 07/21</b><br><i>Previous Employer</i> | <b>S.P. No. H.000358.5, US 190: LA 415 &amp; RR Overpass Repl (HBI); LADOTD; West Baton Rouge Parish, LA</b> – Survey Crew Chief. Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                           |
| <b>03/21 – 06/21</b><br><i>Previous Employer</i> | <b>MoveBR Lee Drive (Highland Road – Perkins Road); East Baton Rouge Parish, LA</b> – Survey Crew Chief. Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                                                    |
| <b>11/19 – 12/20</b><br><i>Previous Employer</i> | <b>S.P. No. H.001344.5, US 190: LA 437-US 190 BUS (Ph 1); LADOTD; St. Tammany Parish, LA</b> – Survey Crew Chief. Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                                           |
| <b>04/19 – 12/19</b><br><i>Previous Employer</i> | <b>S.P. No. H.007811.5, Comite River Diversion; LADOTD; East Baton Rouge Parish, LA</b> – Survey Crew Chief. Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                                                |
| <b>11/23 – 01/24</b>                             | <b>S.P. No. H.015576, LA 447 &amp; LA 1025: Roundabout; LADOTD; Livingston Parish, LA</b> – Party Chief. Responsible for establishing project control and collecting topographic and drainage data for the design and construction of a roundabout at the intersection LA 447 and LA 1025 near Walker, Louisiana.                                                      |
| <b>09/22 – 08/23</b>                             | <b>S.P. No. H.014414, LA 22: Bedico Creek – Pine Creek, St. Tammany &amp; Tangipahoa Parishes, LA</b> – Survey Crew Party Chief. Established project control and performed topographic survey, including development of an existing drainage map, for the widening of LA 22 near Madisonville, Louisiana.                                                              |
| <b>06/20 – 07/21</b><br><i>Previous Employer</i> | <b>S.P. No. H.000358.5, US 190: LA 415 &amp; RR Overpass Repl (HBI); LADOTD; West Baton Rouge Parish, LA</b> – Survey Crew Chief. Performed field data collection for Property Survey and Right of Way Maps.                                                                                                                                                           |
| <b>06/23 - 08/23</b>                             | <b>S.P. No. H.015587, LA 3211 Yokley Road: Roundabout; LADOTD; St. Mary Parish; District 03</b> – Party Chief. Branden established project control and performed topographic survey, including development of an existing drainage map, for the design and construction of a roundabout at the intersection of LA 3211 and Yokley Road in Franklin, Louisiana.         |
| <b>01/24 - 02/24</b>                             | <b>S.P. No. H.015555, LA 1077 &amp; Brewster Rd Roundabout; LADOTD / St. Tammany Parish, LA</b> – Party Chief. Branden established project control and performed topographic survey, including development of an existing drainage map, for the design and construction of a roundabout at the intersection of LA 1077 and Brewster Road near Madisonville, Louisiana. |

| NAME: Cy Toups, P.E.                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | TITLE: Lead Professional, Environmental                |  | FIRM EMPLOYED BY: T. Baker Smith, LLC |  |  |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--|---------------------------------------|--|-------------------------------------------------------------------------------------|
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 19                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 3 |  |                                       |  |                                                                                     |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2002 / Environmental Engineering                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |  |                                       |  |                                                                                     |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: 33966 / LA / 9-30-2028                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | YEAR REGISTERED: 2008                                  |  | DISCIPLINE: Environmental             |  |                                                                                     |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Environmental Manager (MPR 5) / NEPA Compliance and Wetlands |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |  |                                       |  |                                                                                     |
| EXPERIENCE DATES<br><small>(mm/yy – mm/yy)</small>                                                                     | EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT<br><small>("designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                        |  |                                       |  |                                                                                     |
| 22 Years of Experience                                                                                                 | Cy Toups is a Louisiana-licensed environmental engineer focused on NEPA processes, environmental assessments, and regulatory compliance. With 22 years of experience in the industry, Cy leverages his diversified environmental and regulatory experience to perform due diligence on powerline transmission projects, commercial developments, and public infrastructure improvements that benefit our communities. Cy’s passion for improvement in our communities is shown in his commitment to the NEPA process to help strengthen project success and implementation. Cy maintains the following certifications: FHWA-NHI-142005 NEPA and the Transportation Decisionmaking Process, as well as ATSSA Traffic Control Supervisor and Traffic Control Technician. |                                                        |  |                                       |  |                                                                                     |
| 08/20-10/21                                                                                                            | Contract 44-17598 – Rural Bridge Replacement Initiative Phase I   LADOTD   Districts 04, 05, 08, 58 – Environmental Lead / Engineer. Performed QC review of wetland delineation field work and report preparation, prepared Solicitation of Views letters, NEPA Categorical Exclusion Documents, and regulatory permit applications for the replacement of 47 bridge structures in northern Louisiana.                                                                                                                                                                                                                                                                                                                                                                 |                                                        |  |                                       |  |                                                                                     |
| 05/21-Ongoing                                                                                                          | Contract 44-19336 – Rural Bridge Replacement Initiative Phase II   LADOTD   Districts 04 and 05 – Environmental Lead / Engineer. Performed QC review of wetland delineation field work and report preparation, prepared Solicitation of Views letters, NEPA Categorical Exclusion Documents, and regulatory permit applications for the replacement of 40 bridge structures in northern Louisiana.                                                                                                                                                                                                                                                                                                                                                                     |                                                        |  |                                       |  |                                                                                     |
| 03/19-05/21                                                                                                            | S.P. No. H.0115116, LA 20 Widening (LA 307 to S. Vacherie)   LADOTD   St. James and Lafourche Parishes, LA – Environmental Professional. Prepared NEPA document (Categorical Exclusion), developed and edited NEPA documents with LADOTD/FHWA comments, stakeholder comments, public meetings, wetland delineation, T&E reporting, alternative analyses, farmlands and mitigation justification, assisted with USACE, LADNR and USCG permit drawings for the 2.5-mile roadway widening and bridge replacement project.                                                                                                                                                                                                                                                 |                                                        |  |                                       |  |                                                                                     |
| 05/23 - Ongoing                                                                                                        | Contract 44-25027, Infrastructure Investment and Jobs Act (IIJA) Off System Bridge Program District 08; LADOTD; District 08, LA – Environmental Lead / Engineer. Performed QC review of wetland delineation field work and report preparation, prepared Solicitation of Views letters, NEPA Categorical Exclusion Documents and regulatory permit applications for the replacement of 12 bridge structures in District 08.                                                                                                                                                                                                                                                                                                                                             |                                                        |  |                                       |  |                                                                                     |

|                                                                                                       |                                         |                                                        |                   |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------|-------------------|
| NAME: Colby Guidry, P.E.                                                                              | TITLE: Vice President and Lead Engineer | FIRM EMPLOYED BY: Huval and Associates, Inc.           |                   |
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 17                                                   |                                         | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 7 |                   |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2000 / Civil Engineering                                     |                                         |                                                        |                   |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: PE 31338 / LA / 9-30-2026                       |                                         | YEAR REGISTERED: 2004                                  | DISCIPLINE: Civil |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Engineer / Structural Subject Matter Expert |                                         |                                                        |                   |

| <b>EXPERIENCE DATES</b><br>(mm/yy – mm/yy) | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br>(“designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s))                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>24 Years of Experience</b>              | Certifications include Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures and Fracture Critical Inspection Techniques for Steel Bridges.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>01/08 - Present</b>                     | <b>Public and Private Bridge Load Ratings – Statewide</b> – Lead Rating Engineer for bridges all across the state on a continual basis. Numerous load ratings performed weekly for a host of clients including parishes, cities, oil field companies, and other clients. The ratings include bridge types such as timber, steel, concrete, movable, fixed, pontoons, and trusses.                                                                                                                                                                                                                                                    |
| <b>01/23 – Present</b>                     | <b>Stuller Bridge – Private Bridge – St. Martin Parish</b> – Design and Construction Manager for the design, load rating, plan development, and Construction Management of a multi-span Quad beam bridge for a private owner. The bridge design and construction involves concrete piles, concrete caps, prestressed concrete beams, concrete barrier rails, steel sheet piles, and other miscellaneous work.                                                                                                                                                                                                                        |
| <b>01/19 – 02/24</b>                       | <b>Herman Dupuis Swing Span Bridge (Movable) – St. Martin Parish</b> – Project Manager for the design, load rating, plan development, and Construction Oversight of a new swing span bridge over alligator bayou which will replace the Butte LaRose Pontoon bridge. Design elements include all aspects of the bridge including environmental clearance, surveying, structural design, mechanical design, electrical design, hydraulic design, roadway design, and all other design elements. Rating of the various bridge components was also performed. Construction support and oversight were provided throughout construction. |
| <b>10/10 – 01/22</b>                       | <b>Butte LaRose Pontoon Repairs (Movable) – St. Martin Parish</b> – Lead Engineer for the design, Load Rating, and Construction Management of numerous repairs to the movable pontoon bridge over alligator bayou. Repairs included deck repairs, stringer repairs, cap repairs, pontoon barge repairs, machinery repairs, pile repairs, abutment repairs.                                                                                                                                                                                                                                                                           |
| <b>4/18 – 4/23</b>                         | <b>Retainer for Engineering Services for Bridge Preservation - Statewide, Contract No. 4400011225</b> - Supervisor Engineer of \$4M Retainer Contract. Responsible for project management, coordination, project setup, QA/QC, Load Ratings and bridge rehab design.                                                                                                                                                                                                                                                                                                                                                                 |
| <b>12/20 – 06/21</b>                       | <b>Ascension Parish 26 Bridge Ratings</b> – Inspected, gathered documentation, rated, and provided repair plans, as well as assisted in construction rehab reviews for 26 Ascension Parish bridges. Complex analysis rating analysis allowed the bridges to remain open while repairs were planned.                                                                                                                                                                                                                                                                                                                                  |
| <b>09/12 – 12/17</b>                       | <b>Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, Contract No. 4400002537</b> - Supervising Engineer of Retainer Contract. Responsible for coordination, inspections, project setup, QA/QC, Load Ratings, and bridge rehab design for the \$6M retainer contract.                                                                                                                                                                                                                                                                                                                                      |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>05/11 – 08/15</b> | <b>Retainer for Engineering Services for Bridge Preventive Maintenance (BRPM) - Statewide, Contract No. 440001543</b> - Lead Engineer of Retainer Contract. Led the Inspection and Design for 8 different Task Orders covering Preventive Maintenance Repairs for over 100 Bridges statewide in short timeframes.                                                                                                                                                                                                                                                                      |
| <b>08/09 – 06/15</b> | <b>Retainer Contract for Bridge Repair and Rehabilitation Services - Statewide, S.P. 700-99-0488</b> - Lead Engineer of Retainer Contract. Responsible for coordination, inspection team leader, project setup, bridge design, and QA/QC of Task Orders totaling approximately \$8.75M over a 5-year period. Contract utilized multiple Subconsultants on all aspects of bridge design and inspection.                                                                                                                                                                                 |
| <b>01/13 - 11/15</b> | <b>Tappan Zee Bridge, NY Thruway Authority (Construction Support)</b> – Project Manager/design engineer for design of precast tower and anchor pier slabs, pile templates, work platforms, and other systems. Also assisted in the design of temporary fender systems designed to protect the construction area from ice, wave, and ship impacts.                                                                                                                                                                                                                                      |
| <b>01/11 - 08/14</b> | <b>St. Ann Bridge Over Bayou Terrebonne (Movable) Swing Span – S.P. 700-55-0107</b> – Lead structural designer for a new Swing span bridge over bayou Terrebonne. Also assisted with Mechanical reviews throughout the design process. Colby was involved with every aspect of this movable bridge project from environmental clearance through construction. This swing span had unique issues to overcome due to the limited vertical space due to waterway and adjacent road obstructions. Also performed Construction Oversight for LADOTD during the entire construction process. |

