DOTD FORM: 24-102

(Revised March 1, 2022)

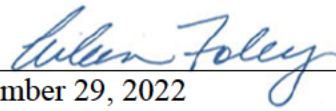
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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.

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract title as shown in the advertisement	BELLARD LOOP OVER UNNAMED DRAINAGE DITCH
2. Contract number(s) as shown in the advertisement	4400025033
3. State Project Number(s), if shown in the advertisement	H.014978.5
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	**TriCoeur Services, L.L.C.**
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF#: 4660 VF#: 0653
6. Prime consultant mailing address	9270 Siegen Lane, Suite 501, Baton Rouge, LA 70810
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	9270 Siegen Lane, Suite 501, Baton Rouge, LA 70810
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Barry P. Gahagan, PE, PLS; Projects Principal Phone: 225-266-7507 E-Mail: BGahagan@TriCoeur.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Aileen Foley, Managing Principal Phone:225-228-2681 Email: AFoley@TriCoeur.com

10. This is to certify that all information contained herein is accurate and 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 and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	Signature (shall be the same person as #9):  Date: November 29, 2022
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.	Firm(s): Firm(s)' %: N/A

12. Past Performance Evaluation 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.

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

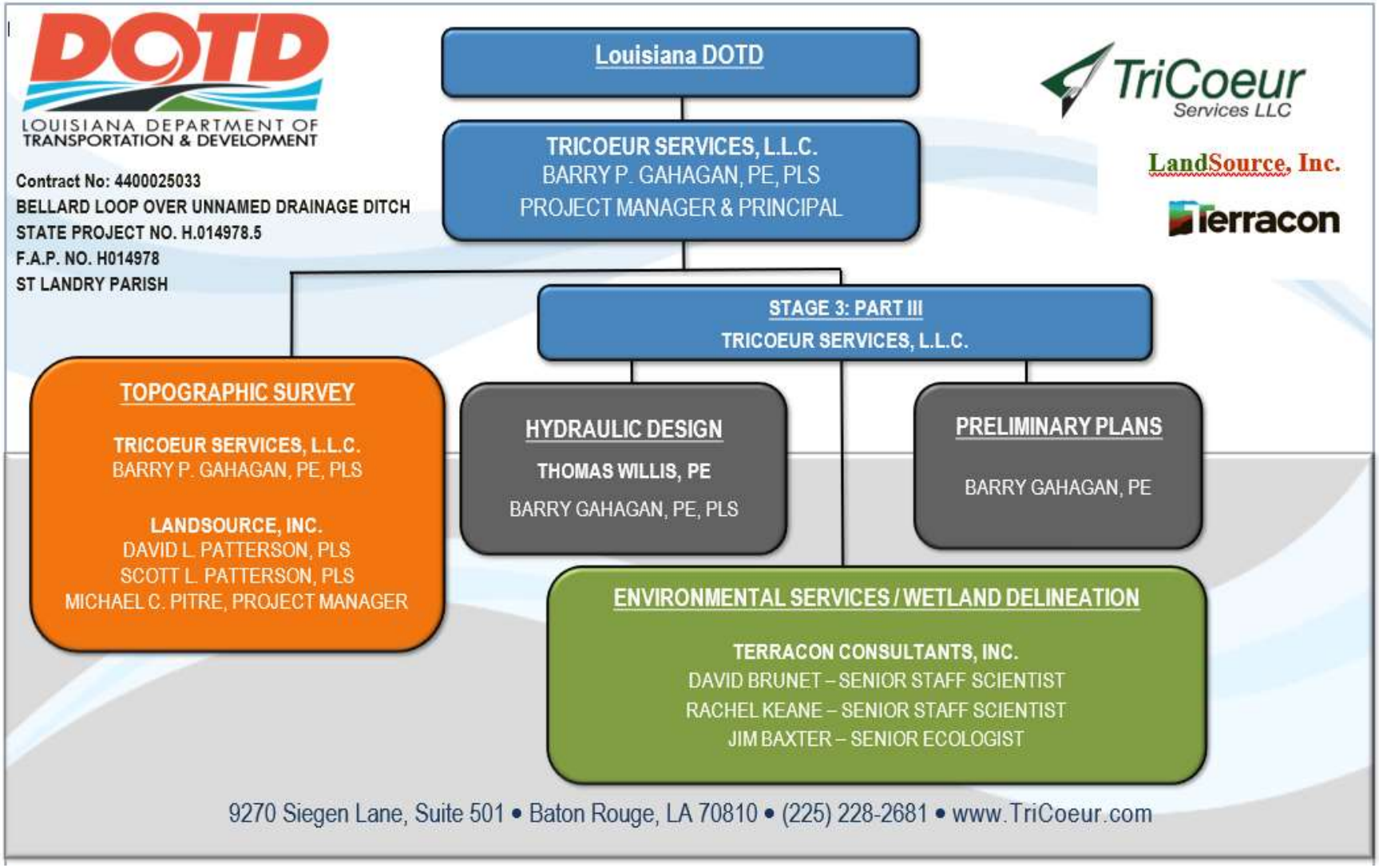
Evaluation Disciplines	% of Overall Contract	Prime **TriCoeur Services, LLC**	Firm B **Landsource, Inc.**	Firm C **Terracon Consultants, Inc.**	Each Discipline must total to 100%
Survey	28.1%	10%	90%	0%	100%
Bridge	63.3%	100%	0%	0%	100%
Environmental	8.6%	4%	0%	96%	100%
Identify the percentage of work for the **overall contract** to be performed by the prime consultant and each sub-consultant					
Percent of Contract	100%	66.4%	25.3%	8.3%	

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 (xxxx)" 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

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
TriCoeur Services LLC	Administrative	1	1
	Principal	1	1
	Engineer	1	2
	CADD Technician	1	1
	Engineer - Intern	1	1
LandSource, Inc.	Surveyor	1	2
	CADD Technician	1	4
	Clerical	1	2
	Instrument Man	1	4
	Party Chief	1	4
Terracon	Biologist/Wetlands	2	20
	Environmental Manager	1	15

14. Organizational Chart:



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.

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	Barry P Gahagan, PE	TriCoeur Services LLC	PE /Civil 21586	LA	3/31/2024
2	Barry P Gahagan, PE		PE /Civil 21586	LA	3/31/2024
3	Barry P Gahagan, PE		PE /Civil 21586	LA	3/31/2024
4	David L. Patterson	LandSource, Inc.	PLS.0004784	LA	3/31/2023
4	Scott L Patterson		PLS.0005246	LA	9/30/2023
5	Jim Baxter	Terracon	N/A	N/A	N/A

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 should be limited to 2 pages per person. Any certificates required by the advertisement are to be placed in Section 20.

<table>
<tr><td colspan="5">Firm employed by TriCoeur Services, L.L.C.</td></tr>
<tr><td>Name</td><td colspan="2">Barry P Gahagan, P.E., P.L.S.</td><td rowspan="2">  </td><td>Years of relevant experience with this employer</td><td>12</td></tr>
<tr><td>Title</td><td colspan="2">Projects Principal</td><td>Years of relevant experience with other employer(s)</td><td>31</td></tr>
<tr><td colspan="3">Degree(s) / Years / Specialization</td><td colspan="2">Bachelor of Science/ 1980 / Civil Engineering LSU
Master of Science / 1990 / Civil (Structural) Engineering LSU</td></tr>
<tr><td colspan="3">Active registration number / state / expiration date</td><td colspan="2">PE LA 21586, PLS 4834 / Louisiana / 3/31/2024</td></tr>
<tr><td>Year registered</td><td>1985
1997</td><td>Discipline</td><td colspan="2">Civil Engineering
Land Surveying</td></tr>
<tr><td colspan="3">Contract role(s) / brief description of responsibilities</td><td colspan="2">Project Manager</td></tr>
<tr><td>Experience dates</td><td colspan="5">Experience and qualifications relevant to the proposed contract; i.e., “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the time specified in the applicable MPR(s).</td></tr>
<tr><td>12/18 – 07/20</td><td colspan="5">SP No. H013122.5 OSB Ouachita Parish (Pine Street over West Prong of Young’s Bayou & Harrison – Collier Streets over Concrete Drainage Canal) TS & PP
Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics for approach roadways and bridge span configuration/ coordinated drainage design/ reviewed plan preparation of two multiple RCB crossings in place of existing bridge structures along existing skewed alignments in FEMA floodways.</td></tr>
<tr><td>12/18 – 03/20</td><td colspan="5">SP No. H013098.5 OSB Vernon Parish (Jim Cryer Rd. over Bayou Anacoco) TS & PP
Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics for approach roadways and bridge span configuration/ developed structure type size and location recommendation/ reviewed plan preparation of a 5 span LG25 crossing along offset alignment to enabling Parish’s request to through travel during construction. Recommended (5) 48ft spans in lieu of (6) 40ft spans to improve debris passage and gain economics advantage by elimination of one intermediate bent.</td></tr>
<tr><td>09/13 – 03/17</td><td colspan="5">SP No. H010597.5 OSB West Feliciana Parish (Sligo Road Bridges) TS, PP & FP
Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics along extremely hilly terrain for approach roadways and bridge span configuration/ developed structure type size and location recommendations/ prepared graphical grades/ ROW taking sketches and reviewed plan preparation for the skewed 12 span Quad Beam crossing of Bayou Sara and the 3 span crossing of Gayle’s Creek. Site construction sequencing to maintain access to landowners between sites.</td></tr>
</table>

04/13 - 04/16	**SP No. H010040.5 OSB Morehouse Parish (Bud Road & Bonne Idee Road Bridges) TS, PP & FP** Project Manager/ designed horizontal and vertical geometrics for approach roadways and bridge span configuration/ developed structure type size and location recommendation/ ROW taking sketches and reviewed plan preparation for skewed /re-aligned/ curved and super-elevated slab span crossings. Prepared cantilevered sheetpile wall system design to minimize wetland encroachment.
05/13 - 01/14	**East Baton Rouge City Parish Project No. 12-BR-US-018 (East Brookstown Bridge over Hurricane Bayou, Bridge Replacement) TS, PP & FP** Project Manager/ designed horizontal and vertical geometrics for approach roadways and bridge span configuration/ developed structure type size and location recommendation/ and reviewed plan preparation for slab span crossings over concrete lined channel and along challenging utility corridor including shallow, large diameter sewer force main and maintained pedestrian access.
02/19 - 03/20	**East Feliciana Parish Project No. PW1178-DR 4277 LA (FEMA) (Carruth Road Bridge) TS, PP & FP** Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics along narrow flood prone corridor for approach roadways and bridge span configuration/ developed structure type size and location recommendation and reviewed plan preparation for a multi span LG25 crossing as a cost saving alternative to "in kind" timber bridge crossing of the Lateral and Comite Creek Relief structure north of Clinton, LA.
02/19 - 04/20	**East Feliciana Parish Project No. PW1190-DR 4277 LA (FEMA) (John Thomas Lane Bridge) TS, PP & FP** Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics along narrow flood prone corridor for approach roadways and bridge span configuration/ ROW taking sketches /developed structure alternative span recommendation and reviewed plan preparation for a multi concrete slab crossing as a cost saving alternative to "in kind" timber bridge crossing of the Waterfall Bayou structure south of Clinton, LA.
02/17 - 02/18	**West Feliciana Parish Project No. 16-HMP-PW-02 (FEMA) (Plettenberg Road Bridge) TS, PP & FP** Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics along sharply curved alignment in extremely flood prone corridor for approach roadways and bridge span configuration/ prepared ROW taking sketches /developed structure alternative span recommendation of three central quad beam spans and curved end slab spans/ reviewed plan preparation for the Polly Creek crossing replacement structure in the seasonally flood prone areas from the Mississippi River batture north of St Francisville, LA.
02/11 - 02/13	**Jefferson Parish Project No. DPW-97-046B-DR(SELA) (WB West Metairie Ave over Soniat Canal) PP & FP** Project Manager/ directed topographic survey/ designed horizontal and vertical geometrics along curved alignment requiring split phase construction, channel paving, approach surcharge loading and designed superstructure and substructure including segmental spliced precast pile construction below high tower electrical transmission lines. This project alternative was conceived following realization of constructability issues at the confluence of pumped drainage canals at the upstream terminus of USACE/SELA flood improvement project. .

