

REQUEST FOR QUALIFICATIONS

IDIQ CONTRACT FOR ENGINEERING AND INSPECTION SERVICES OF STATE REGULATED DAMS



CONTRACT NO. 4400035030
APRIL 28, 2026

SUBMITTED TO
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Michael Baker
INTERNATIONAL

We Make a Difference

Michael Baker

INTERNATIONAL

Ms. Paulette Territo
Consultant Contract Services Administrator
Department of Transportation and Development
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

DAM SAFETY PROGRAM

ENGINEERING AND RELATED SERVICES

APRIL 28, 2026

RE: ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES CONTRACT NO. 4400035030 IDIQ CONTRACT FOR ENGINEERING AND INSPECTION SERVICES OF STATE REGULATED DAMS STATEWIDE IN DISTRICTS 02, 03, 07, 08, 61 AND 62

Dear Ms. Territo,

DOTD is seeking a trusted, technically rigorous partner who can deliver consistent dam safety inspections, regulatory-compliant reporting, and responsive engineering support across multiple districts while managing concurrent task orders with precision and accountability. Michael Baker fulfills this role through proven statewide dam safety experience, multidisciplinary inspection expertise, and established QA/QC and coordination processes that ensure timely, accurate, and defensible results for DOTD and dam owners alike.

Michael Baker has been providing complete engineering services to municipalities and county governments since 1940. Michael Baker has grown to become an international firm with over 6,000 employees providing services in civil engineering, geographic information technology, environmental services, transportation, and architecture. Our civil engineers are not only infrastructure experts, as DOTD has come to know us, but are also dam subject-matter experts. We have provided dam rehabilitation, inspection, and assessment engineering services for over 50 years, partnering with dam owners nationwide to deliver comprehensive dam safety solutions. We are currently ranked No. 7 in the Engineering News-Record for work on Dams and Reservoirs, indicating our commitment and experience with dam safety projects. Our Dams Department consists of engineers and supporting staff who work solely on dam projects across the nation. From decades of experience working with DOTD, Michael Baker has extensive knowledge and understanding of the planning and project requirements that are integral to the successful execution of services from scientific and technical analysis, concept through design stages, regulatory permitting, bidding, and construction. Our partnership with Forte & Tablada and Eustis Engineering strengthens our team. Our entire team has longstanding relationships with DOTD, ensuring that we understand the Department's mission, values, and needs for this Dam Safety Program.

MICHAEL BAKER AND OUR TEAM OFFER DOTD THE FOLLOWING:



PROVEN SUCCESS DELIVERING DOTD IDIQ CONTRACTS

Michael Baker has a strong understanding of DOTD expectations, regulatory considerations, and constructability challenges. Our current workload (including dams at Anacoco Lake, Vernon, Bundick and Three Mile Lakes) allows us to readily accept additional assignments, and our familiarity with DOTD personnel and processes enables rapid mobilization with minimal startup time. We are staffed and positioned to handle multiple task orders, simultaneously.



EXTENSIVE EXPERIENCE WITH DAM INSPECTION AND ENGINEERING SERVICES

Our team has in-depth knowledge of many DOTD-serviced dams, where we have performed formal inspections, hydrologic and hydraulic (H&H) modeling, engineering analyses, and prepared construction plans and specifications for infrastructure and dam-related improvements.



LEAN AND LOCAL TEAM WITH ONE-STOP-SHOP SERVICE

By eliminating unnecessary handoffs and layering, our integrated approach streamlines communication, accelerates issue resolution, and ensures consistent application of state and federal dam safety requirements. The result is efficient inspections, clear recommendations, and dependable support that reduces risk while maximizing value for DOTD.

WE ARE READY AND AVAILABLE TO SERVE YOU

Please contact me for additional information or to schedule an interview.

Sincerely,

MICHAEL BAKER INTERNATIONAL, INC.

L.R. "Eric" Erikson, PE
Program/Project Manager
Eric.Erikson@mbakerintl.com
225-266-5335

DOTD FORM: 24-102

(Revised August 11, 2025)

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.

1. Contract Name as shown in the advertisement	IDIQ CONTRACT FOR ENGINEERING AND INSPECTION SERVICES OF STATE REGULATED DAMS STATEWIDE DISTRICTS 02, 03, 07, 08, 61 AND 62
2. Contract Number(s) as shown in the advertisement	4400035030
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)	Michael Baker International, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	Louisiana License: E.F. 0000062 Louisiana License: V.F. 0000010
6. Prime consultant mailing address	2600 CitiPlace Drive, Suite 450
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	Baton Rouge, Louisiana 70808
8. Name, title, phone number, and email address of prime consultant's contract point of contact	L. R. "Eric" Erikson, PE, CFM Department Manager – Water Resources 225-218-2829 Eric.Erikson@mbakerintl.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Daniel Thornhill, PE Office Manager - Associate Vice President 225-218-2846 Daniel.Thornhill@mbakerintl.com



DOTD requires a trusted partner capable of delivering repeatable, compliant dam safety inspections statewide. Michael Baker offers the experience, systems, and people to do so—safely, efficiently, and reliably.



50+ Years of Experience in Dam Rehabilitation



Ranked #7 in Engineering News-Record for Dams

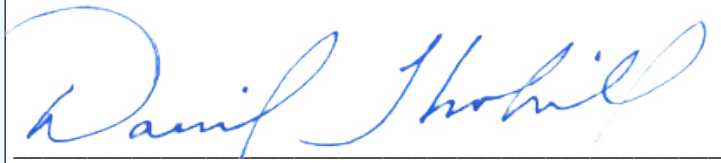


Provide DOTD a Trusted Partner to Provide All Services Dam/Reservoir related

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.

Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association. In addition, proposer certifies it will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.

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.



Signature above shall be the same person listed in Section 9:

Date: 04/28/2026

Firm(s):
N/A

Firm(s)' %:
N/A

WHY CHOOSE THE MICHAEL BAKER TEAM?

The Michael Baker team is ready and qualified to serve DOTD on this contract. We know and understand DOTD's needs and expectations. Amongst other discriminating factors, the Michael Baker team will bring DOTD:



Innovative Dam Safety and Compliance experience on multiple DOTD regulated dams.



Responsive and Ready Multi-Task IDIQ Delivery



An adaptable team of inspectors, designers, hydraulic modelers and project managers ready to take on multiple task orders at any given time or ready to mobilize during an emergency.

SECTIONS 12-15

DISCIPLINE TABLE | TEAM SIZE | ORGANIZATIONAL CHART | MINIMUM PERSONNEL REQUIREMENTS



12. Discipline Table:

<i>Past Performance Evaluation Discipline(s)</i>	<i>% of Overall Contract</i>	<i>Michael Baker International, Inc.</i>	<i>Forte and Tablada, Inc.</i>	<i>Eustis Engineering, LLC.</i>	<i>Each Discipline must total to 100%</i>
(Other) Dams & Spillways*	85%	100%	0%	0%	100%
Geotech	5%	0%	0%	100%	100%
Survey	5%	0%	100%	0%	100%
Environmental	5%	100%	0%	0%	100%
<i>Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.</i>					
<i>Percent of Contract</i>	100%	90.00%	5%	5%	

YOUR MICHAEL BAKER TEAM



DOTD will experience a dedicated team of local partners led by Michael Baker. Each firm and each team member were chosen specifically to bring a unique skill set, expertise, and experience to deliver successful dam inspections across the state of Louisiana.

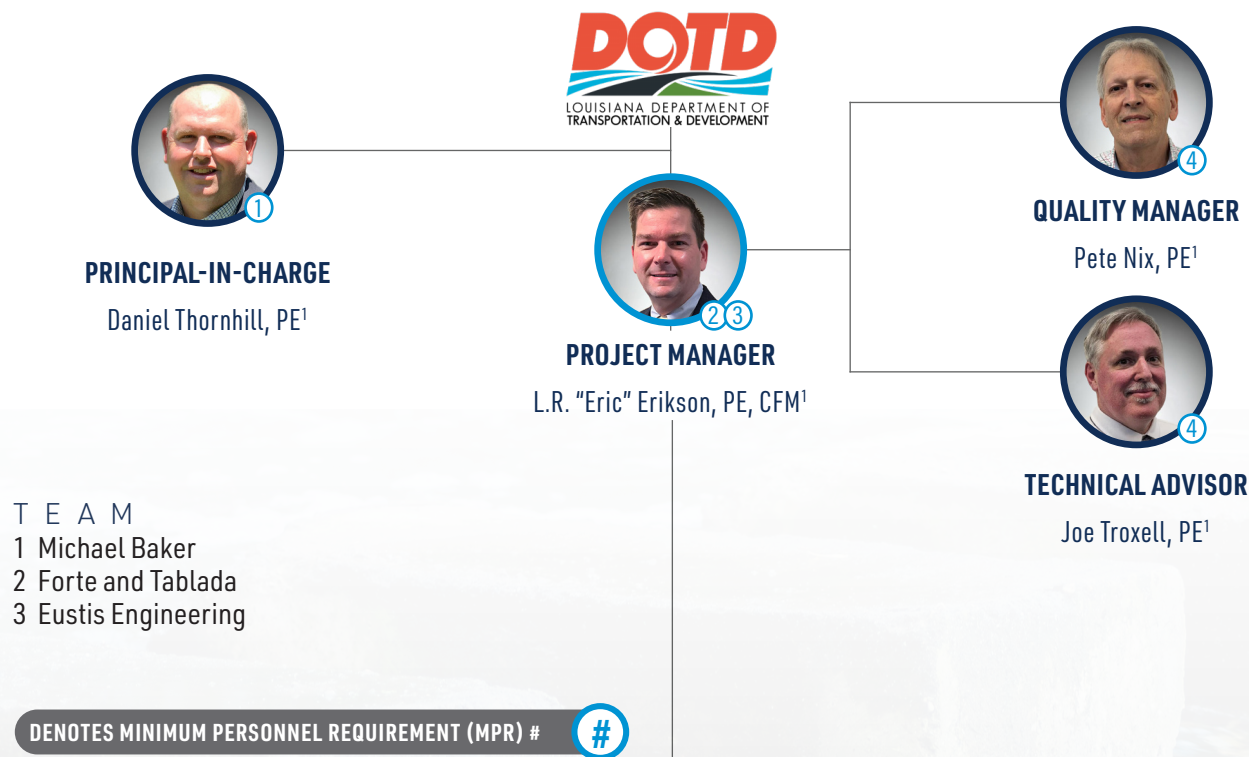
13. Firm Size:

<i>Firm name</i>	<i>DOTD Job Classification</i>	<i>Number of personnel committed to this contract</i>	<i>Total number of personnel available in this DOTD Job Classification (if needed)</i>
 Michael Baker International, Inc. - Michael Baker has provided dam rehabilitation, inspection, and assessment engineering services for over 50 years, partnering with dam owners nationwide to deliver comprehensive dam safety solutions. - We are currently ranked No. 7 in the Engineering News-Record for work on Dams and Reservoirs, indicating our commitment and experience with dam safety projects. Our Dams Department consists of engineers and supporting staff who work solely on dam projects across the nation.	Clerical	1	2
	Engineer	2	5
	Engineering-Aide	1	2
	Engineer Intern	2	10
	Engineer-Other	4	10
	Environmental Pro	1	3
	GIS Analyst	1	2
	Principal	1	2
	Senior Technician	1	2
	Supervisor- Eng	1	3
 Forte and Tablada, Inc. - Forte and Tablada, Inc. brings more than six decades of proven land surveying and geospatial expertise to projects across Louisiana. - Headquartered in Baton Rouge, the firm is a long-standing, Louisiana-based engineering and land surveying practice with multiple offices throughout the state, including Shreveport, Bossier City, and Denham Springs.	Technician	0	2
	Principal	1	3
	Surveyor	1	5
	Senior Technician	2	6
	Party Chief	2	6
	Technician	2	14

13. Firm Size:

 Eustis Engineering, L.L.C. - Eustis Engineering, L.L.C. provides Louisiana-based dam safety, geotechnical, and inspection services that directly support the objectives of the LaDOTD Dam Inspection IDIQ. The firm has delivered inspection and engineering services for regulated dams and flood control structures throughout the state, including the Falgout Canal Floodgate Structure in Terrebonne Parish, where Eustis Engineering performed geotechnical analyses and recommendations supporting critical flood protection infrastructure. - Their experience includes high-hazard dams, embankment evaluations, spillway capacity improvements, and associated field investigations across Louisiana's challenging geotechnical and hydraulic environments.	Principal	1	3
	Supervisor-Eng	2	9
	Engineer	2	5
	Engineering intern	1	6
	Engineering-Aide	2	5
	Accountant	1	3
	CADD Technician	1	1
	Clerical	3	11
	Driller	1	8
	Geologist	1	2
	Inspector	6	13
	Inspector-Certified	1	1
	Supervisor-Other	2	7
	Technician	6	9

14. Organizational Chart:



OUR LOCAL TEAMING PARTNERS



SURVEY

Forte and Tablada has 80+ staff members with survey, civil and construction engineering, and environmental expertise.



GEOTECHNICAL INVESTIGATIONS

Eustis Engineering is an industry leader for geotechnical engineering, environmental consulting, and materials testing and inspections.

DAM INSPECTION TEAM NO. 1

LEAD- Joe Hlebiczkj, PE¹

Andrew Durkin, PE¹
Justin West, PE, CFM¹
Afaq Durrani, EI¹

DAM INSPECTION TEAM NO. 2

LEAD- Joe Troxell, PE¹

Achutam Baral, PE, CFM¹
Tanveer Ahmed, EI¹
Haley Stevens, EI¹

SUPPORT SERVICES

GEOTECHNICAL

LEAD- Don Green, PE¹
Gwendolyn Sanders, PE³
James Hance, PE³
Shawn Walsh, PE³
Jonathan Sherwood, PE³
John Laux¹

SURVEY

LEAD- Brad Holleman, PLS, PE²
Trent Iglehart²

UNDERWATER INVESTIGATIONS

LEAD- Brian Rhett, PE¹
William Gwaltney, EIT¹

STRUCTURAL ASSESSMENT/ DESIGN

LEAD- Shalin Sheth, PE¹

HYDROLOGY & HYDRAULICS

LEAD- Don Gregor, PE¹
Justin West, PE, CFM¹
Achutam Baral, PE, CFM¹
Tanveer Ahmed¹

DAM BREACH / EMERGENCY ACTION PLAN (EAP)

Erika Rodgers, PE¹
Fereshteh Noorbakhsh, PE¹

15. Minimum Personnel Requirements:

Led by Daniel Thornhill, PE, a Principal In Charge with over 25 years of inspection oversight experience, 19 serving the DOTD, Michael Baker and subconsultant staff designated to work on this contract meet the Minimum Personnel Requirements (MPRs) specified in the advertisement.

Resumes included in this submission reflect the required experience stated in the MPR.



MPR No. Do not insert word- ing 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 and discipline meeting MPR/ certi- fication & number (Ex: PE # - Civil)	State of license	License/certification expiration date
1	Daniel Thornhill, PE		Professional Engineer / Civil Engineering / PE.32367	Louisiana	09/30/2026
2	L.R. "Eric" Erikson, PE, CFM		Professional Engineer / Civil Engineering / PE.31061	Louisiana	03/31/2028
3	L.R. "Eric" Erikson, PE, CFM		Professional Engineer / Civil Engineering / PE.31061	Louisiana	03/31/2028
4	Arthur "Pete" Nix, PE		Professional Engineer / Civil Engineering / PE.53557	Ohio	12/31/2027
	Joseph Troxell, PE		Professional Engineer / Civil Engineering / PE.66227	Ohio	12/31/2027
5	Bradley Holleman, PLS, PE		PLS 5082 - Survey	Louisiana	09/30/2026