|                                                                                                        |                                                        |                                              |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------|
| NAME: Reid Romero, P.E.                                                                                | TITLE: Civil Engineer                                  | FIRM EMPLOYED BY: Huval and Associates, Inc. |
| YEARS OF RELEVANT EXPERIENCE WITH THIS EMPLOYER: 15                                                    | YEARS OF RELEVANT EXPERIENCE WITH OTHER EMPLOYER(s): 0 |                                              |
| DEGREE(S) / YEARS / SPECIALIZATION: BS / 2000 / Civil Engineering                                      |                                                        |                                              |
| ACTIVE REGISTRATION NUMBER / STATE / EXPIRATION DATE: PE 37772 / LA / 9-30-2025                        | YEAR REGISTERED: 2013                                  | DISCIPLINE: Civil                            |
| CONTRACT ROLE(S) / BRIEF DESCRIPTION OF RESPONSIBILITIES: Engineer / Bridge Design, Project Management |                                                        |                                              |

| <b>EXPERIENCE DATES</b><br>(mm/yy – mm/yy) | <b>EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE PROPOSED CONTRACT</b><br>(“designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>5/20 – Present</b>                      | <b>Retainer for Engineering Services for Bridge Preservation - Statewide, Contract No. 4400017262</b> - Lead Engineer of Retainer Contract. Responsible for coordination, project setup, QA/QC, and bridge design for the \$5M retainer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>03/23 – Present</b>                     | <b>Jimmie Davis Bridge (LA 511), S.P. No. H.001779</b> – Bridge task lead for the Design Build project to construct the new four lane bridge across the Red River in Bossier / Caddo Parish. The project includes the reconstruction of nearly two miles of LA 511 into a modern, four lane median divided highway. The project encompasses the creation of full access interchange connections at two key junctions: Arthur Ray Teague Parkway and Clyde Fant Memorial Parkway. These interchanges will seamlessly integrate with upgraded LA 511. The initiative also includes the transformation of the existing Jimmie Davis Bridge into a Linear Park. The repurposed structure will be a vibrant public space, featuring new multi-use paths for pedestrians and cyclists.                                                                                                                                    |
| <b>4/18 – 5/23</b>                         | <b>Retainer for Engineering Services for Bridge Preservation - Statewide, Contract No. 4400011225</b> - Lead Engineer of Retainer Contract. Responsible for coordination, project setup, QA/QC, and bridge rehab design for the \$4M retainer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>12/19 – 01/23</b>                       | <b>New Swing Span- Herman Dupuis RD. Pontoon BR. Replacement, St. Martin, LA, Bridge Recall 200896</b> – Lead structural engineer for the bridge design and plan development of a new swing span bridge over alligator bayou which replaced the Butte LaRose Pontoon bridge. Designed, detailed, and sealed final plans, specifications, calculations, load rating and cost estimates for all structural elements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>03/19 – 06/22</b>                       | <b>I-220/I-20 Interchange Imp &amp; BAFB Access Design Build Project – S.P. No. H.003370</b> – Responsible for QA of the bridge plans and load rating for the LA 1267 bridges over I-20 and the LA 1267 bridges over the KCS Railroad. The LA 1267 structures over I-20 consist of twin bridges utilizing LG-54 p.p.c. girder spans supported by concrete column bents and drilled shafts. The LA 1267 structures over KCS Railroad consist of twin bridges utilizing LG-54 p.p.c. girder approach spans supported by concrete pile bents and a main span over the KCS Railroad consisting of 170'-0", LG-78 p.p.c. girders supported by concrete column bents and drilled shafts. Some unique challenges that the project has presented is designing applicable LA 1267 bridges over I-20 column bents for vehicular collision and completely spanning the KCS own right-of-way utilizing concrete p.p.c. girders. |



|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7/17 – 8/20   | <b>I-10: Highland Road to LA 73, Design Build Project, East Baton Rouge &amp; Ascension Parish, S.P. No. H.009250</b> - Led the design, plan preparation, and load rating for the repair of the prestressed girder bridge on LA 928. Performed QA/QC of the LRFD design calculations and load rating for the steel girder bridge at Highland road and the slab span widening at Bayou Manchac. The existing I-10 mainline bridge at the Highland Road interchange needed to be reconstructed under the project to provide longer spans in addition to more lanes. An innovative sequence of construction scheme and bridge design enabled construction of this bridge while maintaining 74,000 ADT traffic. Huval's cost-effective designs enabled its design-build team to be the only competitor to fit within the Owner's budget of \$72 million. |
| 01/19 – 05/19 | <b>I-10 Loyola Design-Build Project RFP Phase 30% Design - S.P. H.011670</b> – Lead bridge engineer throughout the RFP design phase for this complex urban interchange. Assisted in the preparation of steel tub girder design and details, concrete box girder design and plans, as well as plans and proposal documents for the RFP phase of the project. Created dozens of computer models in order to analyze and size the steel tub girders, taking into account system redundancy. Assisted in development of alternative technical concepts, suggested sequence of construction, and miscellaneous bridge and other details. Assisted in the coordination and organization of all project data with the various members of the design team from numerous consulting firms.                                                                    |
| 11/17 – 07/18 | <b>Surrey St. Bridge Repairs, Lafayette Parish</b> – Lead Engineer for the repair of the Surrey St. Bridge in Lafayette. Project consisted of bearing repair and replacement, concrete riser construction, deck overlay, joint repairs, painting of steel girders with full enclosure, and miscellaneous work.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 12/09 – 01/13 | <b>St. Ann Swing Span Bridge, S.P. 700-55-0107 &amp; S.P. H.005029.5</b> – Assisted in plan preparation and performed designed calculations on this swing span bridge. Performed moment balance calculations, design of pedestrian walkway, counterweight design calculations, traffic barrier design calculations, light pole foundation design calculations, quantity calculations, design checks of stringer and main girders, and plan review and markups. Provided construction services on an as-needed basis.                                                                                                                                                                                                                                                                                                                                 |
| 12/11 – 01/13 | <b>Seabrook, Port of New Orleans Req. No. 077704</b> – Performed span balancing calculations of the bascule bridge throughout the different construction phases. Designed temporary support brackets to elevate existing ballast beams to allow for painting of the bottom chord. Provided additional construction services on an as-needed basis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 01/12 – 11/13 | <b>I-49 North Segment J (MLK Blvd. to LA 1), S.P. H.003496.5</b> – Performed LRFD design calculations and led plan preparation on two prestressed girder and steel girder bridges. Performed approach slab design, girder design check using LEAP Conspan, cap and column design check using LEAP RC Pier, steel girder design check using MDX, deck and overhang reinforcing design check, strip seal joint opening calculations, quantity calculations and QA/QC, and elevation calculations. Mr. Romero also provided load rating of the completed structure.                                                                                                                                                                                                                                                                                     |
| 03/09 – 11/10 | <b>I-49 North (LA 1 – LA 173), S.P. 701-65-1230 &amp; S.P. 701-65-1349</b> – Assisted in plan preparation and performed LRFD design calculations on a Type BT Prestressed Girder Bridge and a Type IV Prestressed Girder Bridge. Performed fixed and expansion bearing pad design, deck and overhang reinforcing design, quantity calculations and QA/QC, strip seal joint opening calculations, girder design check using LEAP Conspan, cap and column design check using LEAP RC Pier, and elevation checks.                                                                                                                                                                                                                                                                                                                                       |

## 17. FIRM EXPERIENCE

Identify the team's project experience most relevant to the scope in the advertisement. **The projects should be limited to a total of 20, with no more than 5 projects being represented by the prime consultant and with no more than 3 projects represented by each sub-consultant on the team. If more than 5 projects are identified for the prime consultant, all projects identified after the first 5 will not be evaluated. If more than 3 projects are identified for a single sub-consultant, all projects identified after the first 3 from that sub-consultant will not be evaluated.** Include no more than one page per project. Projects identified shall only include work performed by firms on the team. The projects identified do not necessarily need to have been DOTD projects. Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) \* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent. **\*\*This field cannot be left blank and N/A is not acceptable. The only past performance evaluation disciplines to be used are: Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic.** \*\*Please copy these disciplines exactly as they are listed above. \*\*

|                                                                                                                      |                                                                |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| <b>FIRM NAME:</b> Royal Engineers and Consultants, L.L.C.                                                            | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge       |
| <b>PROJECT NAME:</b> West Metairie Avenue Over S. Suburban Canal                                                     | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime               |
| <b>PROJECT NUMBER:</b> H.015009                                                                                      | <b>OWNER'S NAME:</b> DOTD                                      |
| <b>PROJECT LOCATION:</b> Jefferson Parish, Louisiana                                                                 | <b>OWNER'S PROJECT MANAGER:</b> Barbara Ostuno, P.E.           |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> P.O. Box 94245, Baton Rouge, LA 70804   (225) 379-1047   Barbara.ostuno@la.gov |                                                                |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 05/23                                                                        | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$93                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> Ongoing                                                                      | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$70 |

Royal is providing Engineering and Related Services to develop plans to replace an existing slab span bridge at West Metairie Avenue over the South Suburban Canal in Jefferson Parish. Royal is managing all aspects of design and client relations, overseeing plan production in accordance with the OSBR Program Guidelines, leading the hydraulic analysis and design for all viable alternatives for the bridge replacement in accordance with the DOTD Hydraulics Manual, and coordinating survey efforts. Royal's scope includes preliminary plan production and environmental services, including solicitation of views, categorical exclusion clearance, wetland studies, and other information needed for the Environmental Clearance process. Royal oversaw surveying services for the project, with survey deliverables provided in accordance with the OSBR Program Guidelines and the LADOTD Location and Survey Manual. The existing slab span bridge is proposed to be replaced by two (2) 12 ft x 12 ft reinforced box culverts. Royal has completed all of preliminary design and is awaiting Environmental Clearance to begin the Final Plans phase.