Firm employed by **TriCoeur Services, L.L.C.**					
Name	**Thomas M. Willis, P.E.**			Years of relevant experience with this employer	7
Title	Project Engineer (Hydr & Env)			Years of relevant experience with other employer(s)	35
Degree(s) / Years / Specialization				BS/ 1981/ Civil Engineering	
Active registration number / state / expiration date				24205 / LA Expiration: 3/31/2024	
Year registered	1991	Discipline		Civil (Hydraulic) & Environmental Engineering	
Contract role(s) / brief description of responsibilities				Project Engineer Civil (Hydraulic) & Environmental	

Experience dates	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
12/18 – 07/20	**SP No. H013122.5 OSB Ouachita Parish (Pine Street over West Prong of Young's Bayou & Harrison – Collier Streets over Concrete Drainage Canal) HYDR** Project Engineer/ Prepared hydraulic analyses reports/ calibrated results to conform to FEMA data in undocumented pump drainage network of Monroe, LA./ confirmed sufficiency of Parish preferred multiple RCB bridge replacements along existing skewed alignments in FEMA floodways.
12/18 – 03/20	**SP No. H013098.5 OSB Vernon Parish (Jim Cryer Rd. over Bayou Anacoco) HYDR** Project Engineer/ Prepared hydraulic analyses report for bridge span configuration developed structure type size and location recommendation/ reviewed plan preparation of a 5 span LG25 crossing along offset alignment in woody debris prone regions downstream of the Anacoco Lake dam.
09/13 – 03/17	**SP No. H010597.5 OSB West Feliciana Parish (Sligo Road Bridges) HYDR** Project Engineer/ Prepared hydraulic analyses reports for two bridge sites along extremely hilly terrain/flashy streams for Quad Beam bridge spans for the skewed 12 span crossing of Bayou Sara and the 3 span crossing of Gayle's Creek.
02/19 - 03/20	**East Feliciana Parish Project No. PW1178-DR 4277 LA (FEMA) (Carruth Road Bridge) HYDR** Project Engineer/ Prepared hydraulic analyses reports for narrow flood prone corridor for roadway crossing at the confluence of a drainage lateral and significant primary channel relief along the existing bridge upstream face. Developed hydraulic studies inclusive of 20ft timber and 48ft LG25 girder spans. The recommendation and reviewed plan preparation for a multi span LG25 crossing proved low cost in bid as a cost saving alternative to "in kind" timber bridge crossing of the Lateral and Comite Creek Relief structure north of Clinton, LA.
02/19 - 04/20	**East Feliciana Parish Project No. PW1190-DR 4277 LA (FEMA) (John Thomas Lane Bridge) HYDR** Project Engineer/ Prepared hydraulic analyses reports for flood prone roadway crossing in flood prone corridor for a multi concrete slab crossing of Waterfall Bayou structure south of Clinton, LA.
02/17 - 02/18	**West Feliciana Parish Project No. 16-HMP-PW-02 (FEMA) (Plettenberg Road Bridge) HYDR** Project Engineer/ Prepared hydraulic analyses reports for alignment in extremely flood prone corridor for the Polly Creek crossing replacement structure in the seasonally flood prone areas of the Mississippi River batture north of St Francisville, LA.

Firm employed by LandSource, Inc.					
Name	David L. Patterson			Years of relevant experience with this employer	26
Title	President			Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization			Louisiana State University, B.S., 4 yr., Construction Technology		
Active registration number / state / expiration date			License No.: 4784 / LA / 3/31/2023		
Year registered	1996	Discipline	Professional Land Surveyor		
Contract role(s) / brief description of responsibilities			Principal-in-Charge/Project Manager/Land Surveyor - Mr. Patterson has & will serve as Principal-in-Charge, Project Manager & Professional Land Surveyor on the projects listed below and the advertised project. He will oversee all project activities.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2021	S.P. No. H.014318 Site 1, Off-System Highway Bridge Program, East Baton Rouge Parish. Responsibilities included topographic survey to replace one bridge. (2021)
2021	S.P. No. H.014318 Site 2, Off-System Highway Bridge Program, Rapides Parish. Responsibilities included topographic survey to replace two bridges. (2021)
2020	S.P. No. H.014223, Off-System Highway Bridge Program, Vermillion Parish. Responsibilities included topographic survey to replace one bridge. (2020)
2020	S.P. No. H.014261, Off-System Highway Bridge Program, Rapides Parish. Responsibilities included topographic survey to replace two bridges. (2020)
2014	S.P. No. H.010626.5, Off-System Highway Bridge Program, Jefferson Parish. Responsibilities included topographic survey to replace one bridge. (2014)
2013	S.P. No. H.010597.5, Off-System Highway Bridge Program, West Feliciana Parish. Responsibilities included topographic survey to replace two bridges. (2013)
2013	S.P. No. H.010061.5 & H.010062.5, Off-System Highway Bridge Program, Tangipahoa Parish. Responsibilities included topographic survey to replace four bridges. (2013)

Firm employed by LandSource, Inc.					
Name	Scott L. Patterson			Years of relevant experience with this employer	10
Title	Project Manager / Land Surveyor			Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization			Louisiana State University, B.S., 4 yr., Construction Technology		
Active registration number / state / expiration date			License No.: 5246 / LA / 9/30/2023		
Year registered	2022	Discipline	Professional Land Surveyor		
Contract role(s) / brief description of responsibilities			Project Manager		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2021	S.P. No. H.014318 Site 1, Off-System Highway Bridge Program, East Baton Rouge Parish. Responsibilities included topographic survey to replace one bridge. (2021)
2021	S.P. No. H.014318 Site 2, Off-System Highway Bridge Program, Rapides Parish. Responsibilities included topographic survey to replace two bridges. (2021)
2020	S.P. No. H.014223, Off-System Highway Bridge Program, Vermillion Parish. Responsibilities included topographic survey to replace one bridge. (2020)
2020	S.P. No. H.014261, Off-System Highway Bridge Program, Rapides Parish. Responsibilities included topographic survey to replace two bridges. (2020)
2014	S.P. No. H.010626.5, Off-System Highway Bridge Program, Jefferson Parish. Responsibilities included topographic survey to replace one bridge. (2014)
2013	S.P. No. H.010597.5, Off-System Highway Bridge Program, West Feliciana Parish. Responsibilities included topographic survey to replace two bridges. (2013)
2013	S.P. No. H.010061.5 & H.010062.5, Off-System Highway Bridge Program, Tangipahoa Parish. Responsibilities included topographic survey to replace four bridges. (2013)

Firm employed by LandSource, Inc.					
Name	Michael C. Pitre			Years of relevant experience with this employer	26
Title	Vice President			Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization			T.H. Harris Technical College, Associates Degree, 2 yr., Civil Engineering Technology		
Active registration number / state / expiration date			License No.: CST Level III Certified / LA License #1003-1863		
Year registered		Discipline	Survey Coordinator		
Contract role(s) / brief description of responsibilities			Survey Coordinator - Mr. Pitre has & will serve as Survey Coordinator on the projects listed below and the advertised project. He will coordinate survey crews and CADD personnel.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
2021	S.P. No. H.014318 Site 1, Off-System Highway Bridge Program, East Baton Rouge Parish. Responsibilities included topographic survey to replace one bridge. (2021)
2021	S.P. No. H.014318 Site 2, Off-System Highway Bridge Program, Rapides Parish. Responsibilities included topographic survey to replace two bridges. (2021)
2020	S.P. No. H.014223, Off-System Highway Bridge Program, Vermillion Parish. Responsibilities included topographic survey to replace one bridge. (2020)
2020	S.P. No. H.014261, Off-System Highway Bridge Program, Rapides Parish. Responsibilities included topographic survey to replace two bridges. (2020)
2014	S.P. No. H.010626.5, Off-System Highway Bridge Program, Jefferson Parish. Responsibilities included topographic survey to replace one bridge. (2014)
2013	S.P. No. H.010597.5, Off-System Highway Bridge Program, West Feliciana Parish. Responsibilities included topographic survey to replace two bridges. (2013)
2013	S.P. No. H.010061.5 & H.010062.5, Off-System Highway Bridge Program, Tangipahoa Parish. Responsibilities included topographic survey to replace four bridges. (2013)

Firm employed by **Terracon Consultants, Inc.**				
Name	**Jim Baxter**		Years of relevant experience with this employer	15
Title	Senior Ecologist		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization		Master of Forest Resources, University of Georgia, 2002 Bachelor of Science, University of the South, Natural Resources, 2000		
Active registration number / state / expiration date		N/A		
Year registered	N/A	Discipline	**CERTIFICATION**: Wetland Delineation, 2005	
Contract role / brief description of responsibilities		Mr. Baxter meets the requirements of MPR #5 with 20 years of experience performing wetland delineations.		

Mr. Baxter is a Senior Ecologist. Project duties include jurisdictional waters delineations, Section 404 permitting, threatened and endangered species habitat assessments and surveys, state waters guidance, stream buffer variance applications, guidance for mitigation banking, and Phase I Environmental Site Assessments (ESA). Mr. Baxter is a lead reviewer for natural resource work, including wetland delineations and he oversees various ecological projects throughout the southeast.

Mr. Baxter was initially trained in wetland delineation field methods in 2005. He has since attended additional courses and training programs in wetlands and endangered species.

06/21 – 01/22	**H.014319.5 Cedar Crest Ave. Off System Bridge Wetland Delineation, Baton Rouge, LA, DOTD** Senior Project Reviewer. Terracon performed a WOTUS delineation for a project that involved a proposed bridge dismantling project and a new replacement structure at the Cedar Crest bridge location in Baton Rouge, LA where it crosses Weiner Creek.
01/20 – 02/20	**H.013081 Roundhill Road Wetland Delineation, W. Carroll Parish, LA, DOTD** Senior Project Reviewer. Terracon conducted a wetland delineation and prepared a preliminary WOTUS delineation report addressing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act compliance requirements for the proposed Roundhill Road over Little Colewa Bayou bridge replacement.
12/19 – 02/20	**H.013111 Webster Bridge, Minden, LA, DOTD** Senior Project Reviewer. Terracon conducted a wetland delineation and prepared a WOTUS delineation report addressing Section 404 of the Clean Water Act (Section 404) and Section 10 of the Rivers and Harbors Act (Section 10) compliance requirements for the proposed Dorcheat Road over Caney Creek bridge replacement project in Webster Parish, LA.
07/19 – 12/19	**H.013143, OSB Avoyelles Parish, LA, DOTD** Senior Project Reviewer. Terracon conducted a wetland delineation for the Carbon Plant Road bridge over Bayou Boeuf in Avoyelles Parish. The delineation was conducted accordance with the 1987 US Army Corps of Engineers (USACE) Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0, 2010) for a replacement bridge design/construction project with a similar alignment to the previous bridge.
07/19 – 12/19	**H.013130, OSB Ouachita Parish, Red Cut Road Bridge (over Watson Branch) and Charles Rawls Road (over Prairion Bayou), Ouachita Parish, LA, DOTD** Senior Project Reviewer. Terracon conducted a wetland delineation for the Red Cut Road Bridge traversing Watson Branch south of West Monroe, LA. The proposed project included design/construction of a replacement bridge structure with a similar alignment to the previous bridge.