SECTION 16

STAFF EXPERIENCE



KEY PERSONNEL

PROJECT MANAGEMENT TEAM & KEY
DISCIPLINE LEADS

16. Staff Experience:

<i>Firm employed by</i>	Michael Baker International, Inc.														
<i>Name</i>	L.R. "Eric" Erikson, PE, CFM	<i>Years of relevant experience with this employer</i>	3+												
<i>Title</i>	Department Manager – Water Resources	<i>Years of relevant experience with other employer(s)</i>	23												
<i>Degree(s) / Years / Specialization</i>	M.S. / 2003 / Engineering and Technology Management B.S. / 1999 / Civil Engineering														
<i>Active registration number / state / expiration date</i>	PE.0031061 / Louisiana / 03/31/2028 CFM US-23-12645 / 07/31/2027														
<i>Year registered</i>	2004 / 2023 (CFM)	<i>Discipline</i>	Civil												
<i>Contract role(s) / brief description of responsibilities</i>	MPR #2 and #3- Project Manager Mr. Erikson will serve as the Project Manager for this project as he has experience working with several members of the DOTD Public Works section and has completed several dams and spillway type projects with DOTD. He will also support the team in scheduling of inspections and provide QA/QC for any hydraulic modeling that may be required. Over his career, Mr. Erikson has been involved with inspections, studies, EAP's and the design of improvements to the following dams maintained by DOTD: <table border="0"> <tr> <td>✓ Anacoco Lake</td> <td>✓ Bayou D'Arbonne Lake</td> </tr> <tr> <td>✓ Vernon Lake</td> <td>✓ Black Bayou Lake</td> </tr> <tr> <td>✓ Bundick Lake</td> <td>✓ Iatt Lake</td> </tr> <tr> <td>✓ Three Mile Lake</td> <td>✓ Turkey Creek Lake</td> </tr> <tr> <td>✓ Poverty Point Reservoir</td> <td>✓ Bayou Cocodrie Lake</td> </tr> <tr> <td>✓ Bayou De Chene Reservoir</td> <td>✓ Caney Creek Lake</td> </tr> </table>			✓ Anacoco Lake	✓ Bayou D'Arbonne Lake	✓ Vernon Lake	✓ Black Bayou Lake	✓ Bundick Lake	✓ Iatt Lake	✓ Three Mile Lake	✓ Turkey Creek Lake	✓ Poverty Point Reservoir	✓ Bayou Cocodrie Lake	✓ Bayou De Chene Reservoir	✓ Caney Creek Lake
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✓ Bayou De Chene Reservoir	✓ Caney Creek Lake														
<i>Experience dates (mm/yy-mm/yy)</i>	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage," "designed girders," "designed intersection," etc. Experience dates should cover the years of experience specified in the applicable MPR(s).														
11/22 – 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surcharge Management, Beauregard Parish, Louisiana. DOTD. <i>Project Manager</i> . Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Erikson completed the PFM, and SQRA assessments, and provided QA/QC for all modeling. The project will determine improvements to Bundick Lake outlet works in order to reduce flooding within the watershed.														
11/22 – 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. <i>Project Manager</i> . Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Erikson completed the PFM, and SQRA assessments, and provided QA/QC for all modeling. The project will determine improvements to both Vernon Lake and Anacoco Lake outlet works in order to reduce flooding within the watershed.														
7/23 – 12/2024	LWI/SPP Group 1 Three Mile Lake, St. Landry Parish, Louisiana. DOTD. <i>Project Manager</i> . Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Erikson completed the on-site inspection, improvement alternatives strategy, and provided QA/QC for all modeling. The project will determine improvements to infrastructure around Three Mile Lake in order to reduce backwater flooding from the Atchafalaya Floodway.														
01/23 – 12/2024	Louisiana Watershed Initiative (LWI) Region 4, Louisiana. DOTD. <i>Deputy Project Manager</i> . Responsible for contract administration and assisting the project manager with general project management duties such as resource allocation, scheduling, team coordination, and financial analysis. This task includes 1 HUC8 Watershed model.														