**KEY PERSONNEL:** Michael Pugh, Beau Tate, Katherine Foreman, Alec Carter O'Brien, Billy Fontenot, Cassidy Melancon, Caitlin Vines, DeWain Butler



|                                                                                                                                  |                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>FIRM NAME:</b> Royal Engineers and Consultants, L.L.C.                                                                        | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge                       |
| <b>PROJECT NAME:</b> Magistrate Street at Corinne Canal                                                                          | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                               |
| <b>PROJECT NUMBER:</b> 2014 - 24 - 00                                                                                            | <b>OWNER'S NAME:</b> St. Bernard Parish Government                             |
| <b>PROJECT LOCATION:</b> St. Bernard Parish, Louisiana                                                                           | <b>OWNER'S PROJECT MANAGER:</b> Donald R. Bourgeois, Jr.                       |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 51125 East St. Bernard Highway, Chalmette, LA 70043   (504) 278-4313   dbourgeois@sbsp.net |                                                                                |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 08/15                                                                                    | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$550 (programmatic)                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 05/22                                                                                    | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$540 (programmatic) |

The project consisted of engineering and construction administration services for the replacement of Magistrate Street Bridge over the Corinne Canal. This bridge design was apart of St. Bernard's investment in bringing their roadways, bridges, culverts or other canal crossing structures, and all associated infrastructure to meet current codes and standards. The Magistrate Street Bridge also included taking Hazard Mitigation measures for structures prone to repeated damages caused by high velocity flood waters, sediment and debris delivered by storm surges during hurricanes. The project includes a full replacement of the existing two (2) – 96" corrugated metal pipe culverts with a 26'-0" wide clear span, precast concrete structure. Royal performed an existing conditions analysis, identified significant damages to pipe ends and breakage. Due to the extent of the damages, the project was eligible for replacement by the Federal Emergency Management Agency (FEMA). Royal conducted a cost analysis that ultimately justified the ConSpan Hazard Mitigation to replace it at a lower-cost. Engineering services and deliverables include civil engineering, detailed design plans, surveying, full hydraulic analysis, geotechnical, field layout, bidding, construction administration and management, resident inspection, close-out, comprehensive cost estimate, CPM schedule, contract document and bid package production, demolition/removal, replacing with precast concrete clear span con-span, driven timber piles, structural concrete grade beams, storm drainage, roadway/waterline/sanitary sewer replacement, canal cleaning/shaping, riprap with flowable fill, ADA ramps, sidewalks and incidental PCC pavement. Royal designed the interior height to provide the cross-sectional area required for the drainage and engineered the roadway grades to raise while simultaneously not exceeding the maximum longitudinal slope required. Royal also designed vertical curves into the changes in the profile of the roadway to provide a seamless transition from the new to pre-existing roadway grade.

**KEY PERSONNEL:** Michael Pugh, Beau Tate, Katherine Foreman, Alec Carter O'Brien





|                                                                                                                                  |                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>FIRM NAME:</b> Royal Engineers and Consultants, L.L.C.                                                                        | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge                       |
| <b>PROJECT NAME:</b> Gallo Drive Bridge at 20 Arpent Canal                                                                       | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                               |
| <b>PROJECT NUMBER:</b> 2014 - 24 - 00                                                                                            | <b>OWNER'S NAME:</b> St. Bernard Parish Government                             |
| <b>PROJECT LOCATION:</b> St. Bernard Parish, Louisiana                                                                           | <b>OWNER'S PROJECT MANAGER:</b> Donald R. Bourgeois, Jr.                       |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 51125 East St. Bernard Highway, Chalmette, LA 70043   (504)-278-4313   dbourgeois@sbpg.net |                                                                                |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 08/15                                                                                    | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$550 (programmatic)                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 02/20                                                                                    | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$540 (programmatic) |

The project consisted of engineering and construction administration services for the replacement of Gallo Drive Bridge, as part of the Parish's investment in bringing their roadways, bridges, culverts or other canal crossing structures up to current codes and standards and providing Hazard Mitigation measures for structures prone to repeated damages caused by high velocity flood waters, sediment and debris delivered by storm surges during hurricanes. The project included a full replacement of the existing two (2) – 60" concrete pipe culverts with a 26'-0" wide clear span, precast concrete structure. We performed an existing conditions analysis, identified significant damages to pipe ends and breakage. We conducted a cost analysis that ultimately justified ConSpan Hazard Mitigation to replace it at a lower cost. Engineering services and deliverables include civil engineering, detailed design plans, surveying, full hydraulic analysis, geotechnical, field layout, bidding, construction administration and management, resident inspection, close-out, comprehensive cost estimate, CPM schedule, contract document and bid package production, demolition/removal, replacing with precast concrete clear span con-span, driven timber piles, structural concrete grade beams, storm drainage, roadway/waterline/sanitary sewer replacement, canal cleaning/shaping, riprap with flowable fill, ADA ramps, sidewalks and incidental PCC pavement. Royal designed the interior height to provide the cross-sectional area required for the drainage and engineered the roadway grades to raise while simultaneously not exceeding the maximum longitudinal slope required. Royal also designed vertical curves into the changes in the profile of the roadway to provide a seamless transition from the new to pre-existing roadway grade. Bid and construction phase services included assistance with bid advertisement, conducting pre-bid meeting and bid opening, populating bid tabulation, making award recommendation, preparing the owner/contractor draft agreement, assuring that the contractor produced and submitted all necessary insurance certificate, bond, and the schedule of values as per contract award.

**KEY PERSONNEL:** Michael Pugh, Beau Tate, Katherine Foreman, Alec Carter O'Brien



|                                                                                                                                |                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <b>FIRM NAME:</b> Royal Engineers and Consultants, L.L.C.                                                                      | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> CE&I/OV       |
| <b>PROJECT NAME:</b> Plaza / Arpent Bridge                                                                                     | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                |
| <b>PROJECT NUMBER:</b> 2011 - 35 - 03                                                                                          | <b>OWNER'S NAME:</b> St. Bernard Parish Government              |
| <b>PROJECT LOCATION:</b> St. Bernard Parish, Louisiana                                                                         | <b>OWNER'S PROJECT MANAGER:</b> Donald R. Bourgeois, Jr.        |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 51125 East St. Bernard Highway, Chalmette, LA 70043   (504)-278-4313 dbourgeois@sbpg.net |                                                                 |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 02/12                                                                                  | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$125                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 04/15                                                                                  | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$125 |

Royal was hired by the St. Bernard Parish Government to provide engineering services for repairing, restoring, and/or replacing Parish-owned roadways and bridges to their Pre-Katrina condition, while preserving the historical value and intent of each facility. As part of this contract, Royal performed design and construction management services for the replacement of the Plaza /Arpent bridge. The existing culvert configuration was found to be inadequate to handle the increased flow of water during major rain events. The new bridge is 52 ft x 32 ft, and included removal and replacement of 400 sy of roadway pavement, 1250 ft concrete piles; and installation of 56 feet of concrete pipe, over 100 LF of guard rail, a handicap ramp, 5" rollover, 6" and 8" barrier concrete curb, and 190 LF of handrail. Engineering Services included civil engineering, design, surveying, geotechnical, field layout, bidding, construction administration, resident inspection, technical/engineering project close-out, construction management services. Royal produced detailed design plans, comprehensive cost estimates, and CPM schedules to execute its engineering design services. Royal also supported the bid and contract phase including assistance with bid advertisements, conducting pre-bid meetings and bid openings, populating bid tabulations and making award recommendations, preparing the owner/contractor draft agreements, assuring SBPG that the contractors produced and submitted all necessary insurance certificates, bonds, and the schedule of values as per each contract award. Royal's engineering and CM responsibilities during the Construction phase consisted of all planning and coordination with the contractor, starting with a Preconstruction meeting with all project associated personnel, through project close-out.

**KEY PERSONNEL:** Michael Pugh, Beau Tate, Alec Carter O'Brien





|                                                                                                              |                                                                 |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <b>FIRM NAME:</b> Royal Engineers and Consultants, L.L.C.                                                    | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge        |
| <b>PROJECT NAME:</b> East Hardy Bridge Design & Replacement                                                  | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Subconsultant        |
| <b>PROJECT NUMBER:</b> 2019-07                                                                               | <b>OWNER'S NAME:</b> SDW Consulting Engineers                   |
| <b>PROJECT LOCATION:</b> Hattiesburg, Mississippi                                                            | <b>OWNER'S PROJECT MANAGER:</b> John Weeks                      |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 301 2nd Avenue, Hattiesburg, MS 36401   (601) 544-1821   john@sd-w.com |                                                                 |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 04/19                                                                | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$15M                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 05/24                                                                | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$764 |

The East Hardy Street Bridge is a two-lane bridge located on the Leaf River in Petal, MS that was identified for replacement through the Emergency Road and Bridge Repair Fund. The bridge was replaced with a two-lane bridge constructed adjacent to the existing structure. The existing bridge remained in service while construction of the new bridge is performed. Preliminary design services were initiated with review of site data available, which consisted of geotechnical investigation and engineering; topographic and boundary survey; existing bridge as-built plans; studies/analysis, environmental assessments, and conceptual road alignment plans pertaining to the project. Royal attended the pre-design conference to outline procedures and to discuss contract administration details, design criteria, and to open the floor for client comment and input. Basis of the engineering design was provided and included foundation type, geotechnical conditions, loading conditions, and span arrangements. Royal also provided a structural design basis and criteria document that compiled and summarized the structural design criteria to be used in the design of structure and foundations. Conceptual Design and Field Review Plans depicted all items to be constructed as well as the layout and basis of design for all foundations and superstructure. Drawings included preliminary bridge layout sheets, foundation plan, piling layout, span arrangement, roadway sections and layout, road profiles, typical sections, phase construction sheets, and an opinion of probable cost. Approval of Field Review Plans was received on schedule, triggering Final Design Services. Substructure and superstructure plans contain pile notes and bearing requirements, pile layout, all dimensions convenient to construction, sufficient cross section details, beam sizes, types and spacing, elevations & crown details, reinforcing details, pile bearing requirements, types and sizes, prestressing data where required, phase construction sheets, notes and proper cross referencing. All design computations, pertinent sketches, quantity estimates, preliminary construction schedule and required special provisions were also provided. Deliverables conform to applicable MDOT requirements and were prepared in accordance with all applicable codes.

**KEY PERSONNEL:** Michael Pugh, Beau Tate



|                                                                                                                            |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>FIRM NAME:</b> T. Baker Smith, LLC                                                                                      | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Road, Bridge, Survey, Environmental |
| <b>PROJECT NAME:</b> IIJA Off-System Bridge Replacement Program                                                            | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                                      |
| <b>PROJECT NUMBER:</b> Multiple #s                                                                                         | <b>OWNER'S NAME:</b> DOTD                                                             |
| <b>PROJECT LOCATION:</b> LADOTD District 08, LA                                                                            | <b>OWNER'S PROJECT MANAGER:</b> Brian Allen                                           |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 1201 Capitol Access Rd., Baton Rouge, LA 70802   (225) 379-1840   brian.allen@la.gov |                                                                                       |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 10/22                                                                              | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$2,450                                        |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> Ongoing                                                                            | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$2,044                     |

The IIJA Off-System Bridge Replacement Program was created with the signing of the Infrastructure Investment and Jobs Act (IIJA) to increase federal funding to replace rural bridges that are in fair or poor condition. DOTD awarded TBS with the IIJA off system bridge contract for District 08, which allocated approximately \$29 million to cover engineering services, construction, environmental, right-of-way acquisitions, utility relocations and construction support services. In conjunction with the Parishes and LADOTD, 12 bridges were selected for replacement for District 08. These bridges are spread throughout 7 Parishes and 9 State Project Numbers. The replacement structures include Reinforced Concrete Slab Spans and Reinforced Concrete Box Culverts, spanning lengths from 20'-160'. Although most sites were able to be closed to local traffic, low profile runarounds and diversions were necessary on some sites to maintain access and add to the complexity and diversity of this project. TBS established a project control network, researched existing subsurface utilities, and collected topographic data to aid in hydraulic analysis and design of replacements bridges at each site. The topographic surveys extended along the road for 500' feet from each end of bridge and along the creek for 150 feet upstream and downstream of said bridges. Site photographs were collected to further document existing conditions. All project deliverables were prepared to LADOTD Location & Survey Standards. Where the design engineer identified a need for additional right-of-way, TBS provided Property Surveys and Right-of-Way maps for use in acquisition. Survey crews located boundary monumentation and other evidence of possession to determine the extents of the existing highway rights-of-way and landowners affected by right-of-way takings. The maps were developed utilizing field data and title information provided by LADOTD. All project deliverables were prepared in accordance with Addendum A of the Location & Survey Manual. TBS performed wetland delineation which were comprised of preliminary data gathering, field investigation, report preparation and coordination of a Jurisdictional Determination (JD). TBS also prepared Categorical Exclusions (CE) in accordance with the National Environmental Policy Act (NEPA) of 1969 and the President's Council on Environmental Quality regulations to implement NEPA. The CE documents included Solicitation of Views (SOV), purpose and need, description of alternatives, and an evaluation of the socio-economic and environmental consequences to be presented in the CE Checklist with supporting Appendices. TBS also prepared and submitted U.S. Army Corps of Engineers (USACE) Section 404 Permit/ NWP applications for the proposed bridge projects.