07/19 – 03/20	**H.013163 Wadesboro Road over Unnamed Creek, Tangipahoa Parish, LA, DOTD** Senior Project Reviewer. Terracon conducted a site visit at the Wadesboro Road Bridge for proposed replacement of the 29.7-foot-long timber bridge, a project located withing the Pontchartrain River Basin in the Lake Maurepas Watershed. Terracon subsequently prepared a Waters of the US (WOTUS) Delineation report based on site conditions. The delineation was conducted in general accordance with the 1987 USACE Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0, 2010), and the Louisiana Department of Transportation and Development (DOTD) guidelines.
05/22 – 06/22	**SP H.014270, Lefort Bypass Road OSB, Thibodaux, LA, DOTD** Senior Ecologist. Terracon prepared a Waters of the US (WOTUS) Delineation report based upon findings obtained during field delineation. Terracon recommended consultation with the USACE to determine the appropriate Nationwide Permitting action and for a jurisdictional determination of the identified waters, and for potential permit issuance prior to initiating construction activities for this project.
02/22 – 04/22	**After the Fact Permitting – McComb Substation, LaPlace, LA, Illinois Central RR** Senior Project Reviewer. Terracon performed a preliminary WOTUS delineation on the approximately 37.03-acre site to characterize the existing site conditions, observe the site for the presence of WOTUS, including wetlands, provide an opinion regarding whether WOTUS (if observed) would be considered jurisdictional by the USACE. Additionally, at the time of the WOTUS delineations, Terracon sought to identify (if observed) any impact from emergency repair operations from Hurricane Ida.
10/18 – 02/19	**City Parish Project No. 16-BR-US-0019, Port Hickey Road Bridge over Drainage Bayou, E. Baton Rouge Parish, LA** Senior Project Reviewer. Provided environmental wetlands services including Cultural and Historical Sensitivity of the Property (Section 106 Environmental Review).
07/18 –04/20	**SR 306 from SR 400 to SR 369, Baldridge Creek Project, Forsythe County, GA, GDOT** Project Manager. For the approximately one-mile road widening project for State Route (SR) 306 located from SR 400 to SR 369, Terracon performed a wetland determination in addition to other ecological surveys. Background research was conducted prior to field surveys to identify potential ecological resources within the study area. Jurisdictional wetland determinations were performed using the three-parameter approach (hydrophytic vegetation, hydric soils, and hydrology) as described in the 1987 USACE *Wetland Delineation Manual* and utilized the *2012 Eastern Mountains and Piedmont Regional Supplement* as guidance.
08/15 – 10/22	**SR371 (Post Road) from SR 9 (Atlanta Hwy) to SR 20 Widening Project, Forsythe County, GA, GDOT** Senior Project Reviewer. For the proposed widening and roadway reconstruction project, Terracon provided a geotechnical soil survey and several environmental services including Phase I Environmental Site Assessment, NEPA, Ecology, Air Quality, Noise Study, History, and Archaeology.

Firm employed by **Terracon Consultants, Inc.**					
Name	**Rachel Keane**			Years of relevant experience with this employer	4
Title	Senior Staff Scientist			Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization			Bachelor of Science, Limnology, 1997		
Active registration number / state / expiration date			N/A		
Year registered	N/A	Discipline	**CERTIFICATION:** Wetland Delineation, U.S. Army Corps of Engineers 1987 Manual		
Contract role(s) / brief description of responsibilities			Ms. Keane meets the requirements of MPR #5 requiring a minimum of 5 years of experience performing wetland delineations.		

Ms. Keane meets the qualifications of an Environmental Professional as defined by EPA's AAI. With 24 years of experience, she has performed all aspects of Phase I ESA's including site reconnaissance and report preparation for sites throughout the Southeast. She has also been a contributing writer of documents required by the National Environmental Policy Act (NEPA) as well as Phase I Environmental Site Assessments (ESAs) and assisted in natural resources surveys for various projects. Ms. Keane has completed +200 Phase I ESAs and has assisted in multiple Phase II ESAs.

01/20 – 06/20	**Carruth Road Bridge over the Little Comite River, E. Feliciana Parish, LA** Senior Staff Scientist. Provided DOTD NEPA Environmental Clearance.
03/20 – 05/20	**SP H.013122 Ouachita Parish Bridge Replacement: Harrison Street and Collier Street Bridge/Drainage Canal, Ouachita Parish, LA** Senior Staff Scientist. DOTD NEPA Environmental Clearance.
03/20 – 05/20	**SP H.013122 Ouachita Parish Bridge Replacement: Pine Street Bridge Ouachita Parish, LA**Senior Staff Scientist. DOTD NEPA Environmental Clearance.
02/18-Ongoing	**New Orleans Redevelopment Authority - Acquisition, Construction, and Disposition Projects, New Orleans, LA** Project Manager/Main Point of Contact. Provided NEPA and Environmental Review Record (ERR) documentation for several HUD programs.
1/20 – 6/20	**John Thomas Bridge** Senior Staff Scientist. DOTD NEPA Environmental Clearance.
02/18 - Ongoing	**Louisiana Housing Corporation – Renovation and New Construction, Various Grant Programs for 2016 Flooding Recovery, Statewide, LA** Program Manage/Principal Technical Writer/Team Leader. Prepared Environmental Assessments and Tier II ERRS in support of various grant programs administered by the Louisiana Housing Corporation (LHC) for renovation and recovery funding for the March and August 2016 flood events in Louisiana. These programs included Neighborhood Landlord, Multifamily, Baton Rouge Rebuilds, and Baton Rouge Rebuilds Developers grant funding. Ms. Keane also trained junior staff and guided the preparation of 100+ Environmental Assessments and Tier II ERRs.
02/20 – 08/20	**Habitat for Humanity – Four (4) Residences, Lafayette, Louisiana** Project Manager/Principal Technical Writer. Prepared the Phase I ESA and Environmental Assessment (EA) in compliance with HUD and NEPA for the construction of four single-family residences on contiguous parcels in Lafayette, Louisiana. The Phase I ESA was conducted in compliance with the appropriate ASTM Standard. Resources assessed for the EA included, but was not limited to, historic resources, endangered species, floodplain impacts, and other natural and community resources. No issues of concern were identified for either the Phase I ESA or the EA.
7/19 – 11/19	**Jim Cryer Lane Bridge -** Senior Staff Scientist. Environmental Clearance
10/18 – 05/19	**Habitat for Humanity St. Tammany West – Four Scattered Residential Lots, Mandeville and Covington, LA** Project Manager/Main Technical Writer. HUD NEPA Environmental Clearance.
01/07 - Present	**Department of Housing and Urban Development** – Multiple Project – HUD NEPA Environmental Clearance

Firm employed by **Terracon Consultants, Inc.**					
Name	**David Brunet**			Years of relevant experience with this employer	<1
Title	Senior Staff Scientist			Years of relevant experience with other employer(s)	22
Degree(s) / Years / Specialization			Master of Science /Biology/1995; Bachelor of Science, Biology, 1994		
Active registration number / state / expiration date			N/A		
Year registered	N/A	Discipline	N/A		
Contract role(s) / brief description of responsibilities			Wetlands Biologist		

Mr. Brunet has 22 years of experience as a wetland consultant. He has conducted field work associated with wetland delineations and Coastal Use Permits. For various projects, he performed various rare and endangered species surveys and habitat surveys. For four years, Mr. Brunet served as the Environmental Program Manager / Coastal Zone Administrator for the St. Tammany Parish Government. In this role, he was responsible for reviewing all local Coastal Use Permits for compliance with local and state regulation and issuing permits as appropriate. He ensured that all parish projects followed local, state, and federal environmental permits and assisted various state and federal agencies in data collection efforts on the Pearl River System in St. Tammany Parish.

11/22 - Ongoing	**Plettenburg Bridge OSB, W. Feliciana Parish, LA** Wetland Scientist. Terracon is conducting a WOTUS delineation for the bridge site. David is conducting the wetland delineation and preparing the permit application.
11/22 - Ongoing	**Baton Rouge City-Parish, Replacement of the Port Hickey Road Bridge over Drainage Bayou, Zachary, LA** Wetland Scientist. Terracon conducted a geotechnical investigation and is providing wetlands permitting for the project. David is assisting with obtaining the wetland permit.
01/20-12/20 *(performed with previous employer)*	**Sawaya Site, Coastal Use and Scenic River Permits, Lacombe LA** Environmental Consultant. David was responsible for the fieldwork, data collection, drafting, and reporting for the addressing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act compliance requirements for permitting along with Coastal Use, State Lands, Scenic Rivers, and local requirements for the bulkhead and boat house. Project size was two acres.
02/18-03/19 *(performed with previous employer)*	**Railroad Avenue Site, Wetland Delineation and Scenic River Permits, Covington LA** Environmental Consultant. David was responsible for the fieldwork, data collection, drafting, and reporting for the addressing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act compliance requirements for permitting along with Coastal Use, State Lands, Scenic Rivers, and local requirements for the bulkhead and boat house Project size was one acre.
04/19-12/19 *(performed with previous employer)*	**Residential Subdivision, Wetland Delineation and permits, scenic river permit, DEQ Water quality certification Covington LA** Environmental Consultant. David was responsible for the fieldwork, data collection, drafting, and reporting for the addressing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act compliance requirements for permitting along with Coastal Use, State Lands, Scenic Rivers, and local requirements to construct a residential subdivision. Project size was 64 acres.

17. Firm Experience:

Firm name	**TriCoeur Services, L.L.C.**		Past Performance Evaluation Discipline(s)*		Bridge
Project name	**Sligo Road Bridges**			Firm responsibility (prime or sub?)	Prime
Project number	**S.P. No. H.010597.5**	Owner's name	**Louisiana DOTD**		
Project location	**West Feliciana Parish, LA**		Owner's Project Manager	**Barbara Ostuno, PE**	
Owner's address, phone, email	**1201 Capital Access Road, (225) 379-1047, B.Ostuno @LA.GOV**				
Services commenced by this firm (mm/yy)	09/13	Total consultant contract cost ($1,000's)		155.948	
Services completed by this firm (mm/yy)	01/22	Cost of consultant services provided by this firm ($1,000's)		155,948	
Prepared Preliminary and Final bridge replacement plans for rural local roadways/ designed horizontal and vertical geometrics along extremely hilly terrain for approach roadways and bridge span configuration/ developed structure type size and location recommendations/ prepared graphical grades/ ROW taking sketches and reviewed plan preparation for the skewed 12 span Quad Beam crossing of Bayou Sara and the 3 span crossing of Gayle's Creek. Site construction sequencing to maintain access to landowners between sites. All current members of the TriCoeur staff were involved in this project and 100% performed in Louisiana.					
Firm name	**TriCoeur Services, L.L.C.**		Past Performance Evaluation Discipline(s)*		Bridge
Project name	**Bud Road and Bonne Idee Road Bridges**			Firm responsibility (prime or sub?)	Prime
Project number	**S.P. No. H.010040.5**	Owner's name	**Louisiana DOTD**		
Project location	**Morehouse Parish, LA**		Owner's Project Manager	**Barbara Ostuno, PE**	
Owner's address, phone, email	**1201 Capital Access Road, (225) 379-1047, B.Ostuno @LA.GOV**				
Services commenced by this firm (mm/yy)	04/13	Total consultant contract cost ($1,000's)		116.113	
Services completed by this firm (mm/yy)	11/15	Cost of consultant services provided by this firm ($1,000's)		96.639	
Prepared Preliminary and Final bridge replacement plans for rural local roadways / ROW taking sketches for skewed /re-aligned/ curved and super-elevated slab span crossings. Prepared cantilevered sheetpile wall system design to minimize wetland encroachment. All current members of the TriCoeur staff were involved in this project and 100% performed in Louisiana.					
Firm name	**TriCoeur Services, L.L.C.**		Past Performance Evaluation Discipline(s)*		Bridge
Project name	**Pine Street over West Prong of Young's Bayou & Harrison – Collier Streets over Concrete Drainage Canal**			Firm responsibility (prime or sub?)	Prime
Project number	**S.P. No. H013122.5**	Owner's name	**Louisiana DOTD**		
Project location	**Ouachita Parish, LA**		Owner's Project Manager	**Barbara Ostuno, PE**	
Owner's address, phone, email	**1201 Capital Access Road, (225) 379-1047, B.Ostuno @LA.GOV**				
Services commenced by this firm (mm/yy)	12/18	Total consultant contract cost ($1,000's)		110.664	
Services completed by this firm (mm/yy)	05/21	Cost of consultant services provided by this firm ($1,000's)		102.996	