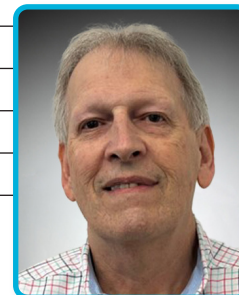


11/22 – 12/2024	Parish Comprehensive Drainage Plan, St. Tammany Parish, Louisiana. <i>St. Tammany Parish. Deputy Project Manager.</i> Responsible for contract administration and assisting with general project management duties, such as resource allocation, team coordination, scheduling, and financial analysis. Attending public outreach meetings and assisted the public in understanding the project objective and goals. Provided review and QC of the Phase 1 final report, community outreach at two public meetings, and scoping of future phases.
11/22 – 12/2024	IJA Bridge Replacement Program Region 7, Louisiana. <i>DOTD. Task Manager.</i> Responsible for directing the completion of 12 Bridge Replacement Hydraulic Studies in accordance with DOTD regulations. Studies included 2D HEC-RAS models, replacement alternative analysis, scour analysis, and "No-Rise" Certificates where required. Mr. Erikson provided overall production oversight and QA/QC of the final reports.
7/23 – 12/2024	Little Bogue Falaya Regional Detention Pond, St. Tammany Parish, Louisiana. <i>St. Tammany Parish. Project Manager.</i> Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Erikson completed the overall strategy for modeling of several pond locations and sizes, QA/QC 2D HEC-RAS models, QA/QC Preliminary Engineering Report, Provide oversight and final review of cost estimates, and reviewed damage calculations for BCA calculations.
01/23 - Ongoing	Jones Creek Regional Detention Pond, Baton Rouge, Louisiana. <i>City Parish of East Baton Rouge DPW. H&H Task Manager.</i> Responsible for the overall execution of the H&H portion of the project, contract administration, and general task management duties, which include H&H resource allocation, H&H team coordination, scheduling, and financial analysis. Specifically, Mr. Erikson completed the overall strategy for modeling of the detention pond configurations, QA/QC 2D HEC-RAS models, QA/QC Preliminary Engineering Report, and provided QA/QC review of preliminary construction plans.
01/23 - Ongoing	Louisiana Watershed Initiative (LWI) Region 6, Louisiana. <i>DOTD. Deputy Project Manager.</i> Responsible for providing contract administration and assisting the project manager in general project management duties such as resource allocation, scheduling, coordination of team members, and financial analysis. Michael Baker supplemented data collection and analysis, continued stakeholder engagement services, and performed topographic, bathymetric, and channel surveys. Specifically, Mr. Erikson completed project management duties such as being a point of contact for the DOTD Project Manager, directed resource management to complete all task orders, provided QA/QC on all deliverables, and provide stakeholder engagement in the form of presentations to various stakeholders.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Arthur "Pete" Nix, PE		Years of relevant experience with this employer	2
Title	Dams Department Manager		Years of relevant experience with other employer(s)	40
Degree(s) / Years / Specialization		B.S. / 1984 / Civil Engineering		
Active registration number / state / expiration date		License No. 53557, Ohio, 12/31/27 License No. 40150, Michigan, 10/09/26 License No. 51673, Colorado, 10/31/27 License No. 021697, West Virginia, 12/31/26		
Year registered	Ohio / 1989	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		MPR #4 - Quality Manager Mr. Nix is a senior geotechnical and dam safety engineer. He has extensive experience with water resource and flood control projects, including dam and levee designs, evaluations, and dam and levee inspections, levee certifications, subsurface investigations, and instrumentation system designs. His work has also included geotechnical explorations, analyses and recommendations for locks and dams, large bridges, roadway alignments, landside repairs and other large civil works projects. Several projects have included embankment or floodwall construction over soft or organic soils using specialized ground improvement techniques. Mr. Nix has worked with a variety of dam owners, including a number of Corps of Engineers Districts and DOTD. With a previous employer, Mr. Nix worked on the certification of a number of the Southeast Louisiana Flood Protection Authority - East (SLFPA-E) levees within the federal flood protection following Katrina. Mr. Nix is very familiar with the very soft, organic deposits in the region.		
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 years of experience specified in the applicable MPR(s).			
11/22 - 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. Dam Department Manager. Mr. Nix was responsible for senior level reviews of the spillway location, configuration, foundation, and seepage control features. In addition, Mr. Nix reviewed the geotechnical engineering evaluations and control of water recommendations for the project. Mr. Nix also performed independent technical reviews of the construction plans and specifications.			
11/22 - 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surge Management, Beauregard Parish, Louisiana. DOTD. Dam Department Manager. The project will determine improvements to Bundick Lake outlet works in order to reduce flooding within the watershed. Mr. Nix acted as the senior reviewer of dam related work. Mr. Nix was responsible for senior level reviews of the spillway location, configuration, foundation, and seepage control features. In addition, Mr. Nix reviewed the geotechnical engineering evaluations and control of water recommendations for the project. Mr. Nix also performed independent technical reviews of the construction plans and specifications.			
09/24 - Ongoing	Rehabilitation of Five Pennsylvania Dams - Various Locations, Pennsylvania. Pennsylvania Fish & Boat Commission. Dam Department Manager. To bring five dams into compliance with Pennsylvania Department of Environmental Protection regulations. He is responsible for management of the project including budget, schedule, coordination, task management, permitting, final design, presentations to the client and other agencies, and construction management. The services include dam inspections, hydrologic and hydraulic evaluations, geotechnical investigations, structural assessments, alternatives analyses, dam-break modeling, inundation mapping, permitting, agency coordination, and construction services. Dams included Cloe Lake Dam, Hemlock Lake Dam, High Point Lake Dam, Kahle Lake Dam, and Virgin Run Lake Dam.			
09/24 - Ongoing	DCNR Dams and Hydraulic Services Open End Contract - Various Locations, Pennsylvania. Pennsylvania Department of Conservation and Natural Resources. Dam Department Manager. Technical execution and the administration of projects under Michael Baker's current open end contract including design, hydrologic and hydraulic analysis, permitting, and Emergency Action Plans. In this contract, Mr. Nix has supervised the department staff updating 4 Emergency Action Plans for significant and high hazard dams and the drafting of an Emergency Action Plan for a newly permitted significant hazard dam. This also included updating downstream inundation maps to account for the 2019 update to the Pennsylvania Probable Maximum Precipitation (PMP) Study. Among those was updating the largest inundation map in Pennsylvania for George B. Stevenson Dam.			