**KEY PERSONNEL:** Jean Reulet, III and Cy Toups



|                                                                                                                                |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>FIRM NAME:</b> T. Baker Smith, LLC                                                                                          | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Road, Bridge, Survey, Environmental |
| <b>PROJECT NAME:</b> Rural Bridge Replacement Initiative, Phase I                                                              | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                                      |
| <b>PROJECT NUMBER:</b> Multiple #s                                                                                             | <b>OWNER'S NAME:</b> DOTD                                                             |
| <b>PROJECT LOCATION:</b> Statewide, LA                                                                                         | <b>OWNER'S PROJECT MANAGER:</b> Valerie M. Tourres, PE                                |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 1201 Capitol Access Rd., Baton Rouge, LA 70802   (225) 379-1894   valerie.tourres@la.gov |                                                                                       |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 08/20                                                                                  | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$8,952                                        |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 11/24                                                                                  | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$4,470                     |

As part of an overall effort by LADOTD to reduce the amount of structurally deficient bridges throughout the state in order to meet FHWA metrics, LADOTD contracted TBS for the Rural Bridge Replacement Initiative, Phase I projects which replaced 47 bridge structures, primarily in North and Central Louisiana. The consultant contract was a complete turnkey project, and as the Prime, T. Baker Smith was responsible for nearly all contract services including inspection, surveying, ROW, preliminary and final bridge plans, preliminary and final roadway plans, construction services, scour analysis, hydraulic analysis, load rating and permanent signing for all 47 structures. TBS coordinated geotechnical investigation and design using sub-consultants. The replacement structures included box culverts, RC Slab spans, and LG-25 girder span bridges having clear widths ranging from 24' wide to 40' wide. TBS established a project control network, researched existing subsurface utilities, and collected topographic data to aid in hydraulic analysis and design of replacements bridges at each site. The topographic surveys extended along the road for 500' feet from each end of bridge and along the creek for 150 feet upstream and downstream of said bridges. Site photographs were collected to further document existing conditions. All project deliverables were prepared to LADOTD Location & Survey Standards. Where the design engineer identified a need for additional right-of-way, TBS provided Property Surveys and Right-of-Way maps for use in acquisition. Survey crews located boundary monumentation and other evidence of possession to determine the extents of the existing highway rights-of-way and landowners affected by right-of-way takings. The maps were developed utilizing field data and title information provided by LADOTD. All project deliverables were prepared in accordance with Addendum A of the Location & Survey Manual. TBS performed wetland delineation which were comprised of preliminary data gathering, field investigation, report preparation and coordination of a Jurisdictional Determination (JD). TBS also prepared Categorical Exclusions (CE) in accordance with the National Environmental Policy Act (NEPA) of 1969 and the President's Council on Environmental Quality regulations to implement NEPA. The CE documents included Solicitation of Views (SOV), purpose and need, description of alternatives, and an evaluation of the socio-economic and environmental consequences to be presented in the CE Checklist with supporting Appendices. TBS also prepared and submitted U.S. Army Corps of Engineers (USACE) Section 404 Permit/NWP applications for the proposed bridge projects.

**KEY PERSONNEL:** Jean Reulet, III and Cy Toups



|                                                                                                                                |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>FIRM NAME:</b> T. Baker Smith, LLC                                                                                          | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Road, Bridge, Survey, Environmental |
| <b>PROJECT NAME:</b> Rural Bridge Replacement Initiative, Phase II                                                             | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                                      |
| <b>PROJECT NUMBER:</b> Multiple #s                                                                                             | <b>OWNER'S NAME:</b> DOTD                                                             |
| <b>PROJECT LOCATION:</b> Statewide, LA                                                                                         | <b>OWNER'S PROJECT MANAGER:</b> Valerie M. Tourres, PE                                |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 1201 Capitol Access Rd., Baton Rouge, LA 70802   (225) 379-1894   valerie.tourres@la.gov |                                                                                       |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 05/21                                                                                  | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$7,282                                        |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> Ongoing                                                                                | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$4,585                     |

As part of an overall effort by LADOTD to reduce the amount of structurally deficient bridges throughout the state as part of meeting FHWA metrics, LADOTD contracted TBS for the Rural Bridge Replacement Initiative, Phase II projects which replaced 40 bridge structures, primarily in North and Central Louisiana. The consultant contract was a complete turnkey project, and as the Prime, T. Baker Smith was responsible for nearly all contract services including inspection, surveying, ROW, geotechnical, preliminary and final bridge plans, preliminary and final roadway plans, construction services, scour analysis, hydraulic analysis, load rating and permanent signing for all 40 structures. TBS is coordinating geotechnical investigation and design using sub-consultants. The replacement structures include box culverts, RC Slab spans, and LG-25 girder span bridges having clear widths ranging from 24' wide to 40' wide. TBS established a project control network, researched existing subsurface utilities, and collected topographic data to aid in hydraulic analysis and design of replacements bridges at each site. The topographic surveys extended along the road for 500' feet from each end of bridge and along the creek for 150 feet upstream and downstream of said bridges. Site photographs were collected to further document existing conditions. All project deliverables were prepared to LADOTD Location & Survey Standards. Where the design engineer identified a need for additional right-of-way, TBS provided Property Surveys and Right-of-Way maps for use in acquisition. Survey crews located boundary monumentation and other evidence of possession to determine the extents of the existing highway rights-of-way and landowners affected by right-of-way takings. The maps were developed utilizing field data and title information provided by LADOTD. All project deliverables were prepared in accordance with Addendum A of the Location & Survey Manual. TBS performed wetland delineation which were comprised of preliminary data gathering, field investigation, report preparation and coordination of a Jurisdictional Determination (JD). TBS also prepared Categorical Exclusions (CE) in accordance with the National Environmental Policy Act (NEPA) of 1969 and the President's Council on Environmental Quality regulations to implement NEPA. The CE documents included Solicitation of Views (SOV), purpose and need, description of alternatives, and an evaluation of the socio-economic and environmental consequences to be presented in the CE Checklist with supporting Appendices. TBS also prepared and submitted U.S. Army Corps of Engineers (USACE) Section 404 Permit/NWP applications for the proposed bridge projects.

**KEY PERSONNEL:** Jean Reulet, III and Cy Touns





|                                                                                                                             |                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <b>FIRM NAME:</b> Huval and Associates, Inc.                                                                                | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge        |
| <b>PROJECT NAME:</b> LA 356-1 Bayou Teche Bridge                                                                            | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                |
| <b>PROJECT NUMBER:</b> H.011485                                                                                             | <b>OWNER'S NAME:</b> DOTD                                       |
| <b>PROJECT LOCATION:</b> Breaux Bridge, LA                                                                                  | <b>OWNER'S PROJECT MANAGER:</b> Chris Guidry, P.E.              |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 1201 Capitol Access Rd., Baton Rouge, LA 70804   (225) 379-1933   chris.guidry@la.gov |                                                                 |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 01/17                                                                               | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$500                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 11/21                                                                               | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$500 |

Huval & Associates, Inc. (HUVAL) was originally contracted to perform an evaluation of the existing historic structure to determine the level of rehabilitation required to restore the bridge to a like new condition while preserving the historical features of the bridge. The bridge is listed as a Preservation Priority and HUVAL worked closely with the DOTD Bridge Design and Environmental Sections to ensure the requirements of the Programmatic Agreement were followed. The evaluation included a hands-on inspection of all components, a live load rating and a final report which summarized the findings and provide the DOTD with repair recommendations and estimated construction costs.

After finalizing the required repairs, Huval was issued a contract to prepare final rehabilitation plans to implement these repairs.

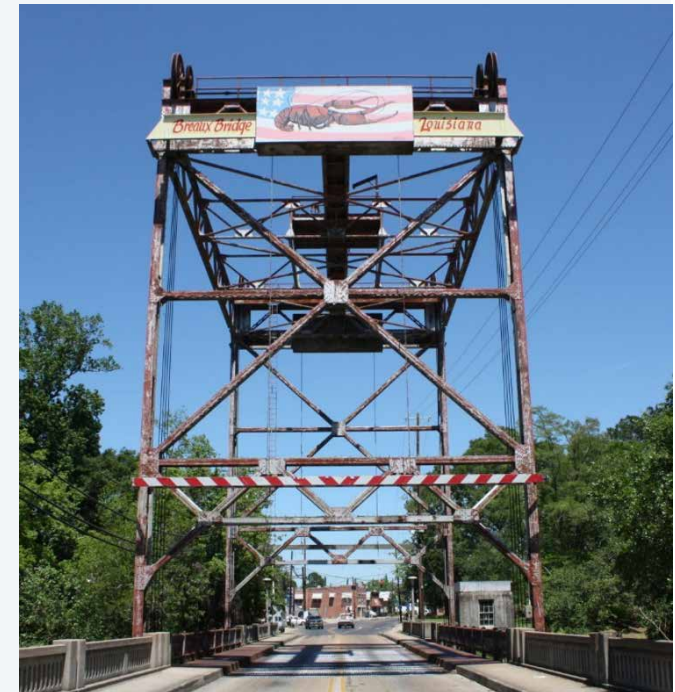
The design details included the replacement or rehabilitation of the following:

- Electrical equipment
- Paint system for structural steel
- Stringer bearings for approach spans
- Steel grid deck
- Rehab of movable traffic barriers
- Tower drive machinery rehab
- Span Locks
- Air Buffers
- Weighing and balancing of the movable span
- Epoxy overlay of the approach spans
- Modification of the bridge railing and sidewalk to comply with ADA requirements.

HUVAL also performed engineering construction services for the project.

HUVAL performed 100% of the work for this project in Louisiana.