Prepared Preliminary bridge replacement plans for urban local roadways, determined and implemented practical application as desired by City Parish representatives of multiple RCB crossings in place of existing bridge structures along existing skewed alignments in FEMA floodways. All current members of the TriCoeur staff were involved in this project and 100% performed in Louisiana.					
Firm name	**TriCoeur Services, L.L.C.**		Past Performance Evaluation Discipline(s)*		Bridge
Project name	**Jim Cryer Rd. over Bayou Anacoco**			Firm responsibility (prime or sub?)	Prime
Project number	**S.P. No. H013098.5**	Owner's name	**Louisiana DOTD**		
Project location	**Vernon Parish, LA**		Owner's Project Manager	**Barbara Ostuno, PE**	
Owner's address, phone, email	**1201 Capital Access Road, (225) 379-1047, B.Ostuno @LA.GOV**				
Services commenced by this firm (mm/yy)	11/18	Total consultant contract cost ($1,000's)			79.692
Services completed by this firm (mm/yy)	10/22	Cost of consultant services provided by this firm ($1,000's)			42.778
Prepared Preliminary bridge replacement plans for rural local roadway, determined and location recommendation/ reviewed plan preparation of a 5 span LG25 crossing along offset alignment to enabling Parish's request to through travel during construction. Recommended (5) 48ft spans in lieu of (6) 40ft spans to improve debris passage and gain economics advantage by elimination of one intermediate bent. All current members of the TriCoeur staff were involved in this project and 100% performed in Louisiana.					
Firm name	**TriCoeur Services, L.L.C.**		Past Performance Evaluation Discipline(s)*		Bridge
Project name	**Poplar Street Bridge over Bonnabel Canal**			Firm responsibility (prime or sub?)	Prime
Project number	**S.P. No. H006138.5**	Owner's name	**Louisiana DOTD**		
Project location	**Jefferson Parish, LA**		Owner's Project Manager	**Barbara Ostuno, PE**	
Owner's address, phone, email	**1201 Capital Access Road, (225) 379-1047, B.Ostuno @LA.GOV**				
Services commenced by this firm (mm/yy)	03/12	Total consultant contract cost ($1,000's)			71.517
Services completed by this firm (mm/yy)	08/13	Cost of consultant services provided by this firm ($1,000's)			71.517
Preparation of Final Plans from Preliminary Plans and Topographic Survey previously initiated by others. Project required preparation of scour analyses, revisions of the project geometric layout, incorporation of prior Plan in Hand review comments, coordination of geotechnical investigations, coordination with utility conflicts for primary water, natural gas and sanitary sewer crossings, interaction with Parish personnel, preparation of non-standard bridge bent approach slab details, and roadway plan preparations. All members of the TriCoeur staff were involved in the project and 100% performed in Louisiana.					

Firm name	Landsource, Inc.		Past Performance Evaluation Discipline(s)*	SURVEY	
Project name	Pine Street over West Prong of Young's Bayou & Harrison – Collier Streets over Concrete Drainage Canal			Firm responsibility	Sub
Project number	State Proj. No. H.013122.5	Owner's name	LA Dept. of Transportation & Development		
Project location	Ouachita Parish		Owner's Project Manager	Barry Gahagan, P.E.	
Owner's address, phone, email	9270 Siegen Ln., Baton Rouge, LA 70810 (225)228-2681, bgahagan@tricoeur.com				
Services commenced by this firm (mm/yy)	12/18	Total consultant contract cost ($1,000's)		11.0	
Services completed by this firm (mm/yy)	01/19	Cost of consultant services provided by this firm ($1,000's)		11.0	

The project's objective was to develop plans for the replacement of two (2) bridges in Ouachita Parish, which was off the State Highway System. LandSource, Inc. was responsible for all the surveying, which included topographic, field and right-of-way surveys. All LandSource personnel listed on the prime's organizational chart were involved in this project & will be utilized in any future projects. 100% of the work was performed in Louisiana.

Firm name	Landsource, Inc.		Past Performance Evaluation Discipline(s)*	SURVEY	
Project name	Jim Cryer Rd. over Bayou Anacoco			Firm responsibility	Sub
Project number	State Proj. No. H.013098.5	Owner's name	LA Dept. of Transportation & Development		
Project location	Vernon Parish		Owner's Project Manager	Barry Gahagan, P.E.	
Owner's address, phone, email	9270 Siegen Ln., Baton Rouge, LA 70810 (225)228-2681, bgahagan@tricoeur.com				
Services commenced by this firm (mm/yy)	11/18	Total consultant contract cost ($1,000's)		6.0	
Services completed by this firm (mm/yy)	01/19	Cost of consultant services provided by this firm ($1,000's)		6.0	

The project's objective was to develop plans for the replacement of a bridge in Vernon Parish, which was off the State Highway System. LandSource, Inc. was responsible for all the surveying, which included topographic, field and right-of-way surveys. All LandSource personnel listed on the prime's organizational chart were involved in this project & will be utilized in any future projects. 100% of the work was performed in Louisiana.

Firm name	Landsource, Inc.		Past Performance Evaluation Discipline(s)*	SURVEY	
Project name	Bayou Bonne Idee Rd Bridge (Site 1) & Bud Rd Bridge over Bayou Bonne Idee (Site 2)			Firm responsibility	Sub
Project number	State Proj. No. H.011532.5	Owner's name	LA Dept. of Transportation & Development		
Project location	Morehouse Parish		Owner's Project Manager	Barry Gahagan, P.E.	
Owner's address, phone, email	9270 Siegen Ln., Baton Rouge, LA 70810 (225)228-2681, bgahagan@tricoeur.com				
Services commenced by this firm (mm/yy)		3/2015	Total consultant contract cost ($1,000's)		16.00 Est.
Services completed by this firm (mm/yy)			Cost of consultant services provided by this firm ($1,000's)		16.00 Est.

The project's objective was to develop plans for the replacement of two (2) bridge in East Baton Rouge Parish, which was off the State Highway System. LandSource, Inc. was responsible for all the surveying, which included topographic, field and right-of-way surveys. All LandSource personnel listed on the prime's organizational chart were involved in this project & will be utilized in any future projects. 100% of the work was performed in Louisiana.

Firm name	**Terracon Consultants, Inc.**	Past Performance Evaluation Discipline(s)*		Environmental	
Project name	**Carruth Road Bridge over the Little Comite River**		Firm responsibility (prime or sub?)		Sub
Project number	PWEF014C	Owner's name	East Feliciana Parish Police Jury		
Project location	East Feliciana Parish, LA		Owner's Project Manager	Sonya Crowe, Parish Manager	
Owner's address, phone, email		12064 Marston Street, Clinton, LA 70722, 225-683-8577			
Services commenced by this firm (mm/yy)		02/19	Total consultant contract cost ($1,000's)		$NA
Services completed by this firm (mm/yy)		02/20	Cost of consultant services provided by this firm ($1,000's)		$9

Terracon was retained by TriCoeur Services, LLC for the replacement of the Carruth road Bridge over the Little Comite River FEMA Disaster Project in East Feliciana Parish. Terracon provided a wetland assessment and NEPA environmental review for the bridge replacement project.

The Little Comite River is considered a USACE Jurisdictional Water of the US. However, the project qualified for an NWP within the USACE's expedited program for transportation projects due to the lack of wetland habitat in the vicinity of the project area. A report was provided which outlined the site reconnaissance and findings, referenced published maps (including National Wetland Inventory Maps. Topographic Maps, and historical aerial photographs).

Based on the lack of wetland habitat and minimal impacts to the river from the proposed construction, it was recommended that a Nationwide Permit 14- Linear Transportation Projects be obtained for the construction portion of the project.

Key Members: Jim Baxter, Rachel Keane

Firm name	**Terracon Consultants, Inc.**		Past Performance Evaluation Discipline(s)*	Environmental	
Project name	**Jim Cryer Lane Bridge Over Bayou Anancoco**		Firm responsibility (prime or sub?)	Sub	
Project number	FAP No. H.013098.5	Owner's name	Louisiana Department of Transportation & Development		
Project location	Vernon Parish, LA		Owner's Project Manager	Ryan Rodney	
Owner's address, phone, email	1201 Capital Access Road, Baton Rouge, LA 70802, 225-379-1309. Ryan.rodney@la.gov				
Services commenced by this firm (mm/yy)	07/19	Total consultant contract cost ($1,000's)		$N/A	
Services completed by this firm (mm/yy)	11/19	Cost of consultant services provided by this firm ($1,000's)		$3.3	

Terracon was retained by TriCoeur Services to perform a wetland delineation of the Off-System Bridge project which included the replacement of an existing 23-foot wide 190-foot long concrete bridge on Jim Cryer Lane over Bayou Anacoco in Vernon Parish, Louisiana. The replacement bridge was proposed to be a 5-foot span, 240-foot long concrete bridge with 28-foot clear roadway. A wetland delineation was conducted to identify wetland and Waters of the US to provide the USACE with a request for a Jurisdictional Determination. Terracon completed a wetland delineation, utilizing the approved United States Army Corps of Engineers Manual, 1987 and the 2008 Supplement for the Atlantic and Gulf Coastal Plain. Prior to the initiation of field work, Terracon completed a desktop review which included gathering published resources for background information. These resources include the USFWS National Wetland Inventory maps, topographic maps, United States Department of Agriculture Soil Surveys, and aerial photographs. During the site reconnaissance, vegetation communities, hydrologic evidence, and the soil profile to an approximate depth of 16 inches below ground surface was observed and documented. A determination was made as to the actual area of impact based on the construction area and expected bridge footprint with gathered information compiled to prepare a wetland delineation report.

In addition, an Environmental Checklist as required by LADOTD to complete a Categorical Exclusion document to satisfy the NEPA and FHWA requirements was prepared. Solicitation of Views (SOV) Letters including project description and location were prepared and submitted to Federal, State, and Local agency for coordination and consultation. In addition, other readily accessible information was reviewed to provide support documentation toward the completion of the Environmental Checklist. The Environmental Checklist with SOV letter responses, support documentation, and other pertinent information was compiled and submitted to the Contractor for submittal to the LADTOD.

Key Members: *Jim Baxter, Rachel Keane*

Firm name	**Terracon Consultants, Inc.**		Past Performance Evaluation Discipline(s)*	Environmental	
Project name	**Ouachita Parish Bridge Replacement: Harrison Street and Collier Street Bridge/Drainage Canal**			Firm responsibility (prime or sub?)	Sub
Project number	SP H.013122	Owner's name	Louisiana Department of Transportation and Development		
Project location	Ouachita Parish, LA		Owner's Project Manager	Noel Ardoin	
Owner's address, phone, email	1201 Capital Access Road, Baton Rouge, LA, 70802, 225-242-4201 Noel.Ardoin@la.gov				
Services commenced by this firm (mm/yy)		03/20	Total consultant contract cost ($1,000's)	$NA	
Services completed by this firm (mm/yy)		12/20	Cost of consultant services provided by this firm ($1,000's)	$2.8	

Terracon was retained by TriCoeur Services to perform a wetland delineation of Off-System Bridge project which included designing and constructing the replacement of an existing 64.3-foot wide, 21.3-foot long clear opening concrete decked, steel girder single span bridge over a concrete paved drainage canal in Ouachita Parish, Louisiana. The recommended replacement bridge consists of a 93.2-foot double reinforced concrete box girder bridge. Terracon completed a wetland delineation, utilizing the approved United States Army Corps of Engineers Manual, 1987 and the 2008 Supplement for the Atlantic and Gulf Coastal Plain. Prior to the initiation of field work, Terracon completed a desktop review which included gathering published resources for background information pertaining to wetlands. These resources include the United States Fish & Wildlife Service National Wetland Inventory maps, topographic maps, United States Department of Agriculture Soil Surveys, and aerial photographs. During the site reconnaissance, vegetation communities, hydrologic evidence, and the soil profile to an approximate depth of 16 inches below ground surface was observed and documented at specific observation points. This information was compiled and used to determine and delineate area of wetlands adjacent to the bridge. The wetland habitat and Other Waters were identified and determination was made as to actual area of impact based on the construction area and expected bridge footprint. The information gathered during the site visit and desktop review was compiled to prepare a wetland delineation report.