09/24 - 02/25	C.F. Walker Lake Dam Environmental Assessment, Snyder County, Pennsylvania. <i>Natural Resources Conservation Service. Project Manager.</i> Responsible for tracking deliverables, coordinating between NRCS, the dam owner, and the project team. Michael Baker evaluated the current state of an earthen embankment dam in Snyder County, PA, identified potential issues, and evaluated compliance with current USDA-NRCS and Pennsylvania state dam safety criteria. These assessments included embankment inspections, geotechnical inspections, structural inspections with divers, hydrologic and hydraulic analyses, erodibility and stability studies, structural investigations, and geotechnical investigations.
09/24 - Ongoing	Little Schuylkill Dam Environmental Assessment, Schuylkill County, Pennsylvania. <i>Natural Resources Conservation Service. Project Manager.</i> Responsible for tracking deliverables, coordinating between NRCS, the dam owners, and the project team. Michael Baker evaluated the current state of 5 dams in Schuylkill County, PA, identified potential issues, and evaluated compliance with current USDA-NRCS and Pennsylvania state dam safety criteria. These assessments included hydrologic and hydraulic analyses, erodibility and stability studies, structural investigations, and geotechnical investigations.
06/23 - 09/24	Forked Run Lake Dam Repairs, Highland County, Ohio. <i>Ohio Department of Natural Resources. Project Manager and Senior Geotechnical Engineer.</i> Forked Run Dam is a high-hazard embankment dam in Meigs County. The dam has a spillway deficiency and does not safely pass the design storm without overtopping. Tetra Tech is currently evaluating rehabilitation alternatives for the project, including armoring the embankment, using larger spillways, or raising the embankment. Of note are the difficult foundation conditions beneath the existing spillway and their impact on the design of new spillways.
1/21 - 09/24	Rocky Fork Lake Dam Repairs, Highland County, Ohio. <i>Ohio Department of Natural Resources. Project Manager and Senior Geotechnical Engineer.</i> Rocky Fork Lake Dam is an 80-foot high, high-hazard, concrete gravity dam constructed in the early 1950s. The work on this project consisted of a stabilization evaluation, over 4,000 square feet of concrete surface patching, replacement of the 5'x7' sluice gate, and upgrading the electrical, mechanical, and other control systems. The design is at a 100% level and construction is scheduled to begin in 2025.
6/21 - 07/24	Emergency Action Plans. <i>Ohio Department of Natural Resources, Division of Engineering. Project Manager.</i> Develop Emergency Action Plans for two Class I (high-hazard) dams and 33 Class II and Class III dams owned by ODNR. For the two Class I dams, hydrologic analyses (HEC-1 and HEC-HMS) and hydraulic and flood routing analyses (HEC-GeoRAS and HEC-RAS) were performed using the existing dam configurations and the updated statewide Probable Maximum Precipitation (PMP) data. The results of these analyses were used to develop the extents of the flooding downstream and inundation limits. Inundation mapping was also developed and included in the EAPs for the two Class I structures.

16. Staff Experience:

<i>Firm employed by</i>	Michael Baker International, Inc.		
<i>Name</i>	Joseph Troxell, PE	<i>Years of relevant experience with this employer</i>	3
<i>Title</i>	Civil Engineer	<i>Years of relevant experience with other employer(s)</i>	29
<i>Degree(s) / Years / Specialization</i>	BS / 1994 / Civil Engineering / Pennsylvania State University		
<i>Active registration number / state / expiration date</i>	P.E. 0066227 / Ohio / 12/31/2027		
<i>Year registered</i>	2001	<i>Discipline</i>	Civil
<i>Contract role(s) / brief description of responsibilities</i>	MPR #4 - Technical Advisor and Dam Inspection Team Lead Mr. Troxell is a senior Water Resource Project Manager specializing in dam and spillway design, rehabilitation, and assessments. His experience includes several dam infrastructure inspections for both private and public entities.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
11/22 - 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. <i>Senior Dam Safety Engineer.</i> Responsible for the technical execution of the project. Specifically, Mr. Troxell managed the hydrology and hydraulics, geotechnical, and structural disciplines for the project. The project will determine improvements to both Vernon Lake and Anacoco Lake outlet works in order to reduce flooding within the watershed.		
11/22 - 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surge Management, Beauregard Parish, Louisiana. DOTD. <i>Senior Dam Safety Engineer.</i> Responsible for the technical execution of the project. Specifically, Mr. Troxell managed the hydrology and hydraulics, geotechnical, and structural disciplines for the project. The project will determine improvements to Bundick Lake outlet works in order to reduce flooding within the watershed.		
01/24 - Ongoing	Hinckley Lake Dam Modifications, Hinckley, Ohio. Cleveland Metroparks. <i>Project Manager.</i> Led construction oversight, responding to RFI's, submittals, and changes in the work. Michael Baker is providing engineering services to design modifications for Hinckley Lake Dam to ensure compliance with ODNR Dam Safety Regulations. The dam, in its current configuration, does not have adequate capacity to convey the Probable Maximum Flood design event over the spillway without overtopping the dam. Michael Baker is providing professional services to rehabilitate and modify the dam to meet ODNR regulations. These services include site investigation and assessment, hydrologic and hydraulic analysis, geotechnical analyses and assessment, alternatives evaluation, permitting, and rehabilitation design.		
01/24 - Ongoing	ODNR Statewide Dam Safety Improvements, Statewide, Ohio. Ohio Department of Natural Resources. <i>Project Manager.</i> Leading the design of improvements to Adams Lake Dam in West Union, Ohio and Lake Alma Dam in Wellston, Ohio. Neither dam can safely pass the design storm (100% PMF) and there are other issues with both dams. Adams Lake requires a new principal spillway, and the left abutment is lower than the embankment crest. Lake Alma has a conduit spillway, with no emergency spillway, and the downstream slope is over steepened.		
10/23 - Ongoing	Kahle Lake Dam Rehabilitation, Emlenton, Pennsylvania. Pennsylvania Department of General Services. <i>Senior Engineer.</i> QA/QC for the rehabilitation design. Michael Baker is providing comprehensive engineering services, including design, procurement, and construction administration, to ensure compliance with state regulations. The project involves spillway reconstruction, embankment enhancements, lake drain improvements, and the selective demolition of existing structures.		
10/23 - Ongoing	Virgin Run Lake Dam Rehabilitation, Buena Vista, Pennsylvania. Pennsylvania Department of General Services. <i>Senior Engineer.</i> QA/QC for the rehabilitation design. Michael Baker designed structural improvements, toe drain design, spillway design, and a freeboard and slope analysis to ensure safety and compliance with the design storm event. Additionally, a Breach Analysis Report was submitted to account for updated storms resulting from the 2019 Probably Maximum Precipitation Study.		
01/24 - Ongoing	Little Schuylkill Dam Environmental Assessment, Reading, Pennsylvania. North Wind, Inc. <i>Project Manager.</i> Led the assessment of 5 dams in the watershed. Work included geotechnical, hydraulic, hydrologic and sediment studies. Michael Baker evaluated the current state of 5 dams in Schuylkill County, PA, identified potential issues, and evaluated compliance with current USDA-NRCS and Pennsylvania state dam safety criteria. These assessments included hydrologic and hydraulic analyses, erodibility and stability studies, structural investigations, and geotechnical investigations.		