**KEY PERSONNEL:** Colby Guidry





|                                                                                                                              |                                                                 |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <b>FIRM NAME:</b> Huval and Associates, Inc.                                                                                 | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge        |
| <b>PROJECT NAME:</b> Herman Dupuis Rd. Pontoon Bridge Replacements                                                           | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                |
| <b>PROJECT NUMBER:</b> N/A                                                                                                   | <b>OWNER'S NAME:</b> DOTD                                       |
| <b>PROJECT LOCATION:</b> Butte La Rose, LA                                                                                   | <b>OWNER'S PROJECT MANAGER:</b> Kasey Courville, P.E.           |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> P.O. Box 9, St. Martinville, LA 70582   (337) 394-2200   kcourville@stmartinparish.net |                                                                 |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 01/19                                                                                | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$726                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> 05/23                                                                                | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$726 |

Huval & Associates, Inc. (HUVAL) was contracted to provide all necessary engineering required for developing plans for the replacement of the Herman Dupuis Rd. Pontoon Bridge. The pre-existing single lane pontoon bridge was closed frequently due to high water levels and structural repairs as required.

HUVAL prepared Design and Construction Plans for a two lane 125 ft. unequal arm steel girder swing span with 145 ft. of concrete slab span approaches. The bridge structure had to be designed on existing alignment in a tight area under vertical constraints to minimize impact to the adjacent roadways, private property, water levels, and the Atchafalaya Basin Levee adjacent to the bridge. The HPU and control panel will be located on the structure to reduce construction cost by eliminating the need for an operator's house. The new bridge will better meet the needs of the community by increasing safety, traffic capacity, improving stopping sight distance, and eliminating closures due to water levels.

HUVAL's responsibilities on this project included the following:

- Structural design of the concrete slab span approach superstructure
- Structural and Geotechnical design of the slab span approach substructure
- Structural and Geotechnical design of the concrete substructure on the movable span
- Structural design of the steel superstructure on the movable span
- Mechanical and Hydraulic Systems design
- Electrical design
- Traffic barrier design
- Final plans were completed in 2021.
- Huval provided construction services including;
  - » Shop drawing review
  - » RFI's
  - » Installation and operation inspection of mechanical systems
  - » Shop visits
  - » Site visits.
- Construction is complete and the bridge was fully opened in May of 2023.

**KEY PERSONNEL:** Reid Romero and Colby Guidry



|                                                                                                                                |                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| <b>FIRM NAME:</b> Huval and Associates, Inc.                                                                                   | <b>PAST PERFORMANCE EVALUATION DISCIPLINE(S):</b> Bridge          |
| <b>PROJECT NAME:</b> IDIQ Retainer Contract for Bridge Preservation Statewide                                                  | <b>FIRM RESPONSIBILITY (PRIME OR SUB):</b> Prime                  |
| <b>PROJECT NUMBER:</b> 4400017262                                                                                              | <b>OWNER'S NAME:</b> DOTD                                         |
| <b>PROJECT LOCATION:</b> Statewide, LA                                                                                         | <b>OWNER'S PROJECT MANAGER:</b> Andrew Windmann, P.E.             |
| <b>OWNER'S ADDRESS, PHONE, EMAIL:</b> 1201 Capitol Access Rd., Baton Rouge, LA 70804   (225) 379-1074   andrew.windmann@la.gov |                                                                   |
| <b>SERVICES COMMENCED BY THIS FIRM:</b> 05/20                                                                                  | <b>TOTAL CONSULTANT CONTRACT COST:</b> \$5,000                    |
| <b>SERVICES COMPLETED BY THIS FIRM:</b> Ongoing                                                                                | <b>COST OF CONSULTANT SERVICES PROVIDED BY THIS FIRM:</b> \$2,194 |

As the Prime, HUVAL is responsible for Preliminary and Final Plans, Surveying Services, Bridge/Structural Inspection and Evaluation, Design Peer Review, Load Rating of Bridges, and Construction Services. Projects performed using LRFD and LRFR design. Completed and On-going Task Orders include:

- **LA 454 over Wiggins Bayou Bridge and Roadway Replacement, T.O. H.012545.5:** Preparing 90% and 100% preliminary plans and 60%, 90%, and 100% Final Bridge Design and Roadway Design Plans with estimated construction cost. Environmental and feasibility studies to realign the channel to mitigate future embankment erosion. The new structure will consist of LG 36 girder spans supported by concrete pile bents. Sub-consultants will perform geotechnical and hydrology surveys.
- **I-20 Bridge Evaluations and Median Barriers Design – US 165 East of Garret Road, T.O. H.014646.5:** Performing load ratings using the LRFR method, adhering to the latest DOTD BDEM. Repair and rehabilitation plans will be provided from the analysis while taking into account the future widening of I-20 and the effects of raising the existing structure to provide adequate vertical clearance for I-20. This will be determined in the bridge study which will look at the effects to the existing bridges, box culverts, roadway geometry, and proposed vertical clearance (16'6"). Submittals consist of Final Roadway, Bridge and Median Barrier Plans.
- **I-10 over I-49 Emergency Repairs, T.O. H.015412.5:** Huval provided emergency design engineering for an emergency repair of the I-10 overpass over I-49. Performed detailed inspection of the damaged structure and designed a replacement section of three concrete girders and deck.
- **US 90-W: US 90 over Bayou Ramos Repairs, T.O. H.015114.5:** Huval is tasked with providing design engineering services for permanent bridge repairs for the LA 182 Bridge over Bayou Ramos. This included preparing a summary of the damage assessment, developing repair concepts, and creating detailed bridge repair plans. Huval also identified necessary traffic control measures, providing specifications, quantities, and an opinion of probable construction costs, as well as preparing an as-designed load rating report. The project required the submission of 60%, 95%, and 100% Final Repair Plans, with the 95% and 100% submittals including cost estimates and detailed specifications.
- Huval and Associates, Inc. is performing 100% of the work for this project in the State of Louisiana.

**KEY PERSONNEL:** Colby Guidry and Reid Romero



# 18. APPROACH AND METHODOLOGY

Provide a description of how the work will be performed **and provide the proposed project schedule**. Include any additional information or description of unique resources that are planned to be used to produce the deliverables. Include any proprietary technologies, methods or approaches that will be used on this project to improve quality or efficiency. If the proposal is for an IDIQ contract, the consultant should review the scope of services in Attachment A to the advertisement to obtain a general understanding of what a typical task order would entail. Based upon that understanding, the consultant should provide a sample schedule that identifies the major milestones, deliverables, tasks, etc., to demonstrate sufficient understanding of a typical task order. The duration of the task order is not required. This section shall be limited to four pages. **If more than four pages are included, all pages after the fourth page will not be evaluated. If the consultant has information it believes is proprietary, label it accordingly.**

## PROJECT UNDERSTANDING

Royal Engineers and Consultants, L.L.C. (Royal) understands that DOTD wishes to replace the existing slab span bridge over a drainage canal on East Flanacher Road near Zachary in East Baton Rouge Parish, LA. The roadway is a local road and is asphalt with open ditch drainage. The bridge site has visible above ground utility crossings and nearby driveways which will require consideration during design and coordination with East Baton Rouge Parish Representatives. The Royal Team is familiar with bridge projects of similar scope and magnitude.

## TEAMING APPROACH

The scope of this OSBR contract will require specific expertise and a distinct familiarity with DOTD's standards, processes, and documentation. To address all scope of work requirements, Royal has assembled a team that has successfully completed projects similar to those listed in the advertisement and who are positioned to interface daily with the DOTD Project Manager, the OSBR Program Manager, East Baton Rouge Parish, as well as other project stakeholders. Our team consists of a diverse group of professionals with extensive experience delivering roadway and various other project types for DOTD and throughout the State.

**As detailed below, each team member brings specific expertise to ensure project success.**

- **As Prime, Royal will lead all bridge design, engineering, and environmental services.** Royal's Civil/Structural engineers are experienced in the disciplines required for this project, have worked on DOTD bridges, and have collaborated closely with other Entities throughout Louisiana on numerous bridge and roadway replacement and rehabilitation projects.
- **Subconsultant T. Baker Smith, LLC (TBS) will lead and perform all surveying activities with support from Royal, and will perform wetlands studies and reporting.** TBS' Professional Land Surveyor and survey crew, and environmental professionals, have conducted the required surveying and environmental activities on similar DOTD bridge project throughout the state. Royal and TBS have a long history of teaming on projects throughout South Louisiana, including working together advancing a rebuilding project for new electric utility infrastructure in Southwest Louisiana that contained complex environmental issues.
- **Subconsultant Huval & Associates, Inc. (Huval) will serve as structural design subject matter experts, provide design support, and participate in technical and QA/QC reviews.** Huval's bridge design experience dates back to 1965, when President David Huval, Sr. P.E., P.L.S. spent 13 years working directly for DOTD as Chief Bridge Engineer, followed by 45 years building a company specializing in DOTD bridge design. Royal and Huval have successfully teamed to complete the Preliminary Design of the recent W. Metairie DOTD Off-System Bridge project located in Jefferson Parish, LA.

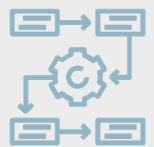
## PROJECT KICKOFF

Upon Notice of Award (NOA), Royal will be ready to mobilize and initiate design services. We will start by submitting our QA/QC Plan within 10 days of NOA and proceeding to prepare an initial project schedule.

## WHY ROYAL?



**PROXIMITY TO PROJECT**  
Our Baton Rouge office is 20 miles from the project location



**PROCESSES & PROCEDURES**  
Our team includes resources who have worked on DOTD projects for over 15 years



**BRIDGE PROJECTS**  
Our team has completed bridge design in several parishes, such as Jefferson/St. Bernard/Iberia

We will coordinate with the DOTD Project Manager to schedule an in-person design kickoff meeting, which will include a site visit with DOTD, East Baton Rouge Parish, utility companies, and TBS present to clarify the project limits and to identify any potential design concerns.

**Topics of discussion at the kickoff meeting will include:**

- » Request existing project information such as design or as-built drawings of the bridge, East Flanacher Road, and other existing infrastructure such as drainage and utilities.
- » Identify potential project issues including:
  - Whether there are any future plans to install sidewalks or multi-use paths along East Flanacher Road. There are no sidewalks currently at the site or along the roadway. The Parish's future plans for connectivity will determine whether including a pedestrian crossing in the replacement bridge's footprint is recommended or required.
  - Since the existing bridge is in a curve, superelevation across the replacement structure will need to be maintained.
  - There is an overhead electric line located at the project site. Potential conflicts and relocations of the electric line and other utilities will be discussed with the Parish and utility owners. Royal has a strong working relationship with DEMCO officials.
  - There is a residential driveway in close proximity to the bridge. Maintaining access to this driveway during construction will be considered early in the design process and incorporated into temporary construction signage plans.
  - There is a steep side slope at one quadrant of the bridge. This will require consideration during design and, depending on the required replacement bridge footprint, may require geotechnical analysis and recommendations to maintain embankment slope stability.
  - Whether a detour bridge will be necessary during construction.