In addition, an Environmental Checklist as required by the LADOTD to complete a Categorical Exclusion document to satisfy the National Environmental Policy Act (NEPA) and Federal Highway Administration (FHWA) requirements to be prepared. Solicitation of Views (SOV) Letters including project description and location were prepared and submitted to Federal, State, and Local agency for coordination and consultation. Other readily accessible information was reviewed to provide support documentation toward the completion of the Environmental Checklist. These sources included the NRCS Web Soil Survey, USFWS iPAC Project Review Application, EPA Sole Source Aquifer Map, FEMA FIRM Map, and other sources. The Environmental Checklist will include SOV letter responses, support documentation, and other pertinent information was compiled and submitted to the Contractor for submittal to the LADTOD.

Key Members: *Jim Baxter, Rachel Keane*

18. Approach and Methodology:

INTRODUCTION

The staff provided by the TriCoeur Services, LLC team offer a combined over 60 years of LADOTD Off-System Bridge Replacement (OSBR) experience with a record of project delivery for the OSBR program. Our staff has surveyed and prepared plans for OSBR projects involving both standard plan and numerous non-standard structures in accordance with appropriate LADOTD procedures and manuals including roadway and bridge design, BDEM, BDTM's, environmental and OSBR guidelines. Our team is led by Barry P. Gahagan, PE, PLS, who has served in various roles on LADOTD bridge replacements. Our Survey team includes David L. Patterson, PLS, who has led TriCoeur's survey effort on 7 LADOTD bridge replacements who has been involved in the OSBR program over 15 years. TriCoeur's team includes Terracon Consultants. Inc. who has a long history of performing environmental services for LADOTD through TriCoeur. Jim Baxter holds Wetland Delineation certification since 2005 and has over 20 years of experience performing wetland delineations.

PROJECT UNDERSTANDING & SITE VISIT

A site familiarization will be conducted to assess the project conditions, confirm Project site, identify potential design challenges, and understand St Landry Parish concerns.

TOPOGRAPHIC SURVEY

Landsource will perform the topographic survey for the project. The TriCoeur engineering staff works closely with survey staff during this phase to ensure that all required data is collected. The dual control and collaboration provides greater QA/QC. Surveys will be completed in accordance with LADOTD Off-System Bridge Guidelines and applicable LADOTD Location & Survey requirements. GPS control will be established using at minimum four (4) control points set in concrete with levels run between these points.

Once control is established and sketches complete, the topographic surveys will continue for the existing roadway, bridge, and channel/river. Surveys will be extended beyond traditional limits to incorporate any curves or additional geometric changes needed for design. Additional data points needed to show DTM break lines and surface anomalies will be collected, and any upstream structures in the channel/river will be surveyed. Bridge sketches will be provided and the channel/river traverses shown on the field roll. Survey data will be reviewed by the project engineering staff for completeness prior to preparation of survey deliverables and field rolls. The survey submittal will include all items required by the LADOTD OSBR Guidelines including photographs, point listing and plotted cross sections. Surveys will undergo QA/QC by both the survey and engineering teams prior to submittal to LADOTD.

50% PRELIMINARY PLANS & HYDRAULICS ANALYSIS

After surveys are reviewed and approved by LADOTD, our team will begin the hydraulics analysis and preparation of 50% Preliminary Plans.

Design Criteria

Tricoeur will review the 5-year crash history of the site as provided by the Parish to determine the roadway's performance and if any geometric improvements should be considered. Poor roadway performance may be justification for addressing geometric issues within the project limits per Section 1.2 of A Policy on Geometric Design of Highways and Streets, AASHTO, 7th Edition (Green Book). Upon review of data, bridge design criteria and LADOTD Design Report Forms will be submitted for review and approval, guiding the remainder of plan development.

Hydraulics & Scour Analysis

We will begin the hydraulics and scour analysis by reviewing additional data including topographic maps, FEMA Firm maps, USGS Quadrangle maps and LiDAR to delineate the site's drainage basin. Peak discharges and water surface elevations will be developed. Hydraulic design will be conducted in accordance with the LADOTD Hydraulics Manual and the results prepared in report format along with the Hydraulic Data table. The Bridge, Type, Size and Location (TS&L) will determine the appropriate bridge length, revetment slopes and hydraulic opening will be developed at the start of the hydraulics analysis. The existing bridge(s) may be subject to overtopping and debris loading. Our staff has the recent relevant experience and design tools to perform the design of a non-standard bridge structure in-house per LRFD methodology to accommodate non-standard site conditions.

75% PRELIMINARY PLANS (PRE-PIH) & SOLICITATION OF VIEWS (SOV's)

After review of the 50% Preliminary Plans, Tricoeur will address all comments will prepare the Pre-PIH plans, if necessary, or proceed to Plan in Hand. Upon approval of the replacement structure, Tricoeur and Terracon will prepare the Solicitation of Views (SOVs), receive DOTD approval thereof and mail these to the recipient list provided by LADOTD Environmental Section. Responses will be logged and loops closed to all SOV responses.

95% PRELIMINARY PLANS (PLAN IN HAND)

Comments from the 50% PP or, 75% PP (if necessary) will be addressed in the Plan in Hand submittal. The roadway model, typical sections, plan & profiles, general notes, bridge GPE, summary of estimated quantities, and construction signing will continue to be developed from the previous plan submittal(s). If superelevation is required, the superelevation diagrams will be further developed and completed by the end of preliminary plans along with the foundation layouts. Standard Plan lists, cost estimate and the Constructability & Biddability Review form will be provided. Tricoeur will attend the Plan in Hand meeting onsite with LADOTD and Parish representatives. Meeting notes will be provided within three (3) days.

100% PRELIMINARY PLANS (POST PLAN IN HAND PRINTS)

Plan development will continue to progress as comments are addressed and major design elements are completed. Items discussed at the PIH meeting will be addressed and added to the plans per the PIH Meeting Memorandum.

Environmental

The wetland delineation will be conducted onsite and a wetland findings report prepared in accordance with US Army Corps of Engineers (USACE) guidelines. A Preliminary Jurisdictional Determination (PJD) will be requested from the USACE upon report completion. Permit sketches sized 8.5"x11" will be prepared to accompany the wetlands report, SOV packet, and Environmental Determination Checklist.

R/W Sketches & Other Documents

TriCoeur will prepare the Right of Way Sketch per OSBR guidelines showing the required taking lines and anticipated parcels affected along with a draft of the R/W agreements. A draft utility conflict matrix will be provided to the Parish to aide in their responsibility to relocate utilities. Our site visit will establish initial evidence of existing utilities. In addition to the 100% Preliminary Plans, environmental package and R/W sketches, the Design Report forms will be finalized and sealed by Tricoeur's Engineer of Record. The Level 1 or Level 2 TMP checklists will also be prepared and submitted. Pile length requests with all supporting documentation will be submitted at this stage for use by the geotechnical engineer.

75% FINAL PLANS (PRE-ADVANCED CHECK PRINTS)

Following the environmental approval and receipt of the Notice to Proceed for Final Plans, Tricoeur will begin the development of additional plan sheets required including embankment widening details, geometric layout (if necessary), erosion control plans, quantity summary sheets, Pile Data & Elevation, and concrete surface finish. All bridge structure and pile cutoff elevations will be finalized. Any special design superstructure or substructure bridge elements or special approach slabs will be fully detailed and placed on bridge sheets. Bridge railing, joint and bearing details will also be completed. If a nonstandard structure is chosen for the site, a draft of the bridge calculations and Load Resistance and Factor Rating (LRFR) will be prepared at this stage to ensure adequacy of reviews.

98% FINAL PLANS (ADVANCED CHECK PRINTS)

Comments from the 60% Final Plans (Pre-ACP) will be reviewed with LADOTD and addressed. Additional details, notes or changes will be added to the plans and quantities will be completed. The ACP Plans will be provided to the Plan Quality Unit (PQU) if necessary. An ACP review meeting will be held to ensure all comments are addressed. Upon resolution, a 98% Final Plan set will be prepared for review by the Chief Engineer and use by General Files to prepare the proposal. Tricoeur will work with LADOTD staff to input pay items and quantities into AASHTOWARE and generate final cost estimates.

100% FINAL PLANS (TRACINGS)

Tricoeur will provide the 100% Final Plans (Tracings) as per OSBR Guidelines with the Title Sheet on Mylar for Chief Engineer signature. This submittal will be prepared once all comments are addressed from task managers, PQU and/ or the Chief Engineer. Parish granted Design Exceptions will be noted on the Title Sheet. A bound calculations book will be prepared and submitted with the original field books and an electronic copy of the Hydraulics Report.

QUALITY CONTROL AND QUALITY ASSURANCE (QC/QA)

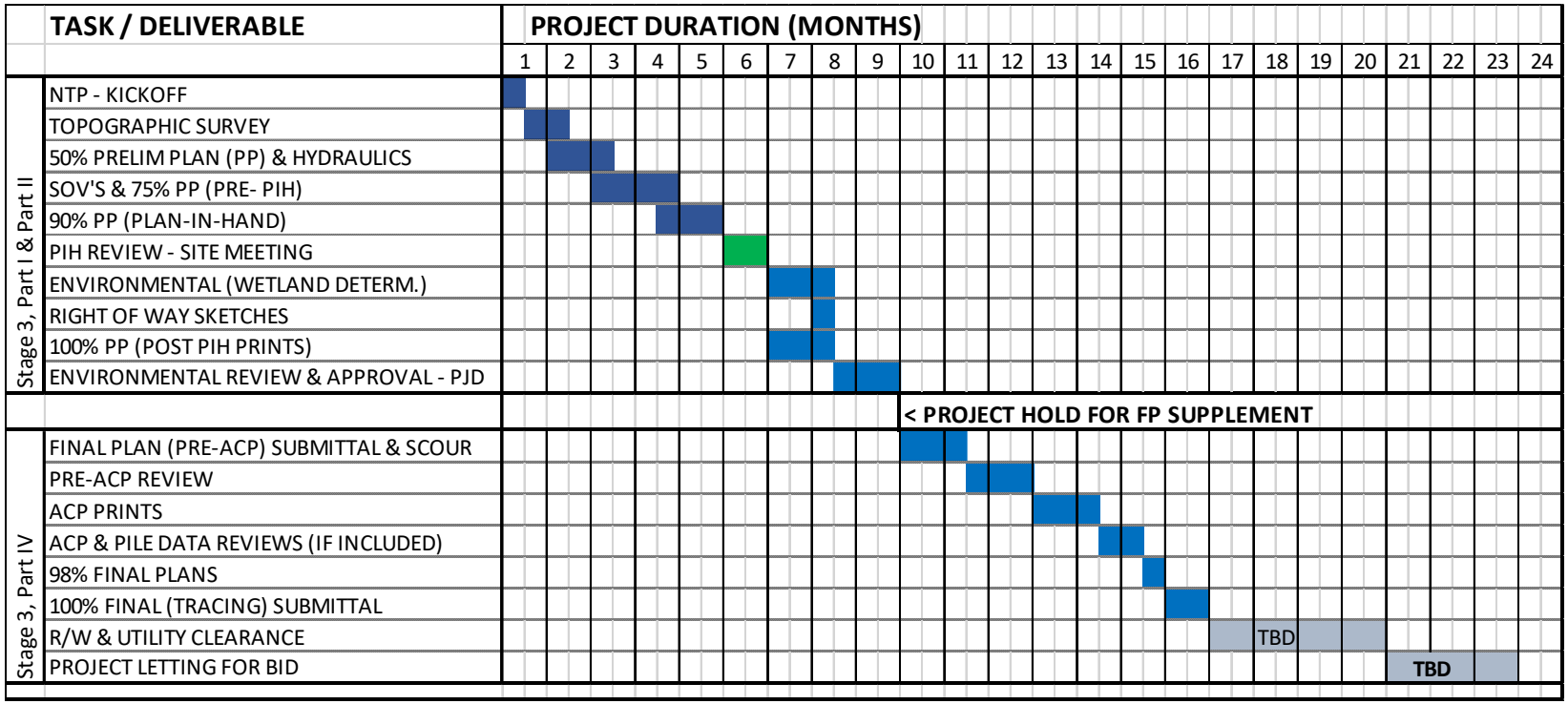
A project specific QC/QA plan has been included Section 21. Each submittal will be accompanied by LADOTD QC/QA certification forms. Design and plan comments, along with their resolutions will be documented in Design Comment Review forms.