01/24 - Ongoing	Shreve Lake Dam Improvements, Shreve, Ohio. <i>Ohio Department of Natural Resources. Project Manager.</i> Provided construction oversight and management. During construction, due to differing conditions, significant redesign was required to keep the Contractor moving forward with the project. Michael Baker replaced the principal spillway, discharge conduit, stilling basin, toe drain, and slope protection to address deficiencies and sinkholes. Additionally, site improvements such as a new fishing pier, launch ramp, and updated parking lot were included, enhancing the recreational and aesthetic value of the area.
01/24 - Ongoing	Muskingum Lock and Dam #7, McConnelsville, Ohio. <i>Ohio Department of Natural Resources. Project Manager.</i> Led the design effort from 90% to 100% and through construction. During construction, due to differing conditions, significant redesign was required to keep the Contractor moving forward with the project. Due to Michael Baker's efforts, the contractor is currently one year ahead of schedule. Project management and oversight during construction, including responding to RFIs, Submittals, and Change Orders. Michael Baker replaced the existing dam with a new structure 580 feet downstream that enhances safety, improves infrastructure, and provides better access.
01/24 - Ongoing	Lake Katharine Dam Rehabilitation, Jackson, Ohio. <i>Ohio Department of Natural Resources. Project Manager.</i> Led the construction closeout of the project and development of the Emergency Action Plan and Operation, Maintenance, and Inspection Manual. Michael Baker is improving the lake drain system, earthen embankment, and flood/discharge capacity of the 80-year-old, 260-foot-long dam to comply with current regulations.
01/24 - Ongoing	Wheeling Creek Dam Rehabilitation, Marshall County, West Virginia. <i>North Wind, Inc. Project Manager.</i> Led the design from 90% to 100%, including additional CFD analyses for the proposed auxiliary spillway. Michael Baker, as part of the North Wind Resources Partnership JV, is providing engineering services for rehabilitation of the Wheeling Creek Site 25 Dam. There has been significant development downstream of the site since original construction, so the dam has been reclassified as a high-hazard potential structure. The structure will undergo rehabilitation to meet current West Virginia Department of Environmental Protection (WVDEP) Dam Safety criteria and Natural Resources Conservation Service (NRCS) design criteria and standards. Michael Baker is providing hydrologic and hydraulic analysis, structural investigation and design, geotechnical investigation and design, and construction administration.

16. Staff Experience:

<i>Firm employed by</i>	Michael Baker International, Inc.		
<i>Name</i>	William "Joe" Hlebiczk, PE	<i>Years of relevant experience with this employer</i>	11
<i>Title</i>	Civil Engineer	<i>Years of relevant experience with other employer(s)</i>	11
<i>Degree(s) / Years / Specialization</i>	B.S.E., 2015, Civil Engineering, Geneva College		
<i>Active registration number / state / expiration date</i>	E-85156/Ohio/ 12/31/2027		
<i>Year registered</i>	2019	<i>Discipline</i>	Civil Engineering
<i>Contract role(s) / brief description of responsibilities</i>	Mr. Hlebiczk is a civil engineer with a background in water resources engineering and site development. His experience includes stormwater management design, environmental permitting, site development plans, erosion and sediment control plans, dam H&H calculations, and dam construction inspection.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
11/22 - 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surge Management, Beauregard Parish, Louisiana. DOTD. Civil Engineer. Responsible for performing a field visit where the dam and its features were inspected and recorded to help determine potential repair.		
11/22 - 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. Civil Engineer. Responsible for attending a site visit where the dam and its features conditions were documented so repairs can be identified and planned.		
7/23 - 12/2024	LWI/SPP Group 1 Three Mile Lake, St. Landry Parish, Louisiana. DOTD. Civil Engineer. Responsible for field inspection documentation so repairs could be identified and planned.		
09/17-11/19	Blue Rock State Park Dam Rehabilitation, Muskingum County, Ohio. Confidential Client. Construction Inspector. Provided construction inspection support, maintaining thorough documentation through daily site reports, notes, and photographs. Michael Baker provided engineering services for the rehabilitation of Cutler Dam in Blue Rock State Park to ensure compliance with Ohio Department of Natural Resources Dam Safety Regulations regarding inadequate spillway capacity and overtopping protection. Michael Baker's services included site investigation, hydrologic and hydraulic analysis, permitting, dam inspection, rehabilitation design, and construction management and inspection services.		
11/23-06/26	Hinckley Lake Dam Final Design, Cleveland, Ohio. Cleveland Metroparks. Civil Engineer. Supported the contractor and project engineers in resolving construction issues, including spillway constructability and stair access along the embankment connecting the parking area to the beach.		
02/20-06/26	Somerset Lake Dam Renovations, Somerset Township, Pennsylvania. Pennsylvania Fish and Boat Commission. Civil Engineer. Responsibilities included reviewing drawing packages, preparing documents for spillway repairs, inspecting construction progress, documenting work through site reports, revising drawings, creating and revising as-built drawings, editing site reports and reviewing material testing reports, and collaborating with the contractor, project manager, and client to resolve issues. Michael Baker is providing engineering services for the Somerset Lake Dam to ensure compliance with Pennsylvania Department of Environmental Protection regulations. Michael Baker's tasks include reviewing drawings and reports; field-inspecting all elements, including spillways and gatehouse structures; performing a hydrologic and hydraulic analysis; performing a topographical survey, geotechnical investigation, and structural analysis to evaluate current conditions; identifying and analyzing rehabilitation alternatives; and providing construction management services		
07/23-OnGoing	Statewide Dam Rehabilitation Fiscal Year 23/24, Statewide, Ohio. Ohio Department of Natural Resources. Civil Engineer. Attended the site walk-through meetings with the client and dam keepers for Lake Adams and Lake Alma. Michael Baker is offering engineering services for Adams Lake Dam and Alma Lake Dam in support of a statewide dam rehabilitation program throughout Ohio. Tasks include a study and verification report, hydrology and hydraulics analysis (H&H), structural investigation and design, geotechnical investigation and analysis, construction documentation, and construction administration.		