**STAGE 3, PART 1: TOPOGRAPHIC SURVEY**

- » After the initial site visit, Royal and TBS will begin the survey phase of the project. TBS will perform the Topographic Survey per the Off System Bridge Guidelines and the DOTD Location & Survey Manual. TBS will then perform a centerline and cross-section survey capturing the topography of the existing bridge and roadway within 500 ft of each end of the bridge and 25 ft beyond the existing/apparent R/W. Stream topography will also be captured within 150 ft upstream and downstream of the bridge, at minimum, with sufficient information captured for Royal to perform hydraulic analyses.
- » The survey will include all existing structures, large trees within the project area, horizontal and vertical control, utility data, existing/apparent R/W, and bridge features such as gutter lines, center bents, and low chords. Also included in the survey will be any known existing utilities to be accommodated during design.
- » If R/W Services are determined to be required during the design process, TBS will also provide a property survey, base R/W maps, and title take-offs.

**STAGE 3, PART 2: SUBMISSION**

All final survey submittals to DOTD will be packaged and provided in accordance with the off-system bridge guidelines. The survey shall be completed within 30 days of the NTP and given to DOTD for review.

**STAGE 3, PART 3: PRELIMINARY PLANS**

After completing and accepting the survey phase, Royal, Huval, and TBS will begin Part 3 of the project. Part 3 primarily consists of the Hydraulics Report, preliminary plans, and environmental clearance. Estimated timelines for completion of tasks and deliverables are included in the Sample Schedule graphic on the next page.

**Hydraulics Report:**

- » Royal will perform hydraulic studies for the bridge site and prepare a hydraulic report including any viable alternates such as a bridge, reinforced concrete box culverts, or other Cross Drain Pipe options. The hydraulic studies and proposed designs will be per the 2011 DOTD Hydraulics Manual, as modified by the Hydraulics Guidelines for Off System Bridges. Royal will begin the hydraulic study by gathering available hydraulic data, such as existing bridge plans, flood studies, gage data, and effective FIRM HEC-RAS models from DOTD, the Parish, and other entities.



- » Royal will delineate the floodplain for the channel using available topographic maps and LiDAR elevation data. Design discharge at the crossing site will be determined using the USGS or NRCS Method under Chapter 3 of the DOTD Hydraulics Manual, depending on the size of the drainage area. The design criteria will be the lesser of the 25-year flood or the overtopping discharge.
- » Royal will then perform a hydraulic analysis using HEC-RAS to establish an existing conditions model and proposed bridge design alternatives models. The topographic survey data of the channel obtained by TBS will be utilized as input cross-sectional data for the model. The proposed conditions models will be compared against the existing conditions model to ensure backwater requirements are met.
- » The bridge is located in a FEMA Flood Zone X, so a No-Rise is not anticipated to be required.
- » Bridge scour will be estimated using the bridge scour hydraulic design tool in HEC-RAS. Efforts will be made throughout design to minimize the effects of scour and preventative/protective measures will be incorporated into the design.

### **50% Completion:**

- » Concurrently to the Hydraulics report, Royal, with the assistance of Huval, will begin the initial project layout and design review using Huval's extensive staff experience with bridges of this structure type, size, span, geography, and crossing type. This initial design will allow for a more rapid adjustment toward a completed preliminary design during the receipt and approval of the survey and hydraulic data, rather than a linear timeline for the design that would not begin until all data is collected and approved. To improve design efficiency and consistency with other state projects, standard bridge plans will be considered foremost in the design. However, should standards fail to satisfy the requirements of the project, a site-specific design will be utilized.
- » Royal will also identify, design, and layout the necessary preliminary traffic detour plans associated with the construction efforts, which may require more than one traffic plan or detour route depending on the need for multiple phases of construction identified in the early design review. Quite often, complications with traffic design have an impact on bridge design specifics. Therefore, we believe it is pertinent to review the potential for complications as part of a larger effort than just the required construction signage.

### **Solicitation of Views / Environmental - Pre Plan in Hand Meeting:**

- » The environmental process will play a significant role in the delivery of the project on schedule. To minimize or eliminate the environmental impact of the project, Royal will attempt to utilize as much of the existing structure's footprint as possible within the design. Once the preliminary layout of the bridge replacement design has been accepted, TBS will perform a site investigation using the latest U.S Army Corps of Engineers Wetland Delineation Manual. The site investigation will be confirmed with aerial base maps, and wetlands within the project footprint will be reported.
- » Pictures, soil samples, plant communities, hydrology, and other pertinent information will be noted in the Wetland Determination Data Form as required. The report of wetland findings will be submitted to the U.S Army Corps of Engineers.
- » After approval of the replacement structure and before the submission of the PIH plans, Royal will begin the Solicitation of Views (SOV), which will be mailed to all required Parish, governmental agencies, and private parties, as shown on the roster provided by DOTD.
- » Upon receiving responses to the SOV, Royal will prepare the Categorical Exclusion Document as required.

### **Plan in Hand – Post Plan in Hand - Environmental Submission:**

- » After a successful Plan in Hand meeting, Royal will incorporate any final revisions into the preliminary plans.
- » Once final grades and alignment are determined, the R/W requirements will be submitted to the Program Coordinator to facilitate right-of-way acquisition.
- » The final Environmental clearance package will be submitted to the Program Coordinator. The final preliminary bridge plans will include the Typical Section, Plan and Profile, Drainage Map, Construction Signing Sheet, General Bridge Plan, Cross-sections, and Design Waiver and Exception Forms.

### **Final Plans:**

The Final Plans stage, if required, will commence following completion of the Environmental Clearance process.



### Construction:

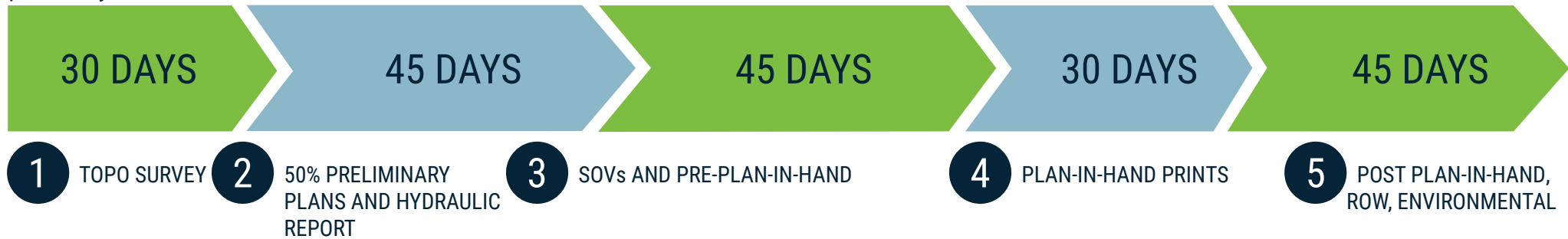
- » Royal will provide DOTD with support during the construction phase, as needed. After award of the contract, Royal will plan to attend the pre-construction meeting and any necessary progress meetings.
- » Royal will be available for RFIs, shop drawings, and change reviews during the construction phase.

## CLOSING

The Royal Team has completed numerous projects throughout south Louisiana and has decades of experience with projects of similar scope and magnitude. We are prepared to bring the necessary resources, experience, and expertise to deliver this project quickly and with excellent quality. The Royal Team appreciates the review of our proposal and consideration for this project and we look forward to working with DOTD.

## PROJECT SCHEDULE

The Project Schedule offered below represents the typical schedule for initial services for OSBR Program projects. The scheduled durations do not include review periods by DOTD.



**Typical Schedule:** Off-System Highway Bridge Program: East Flanacher Rd Over Drainage Canal, East Baton Rouge Parish

## PROJECT LOCATION

**Contract No.:** 4400030639 Off-System Highway Bridge Program: East Flanacher Rd Over Drainage Canal, East Baton Rouge Parish



# 19. WORKLOAD

| ALL FIRMS                                           | PAST PERFORMANCE<br>EVALUATION DISCIPLINES | CONTRACT & STATE<br>PROJECT NO. | PROJECT NAME                                                                  | REMAINING<br>UNPAID BALANCE |
|-----------------------------------------------------|--------------------------------------------|---------------------------------|-------------------------------------------------------------------------------|-----------------------------|
| Royal<br>Engineers<br>and<br>Consultants,<br>L.L.C. | Road, Bridge                               | 4400024593, H.015009.5          | LADOTD OSBR West Metairie Ave Bridge                                          | N/A                         |
|                                                     | CE&I/OV                                    | 4400028466, H.015504.6          | Crescent City Connection Decorative Lighting Project                          | \$159,169                   |
|                                                     |                                            | 4400024438, H.010673            | Harvey Tunnel Rehabilitation                                                  | \$283,184                   |
|                                                     |                                            | 4400027010, H.015018.5          | Entity Contract for Lafayette Parish Non-State PVMT Markings                  | N/A                         |
| Huval &<br>Associates,<br>Inc.                      | Road, Bridge                               | 4400005673, H. 011235           | I-49 South @ Verot School Road Lafayette Parish – Design Phase Supp.<br>3,4,5 | \$97,864                    |
|                                                     |                                            | H.003931                        | I-10 Calcasieu River Bridge; Public-Private Partnership                       | \$20,033,996                |
|                                                     |                                            | 4400029193, H.004100.5          | I-10 CMAR –Design                                                             | \$4,545,608                 |
|                                                     |                                            | 4400029193, H.004100.6          | I-10 CMAR – Construction Services                                             | \$727,569                   |
|                                                     |                                            | 440017262, H.012545.5           | LA 454: Wiggins Bayou Bridge                                                  | \$87,456                    |
|                                                     |                                            | 4400017262, H.012027.5          | I-20: UPRR Overpass                                                           | \$362,180                   |
|                                                     |                                            | H. 001779                       | Jimmie Davis Bridge (LA 511 – Design-Build Project)                           | \$2,218,929                 |
|                                                     | Bridge                                     | 4400010428, H.004774.5          | Kansas Lane-Garrett Road Connector – Supp #1                                  | \$11,644                    |
|                                                     |                                            | H.004791                        | LA 23: Belle Chasse Bridge and Tunnel (HBI)                                   | \$238,565                   |
|                                                     |                                            | 4400017421, H.001352.5          | Comite Diversion Bridge at LA 67 – Construction Services                      | \$174,522                   |
|                                                     |                                            | 4400017421, H.002273.5          | Comite Diversion Bridge at LA 19 & LA 19 Railroad – Const. Services           |                             |
|                                                     |                                            | 4400017262, H.014646.5          | I-20: US 165 East of Garret Road                                              | \$27,224                    |
|                                                     |                                            | 4400017262, H.014052.5          | LA 151: Construction Services                                                 | \$38,473                    |
|                                                     |                                            | 4400017262, H.002868.6          | I-49 South: Ambassador Caffery Interchange                                    | \$24,106                    |
|                                                     |                                            | 4400017262, H.014747.5          | Southern University Ravine Mitigation                                         | \$280,902                   |
|                                                     |                                            | 4400017262, H.011808.6          | LA 10: Palmetto Company Canal BR                                              | \$27,915                    |
|                                                     |                                            | 4400023923, H.013821.5          | LA 6: Youngs Bayou Bridges                                                    | \$10                        |
|                                                     |                                            | 4400023923, H.007300.5          | I-20 Widening and Kansas - Garrett Connector                                  | \$18,483                    |
|                                                     |                                            | 4400023923, H.012545.6          | LA 454 - Wiggins Bayou Bridge: Construction Services                          | \$39,352                    |
|                                                     |                                            | 4400023923, H.014560.6          | LA 94: Vermillion Bridge Replacement                                          | \$28,105                    |