LETTING

Tricoeur will respond to questions and assist LADOTD during letting. Upon receiving the bid results and tabulations, Tricoeur will provide additional information to LADOTD as needed regarding contract award.

STAGE 5: CONSTRUCTION

Tricoeur staff will be available to provide LADOTD with Construction Support (if needed) by assisting with RFI's, reviewing shop drawings, evaluating contractor submittals, attending meetings, and providing design review assistance in the event of bridge component changes



19. Workload:

Firm(s)	Past Performance Evaluation Discipline	State project number	Project name	Remaining Unpaid Balance
TriCoeur Services, L.L.C.	Bridge	H.013098.5	Off System Bridge Program, Vernon Parish Jim Cryer Road Bridge, Stage 3 – Part IV Final Plans	$11,812
LandSource, Inc.	Survey	N/A	N/A	N/A
Terracon	Geotechnical	H.003931.5-2	I-10: Calcasieu River Bridge Additional Borings	$339,579
	Geotechnical	H.002868	I-49 Frontage Road Bridges PDA Testing	$227,811
	Environmental	H.004273.5	Lafayette Urban Section (I-49 Lafayette Connector) Phase II ESA, Lafayette Parish	$9,138
	Geotechnical	H.005967	Nelson Road Extension and Bridge	$52,531
	Geotechnical	H.012569	Little Sugar Creek Bridge	$5,419
	Geotechnical	H.005121	LA-1 and LA-415 Connector	$227,167
	Geotechnical	H.000385.5	US190: LA415 & RR Overpass	$213,763
	Geotechnical	H.011670	Loyola Interchange Design-Build	$221,316
	Geotechnical	H.012033	Cross Bayou and Caney Bayou	$20,420
	Geotechnical	H. 002794.5	LA 308 – Canal Bridges Near Larose	$676
	Geotechnical	H.003931.5-2	I-10: Calcasieu River Bridge Additional Borings	$339,579
	Geotechnical	H.002868	I-49 Frontage Road Bridges PDA Testing	$227,811
	Environmental	H.004273.5	Lafayette Urban Section (I-49 Lafayette Connector) Phase II ESA, Lafayette Parish	$9,138
	Geotechnical	H.005967	Nelson Road Extension and Bridge	$52,531

20. Certifications/Licenses:

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:

TriCoeur Services, LLC

Public Address:

Mr. Barry P. Gahagan, PE, PLS9270 Siegen Lane, Suite 501

Baton Rouge, Louisiana 70810

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004660	Active	09/16/2010	03/31/2023	Mr. Barry Patrick Gahagan # PE.0021586 - Active

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:

TriCoeur Services, LLC

Public Address:

Mr. Barry P. Gahagan, PE, PLS9270 Siegen Lane, Suite 501

Baton Rouge, Louisiana 70810

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000653	Active	09/16/2010	03/31/2023	Mr. Barry Patrick Gahagan # PLS.0004834 - Active

LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Barry Patrick Gahagan

License/Certificate Type - Number: PE.0021586
Expiration Date: 03/31/2024
Status: Active

LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Thomas Montrose Willis

License/Certificate Type - Number: PE.0024205
Expiration Date: 03/31/2024
Status: Active

LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Barry Patrick Gahagan

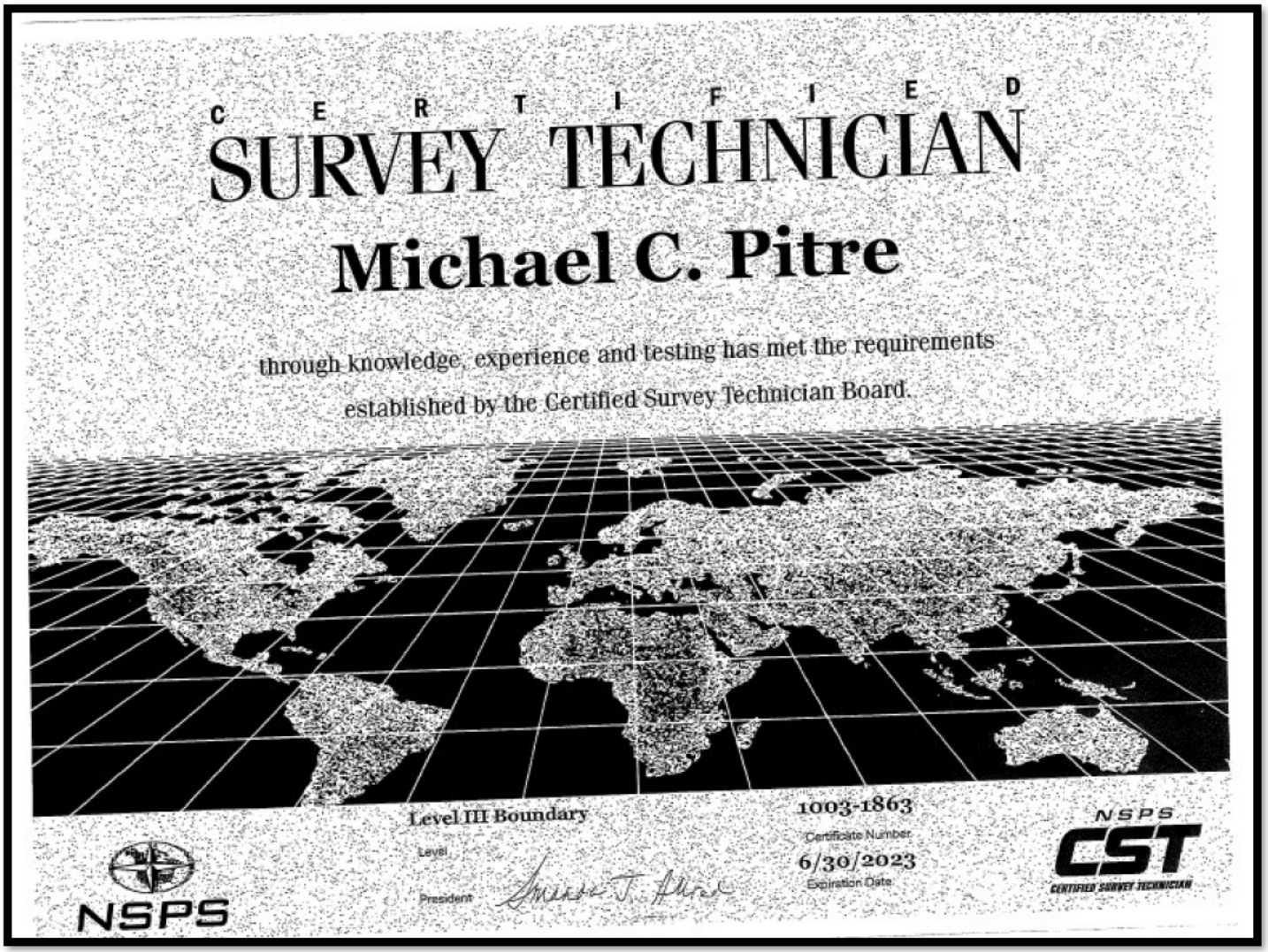
License/Certificate Type - Number: PLS.0004834
Expiration Date: 03/31/2024
Status: Active

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:	Public Address:
Landsource, Inc.	Ms. Sandra Wiley6730 Exchequer Drive Baton Rouge, Louisiana 70809

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000377	Active	02/13/1996	09/30/2024	Mr. David Lee Patterson # PLS.0004784 - Active


CERTIFIED
SURVEY TECHNICIAN
Michael C. Pitre
through knowledge, experience and testing has met the requirements
established by the Certified Survey Technician Board.
Level III Boundary
Level
President
1003-1863
Certificate Number
6/30/2023
Expiration Date
NSPS
NSPS
CST
CERTIFIED SURVEY TECHNICIAN

21. QA/QC Plan and/or Work Plan:

Quality Control / Quality Assurance Plan
Off System Bridge Program

Project Identification

State Project No.:	H.014978.5
Federal Aid Project No.:	H.014978
Project Title:	OFF-SYSTEM HIGHWAY BRIDGE PROGRAM ST LANDRY PARISH
Project Name:	BELLARD LOOP OVER UNNAMED DRAINAGE DITCH

Declaration:
TriCoeur Services, L.L.C. and its design team shall maintain and follow active Quality Control / Quality Assurance procedures in conformance with the no less than the minimum requirements set in the "Guidance on QC/QA in Bridge Design in Response to NTSB Recommendations (H-08-17)" (FHWA/AASHTO Guidance), which was published by FHWA and AASHTO in August 2011, and LADOTD Bridge Design Section QC/QA policies for the duration of this project.

Signature of Official: Barry P. Gahagan **Date: 11/29/2022**

Project Modules/Components & Assignments

Module - Component Description	Project Manager/ Supervisor / Team leader	Professional of Record (P.O.R.)	Checker	Reviewer
Stage 3, Part Ia				
- Topographic Survey	B Gahagan, PE, PLS	D Patterson, PLS (Landsource)	S Patterson, PLS (Landsource)	M Pitre (Landsource)
Stage 3, Part III:				
- Preliminary Plans	B Gahagan, PE, PLS	B Gahagan, PE, PLS	N Lowe, EI	B Gahagan, PE, PLS
- Hydraulic & Hydrologic	B Gahagan, PE, PLS	TM Willis, PE	B Gahagan, PE, PLS	TM Willis, PE
- Solicitation of Views & Categorical Exclusion	D Brunet (Terracon)	J Baxter (Terracon)	R Keane (Terracon)	J Baxter (Terracon)
- Wetland Studies	D Brunet (Terracon)	J Baxter (Terracon)	R Keane (Terracon)	J Baxter (Terracon)
- Environmental Clearance	D Brunet (Terracon)	J Baxter (Terracon)	R Keane (Terracon)	J Baxter (Terracon)
- Right of Way Agreement / Sketch	B Gahagan, PE, PLS	B Gahagan, PE, PLS	N Lowe, EI	B Gahagan, PE, PLS
Stage 3, Part IV				
- Final Plans	B Gahagan, PE, PLS	B Gahagan, PE, PLS	TM Willis, PE N Lowe, EI	B Gahagan, PE, PLS

QC procedures shall assure:

1) A supervisor or team leader is responsible for determining the necessary technical knowledge and experience of the designer/checker for that specific design; Designers & checkers are assigned to bridge projects by matching experience to project complexity.
2) All bridge plan sheets shall include the names or initials and dates of the appropriate designer and checker, and may include their signatures. Including the names or initials of the drafter and reviewer is also good practice. Sealing of the bridge plans by the engineer in responsible charge of the work should follow state requirements.
3) All relevant special provisions shall be identified by the appropriate author in responsible charge and checker. Sealing of special provisions should follow state requirements.
4) Design calculations, check calculations, review comments/resolutions and other pertinent documents as discussed above shall be retained in the permanent bridge design file. Including other important documents like QC checklists, cost estimates, and supporting reports in the design file is good practice.
5) A documented program which details the procedures, standards, and policies to be used in the oversight of bridge design.

QA procedures shall include:

1) Independent check of design calculations with depth and extent of this review commensurate with bridge size, complexity, and level of risk.
2) Participation in field engineering reviews during design, construction, and in-service.