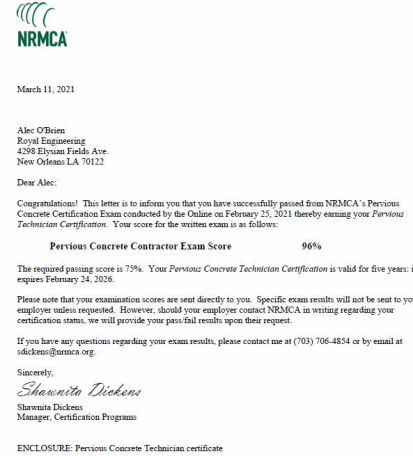
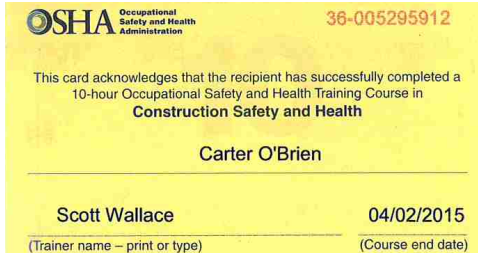
|                |                              |                                      |                                              |           |
|----------------|------------------------------|--------------------------------------|----------------------------------------------|-----------|
| T. Baker Smith | Bridge                       | 4400013407, H.013199                 | Country Estates Dr. Over St. Louis Bayou     | \$799     |
|                |                              | 4400019336, Multiple S.P.'s          | Rural Bridge Replacement Initiative Phase II | \$115,339 |
|                |                              | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$134,534 |
|                | CE&I/OV                      | 4400025760, H.011137                 | I-12: LA 1077 to LA 21 (CE&I)                | \$828,582 |
|                | Environmental                | 4400019336, Multiple S.P.'s          | Rural Bridge Replacement Initiative Phase II | \$34,658  |
|                |                              | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$40,849  |
|                | Other (Construction Support) | 4400013203, H.001344                 | US 190: LA 437 to US 190 Bus (Ph 1)          | \$89,364  |
|                |                              | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$102,092 |
|                | Other (Contract Management)  | 4400019336 Multiple S.P.'s           | Rural Bridge Replacement Initiative Phase II | \$19,749  |
|                |                              | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$71,090  |
|                | Other (Hydraulics)           | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$3,788   |
|                | Road                         | 4400013407, H.013199                 | Country Estates Dr. Over St. Louis Bayou     | \$750     |
|                | Road                         | 4400019336, Multiple S.P.'s          | Rural Bridge Replacement Initiative Phase II | \$116,092 |
|                |                              | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$231,806 |
|                |                              | 4400024928, H.015576 (Task Order #1) | LA 447 & LA 1025: ROUNDABOUT                 | \$142,729 |
|                |                              | 4400024928, H.015721 (Task Order #2) | LA 30: ROUNDABOUT @ ST ELIZABETH/ S PENN     | \$300,567 |
|                | Survey                       | 4400025027, Multiple S.P.'s          | IIJA Off-System Bridge Program               | \$106,384 |
|                |                              | 4400021973, H.009892                 | US 90 FR: Extension to LA 329                | \$73,365  |
|                |                              | 4400021973, H.014308                 | Pope Lane IC RR Xing                         | \$159,701 |

# 20. CERTIFICATIONS/LICENSES

If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

## ROYAL ENGINEERS AND CONSULTANTS, L. L. C.

### ALEC CARTER O'BRIEN, PE



### KATHERINE FOREMAN, PE





## T. BAKER SMITH

## JEAN REULET, III, PE



**LOUISIANA PROFESSIONAL  
ENGINEERING & LAND SURVEYING BOARD  
(LAPELS)**

9643 Brookline Avenue, Suite 121  
Baton Rouge, LA 70809  
Phone (225) 925-6291  
[www.lapels.com](http://www.lapels.com)

**Mr. Jean Louis Reulet III**

License/Certificate Type - Number

**PLS.0005145**

Status: **Active**      Exp Date: **03/31/2026**



## Search for Louisiana Business Filings

[Buy Certificates and Certified Copies](#) [Subscribe to Electronic Notification](#) [Print Detailed Record](#)

| Name                                    | Type                      | City        | Status |
|-----------------------------------------|---------------------------|-------------|--------|
| ROYAL ENGINEERS AND CONSULTANTS, L.L.C. | Limited Liability Company | NEW ORLEANS | Active |

## Previous Names

**Business:** ROYAL ENGINEERS AND CONSULTANTS, L.L.C.  
**Charter Number:** 36013193K  
**Registration Date:** 9/12/2005

## Search for Louisiana Business Filings

[Buy Certificates and Certified Copies](#) [Subscribe to Electronic Notification](#) [Print Detailed Record](#)

| Name                     | Type                 | City      | Status |
|--------------------------|----------------------|-----------|--------|
| HUVAL & ASSOCIATES, INC. | Business Corporation | LAFAYETTE | Active |

## Previous Names

**Business:** HUVAL & ASSOCIATES, INC.  
**Charter Number:** 34351949D  
**Registration Date:** 3/21/1990

## Search for Louisiana Business Filings

[Buy Certificates and Certified Copies](#) [Subscribe to Electronic Notification](#) [Print Detailed Record](#)

| Name                | Type                      | City  | Status |
|---------------------|---------------------------|-------|--------|
| T. BAKER SMITH, LLC | Limited Liability Company | HOUMA | Active |

## Previous Names

T. BAKER SMITH, L.L.C. (Changed: 3/23/2011)  
T. BAKER SMITH, INC. (Changed: 12/13/2010)  
T. BAKER SMITH & SON, INC. (Changed: 4/20/2005)  
**Business:** T. BAKER SMITH, LLC  
**Charter Number:** 26901340K  
**Registration Date:** 1/7/1965

## 21. QA/QC PLAN

*If the advertisement requires submission of a QA/QC plan, include it here. Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.*

See attached.



## **Quality Assurance/Quality Control Plan**

**Contract No. 4400030639**

**Off-System Highway Bridge Program**

**East Flanacher Rd Over Drainage Canal**

**State Project No. H. 015982.5**

**Federal Aid Project No. H015982**

**East Baton Rouge Parish**

**PREPARED FOR**



**PREPARED BY**

**ROYAL ENGINEERS AND CONSULTANTS, L.L.C.**

**1501 RELIGIOUS ST, STE. C**

**NEW ORLEANS, LOUISIANA 70130**

**PHONE: (504) 283-9400**

**FAX: (504) 283-9001**

**February 11, 2025**

# Table of Contents

|                                                         |   |
|---------------------------------------------------------|---|
| SUMMARY OF ROYAL’S QA/QC GOAL.....                      | 3 |
| GLOSSARY .....                                          | 3 |
| DESIGN TEAM .....                                       | 3 |
| SOFTWARE AND DOCUMENT CONTROL.....                      | 4 |
| SURVEY PHASE .....                                      | 5 |
| DESIGN PHASE.....                                       | 5 |
| DESIGN CALCULATIONS, PLAN DEVELOPMENT, AND REVIEW ..... | 5 |
| QC PROCESS .....                                        | 5 |
| QUALITY ASSURANCE .....                                 | 5 |
| RED TEAM REVIEW (FINAL REVIEW BEFORE SUBMISSION).....   | 6 |
| FINAL REVISIONS BASED UPON RED TEAM REVIEW.....         | 6 |
| APPENDIX.....                                           | 6 |

## SUMMARY OF ROYAL'S QA/QC GOAL

Royal Engineers and Consultants, L.L.C. (Royal) and its design team have completed numerous successful bridge designs. Royal will be the primary designer on the project handling the design with assistance from Huval & Associates, Inc. (Huval). Royal will utilize DOTD's Bridge Design QC/QA process along with its internal checklists, processes, and procedures that meet or exceed the requirements of this project.

Royal's goal, as with any project, is to provide the highest standard design in a timely and cost-effective manner. In order to accomplish this, Royal has developed this Quality Control – Quality Assurance plan with the ultimate goal of delivering a quality set of construction plans that will minimize or eliminate errors. Royal understands that QC/QA is the responsibility of the consultant and that DOTD has no obligation to ensure the quality of plans prepared by consultants.

## GLOSSARY

**Quality Assurance (QA):** Procedures of reviewing the work to ensure the quality controls are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications; those actions, procedures, and methods employed at the management and senior technical levels to observe and ensure that prudent quality procedures are in place and are being carried out and that the desired result of a quality product is achieved.

**Quality Control (QC):** Procedure for checking the accuracy and consistency of the calculations and the drawings, detection and correcting design omissions and errors before the design plans are finalized and verifying the specification for the load-carrying members are adequate for the service and operation loads.

**Designer:** Engineer directly responsible for the development of design calculations, drawings, special provisions and cost estimates. Must be either a licensed professional engineer or engineer intern.

**Design Checker:** Engineer responsible for performing a full technical review of the design calculations, special provisions, drawings, and cost estimates. Must be either a licensed professional engineer or engineer intern, however, if the designer is an engineer intern the design checker must be a professional engineer.

**Detailer:** Individual responsible for preparing drawings. This individual/s is responsible for development of the drawing through the use of required CAD technology.

**Detail Checker:** Engineer responsible for performing a full technical review of prepared details/drawings for accuracy.

**Reviewer:** Engineer responsible for ensuring that the QC process has been followed as outlined. The Reviewer is responsible for ensuring that submittals are complete and in accordance with DOTD Bridge Design practices, policies and procedures.

**Red Team Review:** Internal team review prior to each submission phase after completion of initial QC and QA reviews. Comments from review to be incorporated into plans prior to submittal.

**Engineer of Record:** Qualified Engineer responsible for stamping the Final set of Plans and assuring that QC/QA certification is signed by all responsible parties.

## DESIGN TEAM

The designers and QC/QA Personnel are clearly identified in the table below. The team is highly qualified to perform the work.

QA/QC Plan

Prime Consultant: Royal Engineers and Consultants, L.L.C.



| <b>Title/Role</b>           | <b>Name</b>               | <b>Company</b> |
|-----------------------------|---------------------------|----------------|
| Engineer of Record          | Katherine Foreman, P.E.   | Royal          |
| Designer (Hydraulics/Civil) | Katherine Foreman, P.E.   | Royal          |
| Designer (Structural)       | Katherine Foreman, P.E.   | Royal          |
| Checker (Hydraulics/Civil)  | Cassidy Melancon, E.I.    | Royal          |
| Checker (Structural)        | Billy Fontenot, P.E.      | Royal          |
| Reviewer (Hydraulics/Civil) | Beau Tate, P.E.           | Royal          |
| Reviewer (Structural)       | Colby Guidry, P.E.        | Huval          |
| Survey Reviewer             | Katherine Foreman, P.E.   | Royal          |
| Detailer                    | DeWain Butler             | Royal          |
| Detail Checker              | Billy Fontenot, P.E.      | Royal          |
| Detail Reviewer             | Reid Romero, P.E.         | Huval          |
| Constructability Review     | Alec Carter O'Brien, P.E. | Royal          |

## **SOFTWARE AND DOCUMENT CONTROL**

Royal's team is familiar with all necessary drafting and design software, including - CADConform, Microstation, InRoads, and ProjectWise as required by the DOTD and all drawings will conform to LADOTD Software and Deliverables Standards for Electronic Plans. The design team will use software for bridge design that is listed on the DOTD Bridge Design Section's Pre-Approved Software List. If a need arises to utilize other software, such software will be submitted to the Bridge Design Engineer Administrator for approval prior to use.

All pertinent communications, project files, submissions, and documentation of the QC/QA process will be saved within Royal's internal filing system. Final calculation books and other final design documents will be submitted to DOTD at the completion of the project.

Markups and comments on plans and other design documents will be made using red ink (or

QA/QC Plan

Prime Consultant: Royal Engineers and Consultants, L.L.C.

red text if review is performed digitally). The checker/reviewer's name and date of review will be listed on the first page of the document set. Other colors of ink or text may be used to distinguish between comments from different checkers/reviewers if a common document set is used. Markups and comments that have been addressed or otherwise responded to will be highlighted in yellow to indicate completion by the relevant designer or detailer.

## **SURVEY PHASE**

T. Baker Smith, LLC (TBS) will produce the survey in accordance with the procedures as shown on pages 13-17 of the Off-System Bridge Guidelines. Royal will review the field books, topography points and using information from maps/site visits will ensure all necessary points are picked up.

- Field books submitted by TBS, reviewed by Royal.
- Packaging check submitted by Royal, reviewed by TBS.

## **DESIGN PHASE**

Using the design criteria submitted and approved by Royal to DOTD, Royal will follow the design criteria to establish the Bridge Type, size, at this location. All design assumptions, exemptions, etc. will be listed on the design criteria checklist. The design criteria will be updated if necessary but sent to DOTD for review and approval.

## **DESIGN CALCULATIONS, PLAN DEVELOPMENT, AND REVIEW**

### **QC PROCESS**

The quality control phase is governed by the designer/design checker and detailer/detail checker roles. Generally, at the completion of each detail or design the designated checker will independently confirm or redline the submission.

Each designer on the Royal team is responsible for producing, maintaining, and reviewing their own details and plans prior to submitting for review. Royal will implement the design checker as noted in the DOTD QC/QA process. The design checker will be the engineer responsible for producing independent calculations and reviewing those submitted by the designer. Work produced by the CADD detailer will be checked by the responsible designer. All detailed, designed, or calculated work on this project will be independently reviewed by a licensed Professional Engineer.

All calculations that are reviewed, edited, or redlined will be included with the final submission package. All corrected errors will be noted and updated, the calculations from design check(s) will be included with the final submission.

Design checkers shall review for correctness, verifying that the design is adequately reflected in the plans and details.

## **QUALITY ASSURANCE**

The quality assurance phase is defined by the review of QC process to ensure procedures are being followed, and processes are complete. The reviewer is responsible for assuring designs and details are following LADOTD Bridge Design common practices and guidelines.

Reviewers will be charged with identifying any constructability issues, safety, or site issues. Reviewer will provide designer comments or concerns with critical or complicated structures. Upon completion by the designated project reviewer Royal will hold an internal red team review with all personnel involved in the detail and design phase.

QA/QC Plan

Prime Consultant: Royal Engineers and Consultants, L.L.C.

At the completion of the QA process by the Reviewer, the QC/QA form (provided in the appendix) will be signed by the designer, design checker, detailer, detail checker, and reviewer.

#### **RED TEAM REVIEW (FINAL REVIEW BEFORE SUBMISSION)**

Royal and Huval will have an internal final team review of all calculations, plans, hydraulics, and environmental. Comments produced from the Red Team Review will be noted during the meeting to be incorporated prior to final submission.

#### **FINAL REVISIONS BASED UPON RED TEAM REVIEW**

Designer and detailer will encompass all comments made from the red team review. Royal and Huval will ensure that all design calculations, review/check calculations are packaged.

#### **APPENDIX**

- Appendix A: Design Criteria Checklist
- Appendix B: Final Calculation Book Checklist
- Appendix C: QA Information Package Checklist
- Appendix D: QC/QA Certification
- Appendix E: Peer Review Resolution Agreement

## APPENDIX A—DESIGN CRITERIA CHECKLIST

Design criteria for each project shall include, but not limited to, the following sections:

### — **Cover sheet**

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- Revision date
- The Supervisor or Team Leader’s signature and date

### — **Governing Design and Construction Specifications and Other References**

A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.

### — **Design Assumptions and Design Exceptions**

All design assumptions and design exceptions received must be included in this section along with supporting documents.

### — **General Information**

The general information as listed below should be included in this section:

- Bridge information (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Other relevant information

### — **Hydraulic Design Criteria**

All hydraulic design criteria (design year, design water elevations, scour depth and scour elevation, etc.) shall be included in this section and the information shall be provided by the Hydraulic Engineer.

### — **Design Factors**

The ductility factor  $\eta_D$ , redundancy factor  $\eta_R$ , and operational importance factor  $\eta_I$  shall be listed in this section.

### — **Design Loads**

All design loads (dead load, live load, wind load, thermal loads, vessel collision loads, seismic load, wave loads, etc.) used for the project shall be included in this section.

### — **Limit States**

All applicable limit states for this project shall be listed in this section.

### — **Bridge Barrier **Railing****

The design criteria, types, and test levels for bridge **barrier railings** shall be listed in this section. **Standard Plans** should be listed if they are utilized.

---

### **Guardrail**

The design criteria, types, and test levels for guardrails shall be listed in this section. **Standard Plans** should be listed if they are utilized.

---

### **Approach Slab**

Design criteria for approach slab shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Deck and Deck Drainage**

All design criteria for deck and deck drainage design shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Bearing**

All bearing types and design criteria for each bearing type shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Joint**

All joint types and design criteria for each type shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Superstructure**

All superstructure types and design criteria for each type shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Substructure**

All substructure types and design criteria for each type shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Piles and Drilled Shafts**

All pile types, sizes, and structural design criteria shall be included in this section. **Standard Plans** should be listed if they are utilized.

---

### **Geotechnical Design**

All geotechnical design criteria shall be included in this section and the information shall be provided by the Geotechnical Engineer. **Standard Plans** should be listed if they are utilized.

---

### **Mechanical Design**

All mechanical design criteria shall be included in this section if applicable. **Standard Plans** should be listed if they are utilized.

---

### **Electrical/Lighting Design**

All electrical design criteria shall be included in this section if applicable. **Standard Plans** should be listed if they are utilized.

---

### **As-Designed Bridge Rating Criteria**

All as-designed bridge rating criteria shall be included in this section.

---

### **Software**

All software used for design and check shall be included in this section.



## **APPENDIX B—FINAL CALCULATION BOOK CHECKLIST**

The final calculation book for each project shall include, but not limited to, the following sections:

— **Cover Sheet**

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- The title of “Final Calculation Book”
- The EOR’s seal with signature and date

— **Final Calculation Book Check List**

— **QC/QA Certifications**

— **Peer Review Resolution Agreement (if peer review is performed)**

— **Design Criteria**

— **Final Hydraulic Analysis Report from Hydraulic Engineer**

— **Final Geotechnical Analysis Report from Geotechnical Engineer**

— **Superstructure Design Calculations**

— **Substructure Design Calculations**

— **Quantity Calculations**

— **Special Provisions/NS-Items**

— **Construction Cost Estimate**

— **As-Designed Rating Report**

— **List of All Final Electronic Design Files and File Locations (ProjectWise directory name)**

Consultants shall submit the final calculation book to LADOTD bridge task managers; the submittal shall be on a CD or Flash Drive or placed to a designated ProjectWise folder including the following information:

— **A PDF File of the Calculation Book (Including the As-Designed Rating Report)**

— **All Electronic Design Files**

— **A PDF File of the As-Designed Rating Report Only**

The final calculation book for in-house projects shall include the same files listed above for consultant projects. The final calculation book and other final design documents for all projects including in-house and consultant projects shall be uploaded to the archiving location designated in the record retention policy within 30 calendar days after the stamped final plans are delivered.

## APPENDIX C—QA INFORMATION PACKAGE CHECKLIST

Project No.:

Project Description:

|       |                       |
|-------|-----------------------|
| _____ | Calculation Book      |
| _____ | Plans                 |
| _____ | Special Provisions    |
| _____ | Cost Estimate         |
| _____ | Other Documents _____ |

## APPENDIX D—QC/QA CERTIFICATION

Project No.:

Project Name:

We, the undersigned designers, detailers, checkers and reviewers for this project, have reviewed and accepted the calculations, plans, quantities, special provisions, and cost estimate prepared for the project. We certify that the work for which we are responsible has been completed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

| Team Members          | Name | PE Registration No. | Responsible Plan Sheets | Responsible Special Provisions | Construction Cost Estimate | Signature |
|-----------------------|------|---------------------|-------------------------|--------------------------------|----------------------------|-----------|
| Designers             |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
| Design Checkers       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
| Detailers             |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
| Detail Checkers       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
| Reviewers             |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
|                       |      |                     |                         |                                |                            |           |
| Peer Reviewer         |      |                     |                         |                                |                            |           |
| Geotechnical Engineer |      |                     |                         |                                |                            |           |
| Hydraulic Engineer    |      |                     |                         |                                |                            |           |
| EOR                   |      |                     |                         |                                |                            |           |

## APPENDIX E—PEER REVIEW RESOLUTION AGREEMENT

Project No.:

Project Name:

We, the undersigned Peer Reviewer, Supervisor or Team Leader of the design team, and LADOTD Representative for this project, have reviewed and accepted the attached peer review resolutions. We certify that the peer review has been performed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

| Team Members              | Name | Signature |
|---------------------------|------|-----------|
| Peer Reviewer             |      |           |
| Supervisor or Team Leader |      |           |
| LADOTD Representative     |      |           |

## 22. SUB-CONSULTANT INFORMATION

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

| <b>FIRM NAME</b><br><i>(Name must match exactly as registered with Louisiana's Secretary of State (SOS): including punctuation, include screenshot(s) from SOS at the end of Section 20)</i> | <b>ADDRESS</b>                                               | <b>POINT OF CONTACT<br/>&amp; EMAIL ADDRESS</b>      | <b>PHONE NUMBER</b>   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------|-----------------------|
| <b>T. Baker Smith, LLC</b>                                                                                                                                                                   | <b>17927 Old Jefferson Hwy<br/>Prairieville, LA 70769</b>    | <b>Marc Dunn, Jr., P.E.<br/>marc.dunn@tbsmithcom</b> | <b>(225) 288-5611</b> |
| <b>Huval &amp; Associates, Inc.</b>                                                                                                                                                          | <b>922 West Pont Des Mouton Road<br/>Lafayette, LA 70507</b> | <b>Colby Guidry, P.E.<br/>cguidry@huvalassoc.com</b> | <b>(337) 234-3798</b> |



## 23. LOCATION

*If location is an evaluation criterion for this advertisement (see page 2) and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the Evaluation Criteria section of the advertisement.*