Design Criteria:

1) Louisiana Department of Transportation and Development - Off System Highway Bridge Program Guidelines – Latest Edition
2) Reference Project Advertisement (Pg 5)

Design Checklists:

Louisiana Department of Transportation and Development - Off System Highway Bridge Program Guidelines – Latest Edition

1) Location (Topographic) Survey Checklist
2) Plan-in-Hand checklist
3) Constructability / Biddability checklist

PLAN / CONSTRUCTABILITY / BIDDABILITY REVIEW
(ADOPTED FROM LADOTD WITH MODIFICATIONS)

Purpose:

- To provide information to assist in producing quality plans.
- To provide a history of information that is easily accessible.
- To provide questions to stimulate discussion of potentially problematic areas.
- To provide questions to stimulate checking details and items required to complete the project.
- To provide aid during design for QA/QC
- To provide primary discussion for the plan-in-hand meeting

Instructions for completing the form

- The Design Review portion of the form shall be filled out by the designer during design and prior to PIH submittals.
- The form may be filled out by any district person (ADA, Area Engineer, Lab Engineer, etc.) but the Project Engineer must sign the signature sheet that he concurs with the comments. It is encouraged that the Area Engineer and the Project Engineer both review the plans.
- The Project Engineer and any District personnel designated by the Project Engineer are responsible for reviewing the plans and filling out the review form. The Project Engineer and all reviewers must sign the signature sheet at the back of the form. The Area Engineer is also encouraged to review the plans.
- If answer to the question is in blue box (or lightly shaded if in black and white), a comment is **NOT** required.
- Most questions are designed that a "NO" answer will require comments on what is missing or needed.
- Most questions are designed that a "YES" answer means the plans meet the project needs or a follow up question is required.
- Comments should be shown by reference number on notes page for easy reference. (Example III-2)
- Constructability and Plan-in-Hand questions shall be answered prior to the Plan-in-Hand. The plans should provide enough detail to construct the work required.
- ACP and PS&E / Biddability submittal shall have copies of the completed PIH review attached. If missing contact the Project Manager for a copy. The plans and specifications should provide the details and pay items to bid the project.
- Project Managers are required to respond to all comments and copy all reviewers.
- Each review is considered complete when all comments are addressed
- If question is answered N/A, question is not applicable to project.
- 95% Final Plan reviews (ACP) shall have the completed 95% Preliminary Plan (PIH) review attached. It may be helpful to reference the PIH plan set during the ACP review.
- Comments may be required for certain checklist items. Comments are to be written at the back of the form along with reference numbers for the plan section and checklist item number.

Project managers shall collect all review forms, insert responses to any comments, and copy all reviewers.

APPLICABLE SECTION FOR REVIEW

State Project No. H.014978.5 Route No. N/A **P/H –Constructability** ☑ ☐ *(95% Prelim)*

F.A.P. No. H.014978 Parish St Landry **Advance Check Print** ☐ *(95% Final)*

Project Name: BELLARD LOOP OVER UNNAMED DRAINAGE DITCH

Yes	N/A	#	Description
☒	☐	I.	TYPICAL SECTION SHEETS
☒	☐	II.	SUMMARY SHEETS
☒	☐	III.	PLAN-AND-PROFILE SHEETS
☒	☐	IV.	DRAINAGE INFORMATION
☐	☒	V.	SIGNAL PLANS
☒	☐	VI.	GEOMETRIC DETAILS
☒	☐	VII.	SEQUENCE OF CONSTRUCTION & CONSTRUCTION SIGNING
☒	☐	VIII.	GENERAL
☒	☐	IX.	UTILITIES
☒	☐	X.	STRUCTURES - BRIDGE

PLAN-IN-HAND INSPECTION REPORT
AND
CONSTRUCTABILITY / BIDDABILITY REVIEW

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
I. TYPICAL SECTION SHEETS										
1. Has District been consulted on the pavement type?		✓								
2. Is District in agreement with the typical section?										
3. Are project limits covered by typical sections?		✓								
4. Are superelevation diagrams and tables provided?	✓									
4a. If yes, Is the design speed noted on the diagram?										
5. Does the typical section fit within existing and/or proposed right-of-way? (Check cross sections)		✓								
6. Will the typical section drain water from the base course?		✓								
6a.If yes, is there a method/detail to drain and required items?										
7. Is a subgrade layer required?										
7a. If yes, what types are applicable? (List Types)										
7b. If no, Is lime treatment provided in the plans?										
8. Are all measurements, thicknesses, and slope rates labeled and accurately indicate what is to be constructed?		✓								
9. Is the minimum ditch elevation dimension shown on the typical section?		✓								
II. SUMMARY SHEETS										
1. Will existing ditch cleaning be required?										
1a. If yes, are there limits and pay items?										
2. Are there sufficient removal items for the types of pavement/structures being removed?	✓									
3. Is method of payment for earthwork design addressed (e.g. "temporary" borrow, "additional excess", detour material, embankment, etc.)?		✓								

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
4. Have sufficient temporary erosion control items been included?		✓								
5. Are construction entrances required?										
5a. If yes, are the number and section shown?										
6. Is method of payment for removal of pavement satisfactory?										
7. Is traffic maintenance aggregate required?										
7a. If yes, how much?										
8. Is there a summary of drainage structure sheet provided?										
8a. If yes, are items adequately covered?										
8b. If no, is one required? Why?										
9. Are work elements identified clearly with all corresponding pay items included with adequate quantities to construct project? (i.e. summary tables)	✓									
10. Is there any work under this project designated as "no direct pay"?			✓							
10a. If yes, is this work clearly linked to a specific pay item that can be quantified in the contractor's bid item list?										
11. Are permanent erosion and pollution control items included?		✓								
III. PLAN-AND-PROFILE SHEETS										
1. Is adequate right-of-way provided for relocation of utilities?		✓								
2. Is there space between the R/W line and drainage structure to allow for utility relocation?		✓								
3. Are right-of-way and property line dimensions shown on plans?		✓								
4. Will any right-of-entry agreements be required?			✓							
4a. If yes, is this satisfactory?										
4b. If yes, who will secure it?										
5. Does existing horizontal or vertical clearance allow for construction?										
6. Are all the utility owners with contact numbers listed?		✓								
7. Are the existing utility locations marked in the plans?		✓								
8. Are the utility conflict boxes and their location noted on the plans?		✓								
9. Will overlay affect the intersection, gutters, or curbs drainage?	✓									

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
9a. If yes, are adjustments required?										
10. Are retaining walls required?			✓							
10a. If yes, are details provided for the walls?										
11. Are all oil or gas wells on the project shown on the plans?	✓									
12. Are encroachments on the right-of-way being addressed?										
13. Are existing improvements within 50' of required right-of-way shown on the plans?		✓								
14. Is there any potential hazardous waste site / UST?			✓							
15. Have construction or drainage servitudes been shown?		✓								
16. Are the limits of clearing, grubbing, and landscaping shown?		✓								
17. Can any significant tree be allowed to remain?										
17a. If yes are those to remain been identified?										
18. Are there apparent conflicts between plans and specifications?			✓							
19. Are the benchmark data, required elevations, and curve data on the plans?		✓								
20. Does location of the grade shown on the typical section (sub grade or finished) match grade shown in profile? (Check for label)		✓								
21. Are vertical and horizontal limits of removal clear?										
21a. If yes, are the depths of embedment required excavation shown.										
21b. If yes, are details of removable item required?										
22. Have arrangements been made for relocation of hydrants by utility agreement?										
23. Do general site conditions conform to those represented in plans?										
24. Is existing topography accurate and up-to-date?										
25. Does profile fit the terrain?		✓								
IV. DRAINAGE INFORMATION										
1. If subsurface drainage is being used, is there any evidence of effluent sewerage entering existing roadside ditches?										
1a. If yes, what is the plan of action										
2. Is adequate outfall information shown?		✓								

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
3. Has sufficient drainage excavation and/or cleaning of outfall lateral required for adequate drainage been shown?										
3a. If yes, who is cleaning laterals (City, Parish)?										
4. Will cleaning be required for existing drainage structures?										
4a. If yes, are pay items included?										
5. Will special ditch protection items be required?										
5a. If yes, identify type										
6. Have existing drainage patterns, their continuity, and high water indications been identified?		✓								
7. Are ditches compatible with existing and proposed drainage structures?		✓								
8. Is design drainage elevations shown in the plan compatible with the existing conditions?		✓								
9. Is there a provision for temporary drainage?										
10. Is water being trapped on the lanes on travel lanes which are to be maintained during construction?										
11. Is there a method to connect new and existing drainage facilities?		✓								
12. Is a second profile sheet required for right and left of centerline?			✓							
V. SIGNAL PLANS – Not Anticipated for this Project (Review with Traffic Engineer)										
1. Are pole locations in conflict with utilities or drainage structures?										
2. Are a controller, signal head, pull box, and pedestrian poles required?			✓							
3. Is the existing controller compatible to added items?	✓									
4. Are overhead power lines in conflict with span wire?										
5. Will fiberglass insulators be required or relocated?										
6. Are there any signs attached to the overhead span wire for the existing traffic signal?										
7. Is the disposition of existing signal poles and signal equipment to be removed identified?	✓									
8. Is the sidewalk being obstructed by signal equipment access?	✓									
9. Does the foundation match requirements for span lengths/mast arms?	✓									
9a. If yes, are details provided?	✓									
10. Are street name signs included on mast arms?	✓									
10a. If yes, are details provided?	✓									

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
11. Are communication cables overhead?										
11a. If yes, will they fit with overhead electric?										
12. Do loop detectors exist?										
12a. If yes will existing loop detectors be destroyed by construction?										
12b. If loop detectors are being replaced, are all pay items included (i.e. conduit, junction boxes, conduit, etc.)?										
12c. Will cameras be added?										
13. Is jacking and boring required?	✓									
14. Is open trenching required?	✓									
15. Is right-of-way adequate for signal equipment? (e.g. for signal and lighting foundations, utility relocations, construction easements, adequate work space, desirable clear zone, etc.)	✓									
16. Are temporary traffic signals required?										
16a. If yes, who will be responsible?										
VI. GEOMETRIC DETAILS										
1. Have all areas where improvements can be made to alignment been addressed?										
2. Are sight distances adequate at intersections? (r/w flares, obstructions, etc.)		✓								
3. Is the required information shown on the geometric sheets (e.g. curve data, sight distance, vertical datum, centerline, etc.)		✓								
4. Is existing access being denied due to inadequate sight distance?			✓							
VII. SEQUENCE OF CONSTRUCTION & CONSTRUCTION SIGNING										
1. Is through traffic to be maintained?			✓							
1a. If no, is a detour provided?		✓								
2. If local traffic only, are sufficient details and items provided for school buses, mail carriers, emergency vehicles, or other local traffic to be maintained.										
3. Is temporary sheeting required to maintain existing/required travel lanes?			✓							
3a. If yes, are specifications and details provided?										
3b. If yes, is method of payment satisfactory?										
4. Are there conflicts between new and existing roadway used to maintain traffic?			✓							

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
5. Are traffic control plans for the bridge coordinated with roadwork phasing?										
6. Can utility crossings be resolved via scheduling restrictions (i.e. weekends, after hours) or temporary structures?										
7. Do utilities conflict with required special construction sequencing?			✓							
8. Are traffic operations requirements properly addressed? (i.e., signing, pavement markings signal, etc.)		✓								
9. Are lanes on which traffic is to be maintained compatible to local conditions?										
10. Is there sufficient clearance within the work zone for the operations (such as crane swing room)?										
11. Are there adequate accommodations for intersecting and crossing traffic?										
12. Have pedestrian and bicycle accommodations been addressed?		✓								
13. Has a method of containing bridge slopes during phased construction (at end bent) and approach grade separation been identified?	✓									
14. Have restrictions (e.g. lane closure, general construction or peak-hour restrictions in urban areas) been identified?	✓									
15. Are there notes covering pay for traffic control items?		✓								
16. Is the Traffic Control Plan clear, complete, and approved?										
17. Are items for temporary safety devices, requirements and provision (i.e. guardrail, attenuators, barrier rails, etc.)?		✓								
18. Have the traffic control signs, warning devices and barricades been located?		✓								
Scheduling & Phasing										
19. Is scheduling and phasing coordinated with activity needs? (Schools, festivals, harvesting, parallel routes, etc.)										
20. Will staging areas be provided to contractors that will accommodate the sequence of work and work areas?										
21. Is the type and limits of fence for temporary construction servitude identified?	✓									
22. Have requirements for local/state/federal special permits been addressed?		✓								
23. Is existing access being denied by obstacles (walls, guard rails, etc.) or grade differentials to adjacent property?										
24. Is safe pedestrian access and access to business and residences provided?		✓								

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
Detours										
25. Is detour facility clearly depicted?			✓							
26. Do the detour limits conflict with roadway improvements?			✓							
27. Is method of payment for detour satisfactory?										
28. Can detours be built due to grade difference between new and existing roadways?		✓								
29. Is traffic addressed on side streets?		✓								
30. Is night work required?			✓							
31a. If yes, are hours and/or restrictions shown?	✓									
VIII. GENERAL										
1. Are appropriate general notes and special provisions required for construction provided?										
2. Is there adequate construction access for demolition?										
3. Are there adequate provisions if signs or road markers are to be removed?		✓								
4. Are contamination sites delineated?	✓									
5. If there is a contamination site, have utility relocations been addressed?										
6. Does the Corp permit require work not shown on plans?			✓							
7. Have environmental safeguards or dust control, erosion, and disposal of wastes been addressed?		✓								
8. Are there provisions for noise abatement (e.g. permanent noise walls)?			✓							
9. Do conflicts exist between landscaping and planting requirements with utilities (e.g. irrigation lines) and billboards?										
10. Is there sufficient space (25'-30') for power mowers between additional trees that are planted?	✓									
11. Is there an erosion control plan provided? (to be provided in Final Plans)			✓							
12. Where pile driving is to be encountered near existing structures, should pre-existing conditional survey (video/pictures) be performed on the existing structures?										
12a. If yes, are items provided?										
13. Did you create any S-item wording?			✓							
IX. UTILITIES										

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
1. Will there be disruptions of utilities and provisions for restoration?										
2. If utilities are outside of limits of construction but within the r/w, have all parties (including utility owners) agreed to allow them to remain in-place?			✓							
3. Has responsible party for utility relocation been identified with provisions?										
4. Are there overhead utilities, guy wires, etc. in potential conflict with operations and access of large equipment?										
5. Are there gas lines above other utilities?										
6. Are there conflicts between gravity and force sewer mains and construction?		✓								
6a. If yes for force main, is there a utility agreement for relocation?	✓									
6b. If yes for gravity sewer, are plans included for relocation of sewer?			✓							
7. Are there utility conflicts with drainage?										
8. If project is preceded by clearing and grubbing contract, have utilities been relocated?										
9. If there are pipelines, are they shown in the profile?		✓								
10. If there is a need for a specified utility corridor?			✓							
10a. If yes, is it shown?										
11. Should an integrated utility relocation plan (scheduling and final location of utilities) be included in the construction plans?			✓							
11a. If yes, is the integrated utility relocation plan included in the construction plans?	✓									
X. STRUCTURES										
GENERAL NOTES, INDEX, AND BRIDGE SUMMARY OF QUANTITIES										
GENERAL NOTES & INDEX										
1. Is information complete, accurate, clear and free from multiple interpretations?		✓								
2. Have all environmental commitments been identified?			✓							
3. Has the disposition of salvageable materials been addressed?										
4. Are utility permit requests addressed?			✓							
BRIDGE SUMMARY OF QUANTITIES										
1. Are all necessary items shown and properly footnoted?	✓									
2. Are all quantities and units adequately shown?	✓									

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
3. Have all items been brought forward properly to the Master Summary of Quantities?	✓									
4. If the project is composed of multiple project numbers or funding sources have the quantities been subdivided?	✓									
5. Have all non FHWA participating items been identified?	✓									
GENERAL BRIDGE PLANS										
1. Are all geometric controls shown and consistent with other sheets?	✓									
2. Does each plan sheet provide a clear layout and configuration of the intended structure (matchlines, span/bent numbering, joint types, etc.)?	✓									
3. Does the roadway and bridge interface agree?	✓									
4. Has all guard rail installation information been shown?	✓									
5. Are vertical clearances shown (navigable waterways, roads under bridge, etc.)?	✓									
6. Is deck drainage type specified (drain holes ,barrier slots, etc)?	✓									
HYDRAULIC DATA										
1. Is the hydraulic table shown?		✓								
2. If river gauges are present, has the removal and disposition of these gauges been addressed?	✓									
3. Has predicted scour, scour protection and abutment protection been adequately addressed?		✓								
4. Have design water surface elevations been shown?		✓								
5. Do all water surface elevations reference the project survey datum?		✓								
6. Have any channel changes been addressed in the plans?		✓								
GEOTECHNICAL INFORMATION (If not addressed on foundation plan)										
1. Have all borings, CPT, test piles, and settlement plates been shown on the plans?			✓							
2. Has all temporary shoring for phased construction been covered adequately?	✓									
3. Is Pile Batter indicated (if not shown on bent details)?	✓									
CONSTRUCTION CONFLICTS										
1. Is the existing structure shown?		✓								
2. Are all utilities to remain shown?		✓								

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
SUPERELEVATION DIAGRAMS ***(Superelevation implementation plans should always be included when superelevation transition occurs on the bridge. The bridge superelevation will control the design.)***										
1. Is the superelevation implementation plan clear and concise?	✓									
2. Is the transition from roadway to bridge clearly conveyed?	✓									
FOUNDATION PLAN ***(A foundation plan may be used when geometry is complex, additional information is required for layout of foundation or conflicts with foundation construction need to be identified)***										
1. Has all temporary shoring for any phased construction been covered adequately?	✓									
2. Are all conflicts identified in the plans?	✓									
3. Are all utilities to remain shown?		✓								
4. Is the pile batter shown (if not shown elsewhere)?	✓									
5. Have all overhead or underground obstructions or conflicts that may impede pile driving operations been addressed?										
6. Will pile driving interfere with maintenance of traffic?										
7. Will a pre / post construction site survey for such structures be needed?										
8. Are there any residences, businesses, or facilities (including instrumentation) in the area that may be affected by the noise and vibration from the pile driving operations or construction activities?										
9. Will vibration monitoring be needed?										
SUBSTRUCTURE										
1. Does reinforcement location allow for proper placement of concrete? (Special attention should be given to splice locations)										
2. Are any special details required for superstructure anchorage?			✓							
SUPERSTRUCTURE / APPROACH SPANS AND MAIN SPAN DETAILS										
1. Are details adequate for layout of deck reinforcement?	✓									

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
2. Are any special details required for special areas of the deck?	✓									
3. Are deck joint details shown?	✓									
4. Are drains removed over railroads, roadways, and revetments?	✓									
5. Are girder connection details shown?	✓									
6. Is adequate information provided for the fabrication of girders, cross frames, and diaphragms?	✓									
7. Has the pouring sequence been specified?	✓									
APPROACH SLABS										
1. Are the drainage details for the approach slab adequately shown?	✓									
NAVIGABLE WATERWAYS (Not anticipated for this Project)										
1. Are details for clearance gauges shown?	✓									
2. Are details for navigation lighting provided?	✓									
3. Has pier protection been addressed?	✓									
MOVABLE BRIDGES (Not for this Project)										
1. Are all required Special Details included (End Drains, fencing, etc.) ?	✓									
2. Has operator's house been located?	✓									
3. Has adequate parking and access been provided for operators house?	✓									
As-Builts										
1. Are As-built drawings required for this project?			✓							
2. Would As-built drawings be helpful for bidding and/or construction?			✓							
3. Are As-built drawings included with these plans?			✓							
Permitting Issues										
1. Are utility permit requests adequately addressed?	✓									
2. Are there any special requirements that need to be addressed in the plans for the construction of a bridge over a navigable water way or roadway? (These requirements may be related to agreements with the USCG, COE or for purposes of maintenance of traffic)			✓							

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
3. Are there any access issues that may affect the contractors' construction of the bridge or demolition of the existing bridge that have not been addressed in the plans?										
4. Is the water depth at the site of sufficient depth to float barges?										
5. Will barges obstruct navigation?										
6. Are all environmental commitments being met by the proposed construction methods? (These commitments should be noted in the General Notes section of the plans)	✓									
7. Has the removal of the existing bridge been adequately coordinated with the permitting agencies and any special requirements covered in the plans?	✓									
Construction Site Access										
1. Are there any access issues the contractor may have for the delivery of materials to the project site? (Posted bridges)										
2. Are there any driveways or property entrances that will have to be maintained during construction, relocated and / or reconstructed?										
3. Will any work bridges or haul roads be required for the construction of the bridge?										
4. Is there sufficient right of way to construct the bridge structures?										
5. Are there any other construction related issues that will affect the constructability of the project that needs to be accounted for in the construction estimate?										
6. Are there any utilities supported on the structure that need to be addressed in the plans?										
Maintenance of Traffic										
1. For navigational traffic, have channel alignment and clearance issues been addressed?	✓									
2. If the project is to be constructed utilizing phased construction, will the construction scheme facilitate maintenance of traffic?	✓									
General Constructability and Biddability										
1. Are there adequate staging areas for the contractor?										
2. Are all required work items covered under proper pay items?										
3. Have quantities for phase construction been broken out on the individual sheets to facilitate payment during construction?	✓									
4. Has uniformity of formwork been adequately considered in all of the bridge elements?	✓									
K. SPECIAL PROVISIONS (95% Final Plan Review)										

Description	Design Review/ Comments			Construction						
				Plan-in-Hand Constructability			ACP		PS&E Biddability	
	N/A	Yes	No	N/A	Yes	No	Yes	No	Yes	No
1. Is asbestos or creosote timber being removed?	✓									
(a). Are special instructions and disposal defined?	✓									
(b). Has entity to handle been identified?	✓									
2. Is the contract type and time period sufficient?										
3. Is there a treatment for the removed steel if it has red lead?	✓									

Plan-in-hand inspection report prepared by — Date

Project Engineer — Date

ACP review by — Date

Project Engineer — Date

Constructability / Biddability review by — Date

Project Engineer — Date

NOTES PAGE

Item No	Comment	Response
VII.1	Is through traffic to be maintained?	Parish to provide detour signage
VII.25	Is detour facility clearly depicted?	Parish to provide detour signage
VIII.8	Are there provisions for noise abatement (e.g. permanent noise walls)?	Noise abatement not anticipated
VIII.11	Is there an erosion control plan provided?	Erosion control plan to be prepared in Final Plan Phase
IX.2	If utilities are outside of limits of construction but within the r/w, have all parties (including utility owners) agreed to allow them to remain in-place?	Utility conflicts will be resolved by Parish prior to Bid advertisement
IX.6	Are there conflicts between gravity and force sewer mains and construction? If yes for gravity sewer, are plans included for relocation of sewer?	Gravity Sewer Main conflict to be resolved. Alternatives to resolve will be reviewed at Plan-in-Hand (PIH).
IX.11	Should an integrated utility relocation plan (scheduling and final location of utilities) be included in the construction plans?	Utility conflicts will be resolved by Parish prior to Bid advertisement.
X.2	Have all environmental commitments been identified?	To be reviewed. No pile driving noise/vibrations at issue since no driving is planned.
X.4	Are utility permit requests addressed?	Any utility permit requests will be resolved by Parish prior to Bid advertisement.
X.Geo.1	Have all borings, CPT, test piles, and settlement plates been shown on the plans?	None taken. Geotechnical scope to be discussed at PIH.
X.AsBlt.3	Are As-built drawings included with these plans?	No As built drawings anticipated for inclusion in plans.

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.

Firm Name **(as registered with Louisiana's Secretary of State)**	**Address**	**Point of Contact and email address**	**Phone Number**
LANDSOURCE, INC. (Charter Number 34514462D)	6730 Exchequer Dr. Baton Rouge, LA 70809	David L. Patterson patterson@landsource.com	(225)752-0995
TERRACON CONSULTANTS, INC. (Charter Number 35701137F)	2822 O'Neal Lane, Building B Baton Rouge, LA 70816	D'Juana Beason Djuana.beason@terracon.com	225-344-6053 225-614-0404 (mobile)

23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank.

N/A