16. Staff Experience:

<i>Firm employed by</i>	Forte & Tablada, Inc.		
<i>Name</i>	Bradley S. Holleman, P.L.S., P.E.	<i>Years of relevant experience with this employer</i>	5
<i>Title</i>	Senior Vice President, Geospatial	<i>Years of relevant experience with other employer(s)</i>	15
<i>Degree(s) / Years / Specialization</i>	BSCE / 2009 / Civil Engineering with Minor in Land Surveying		
<i>Active registration number / state / expiration date</i>	PLS 5082 / LA / 09/30/2026; PE 47165 / LA / 03/31/2027		
<i>Year registered</i>	2012	<i>Discipline</i>	Land Surveying
<i>Contract role(s) / brief description of responsibilities</i>	MPR #5 Bradley will provide SURVEY services for this project. Bradley will coordinate closely with the Project Manager to ensure that the contract is properly estimated, initiated, and completed on schedule—meeting both LADOTD deliverable standards and Forte and Tablada's quality expectations. Since 2013, Bradley has developed extensive experience in processing and interpreting LiDAR data to generate accurate surface models, meeting the minimum personnel requirement for this contract. In addition, he has significant hydrographic surveying experience throughout Louisiana's rivers, lakes, and coastal environments. His well-rounded skillset and leadership have contributed to the successful delivery of numerous LADOTD topographic, LiDAR, SUE and hydrographic surveying projects.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
02/26-03/26	H.015047 – Three Mile Lake / Two O'Clock Bayou Survey. <i>Principal-in-Charge</i> for this project that included a full topographic survey with aerial LiDAR flights over the the Darbonne Bayou levee and roadway corridor between Two O'Clock Bayou and Three Mile Lake.		
01/26-01/26	H.015040 Anacoco LWI Dam Survey. <i>Principal-in-Charge</i> for this project that included aerial LiDAR flights, terrestrial laser scanning and a multibeam bathymetric survey of the Anacoco Lake Dam and Spillway.		
01/26-01/26	H.015041 – Vernon LWI Dam Survey. <i>Principal-in-Charge</i> for this project that included aerial LiDAR flights, terrestrial laser scanning of the Vernon Lake Dam and Spillway.		
12/25-12/25	H.015044 – Bundick LWI Dam Survey. <i>Principal-in-Charge</i> for this project that included aerial LiDAR flights, terrestrial laser scanning and a multibeam bathymetric survey of the Bundick Lake Dam.		
07/23-02/26	Mid Barataria Sediment Diversion, Plaquemines Parish, LA. <i>Principal-in-Charge</i> of the Survey QA team for the construction of the Mid Barataria Sediment Diversion project. The QA component of this project involves conducting bi-weekly LiDAR UAV flights to generate surface models for construction pay application verification.		
02/25-05/25	Contract 4400021974- Task Order 13- H.016278- US 167: Median Improvements, Vermilion Parish, LA. <i>Principal-in-Charge</i> for providing topographic and Mobile LiDAR surveying for improvements of US 167. The survey included over 2 miles along a divided 4 lane highway in a rural area. The topographic survey includes collecting and utilizing LiDAR data to generate surface models.		
01/23 - 01/24	Contract 4400021974 - Task Order 2- H.014218 US 190 - Livingston Parish Line, East Baton Rouge Parish, LA. <i>Principal-in-Charge</i> for this project providing topographic survey, Mobile LiDAR, and drainage mapping. This project is in a dense urban area and includes approximately 4 miles of a 4 lane highway. The purpose of the project is to complete a road overlay and drainage improvements. The topographic survey included collecting mobile LiDAR throughout the entire project length to generate surface models of US 190.		
06/23-08/23	LA DOTD Underwater Acoustic Imaging - LA 14 Over Delcambre Canal Hydrographic Survey, Iberia Parish, LA. <i>Principal-in-Charge</i> for the area around the LA-14 Bridge over Delcambre Canal. The work included typical cross-sections, and water bottom features below waterline were collected using multi-beam and single beam sonar equipment. Terrestrial LiDAR was used to capture the above water surface.		



05/-10/22	LA DOTD Underwater Acoustic Imaging, Statewide, LA. <i>Principal-in-Charge</i> for aiding in the field acquisition of multibeam hydrographic survey data of 10 bridges in South Louisiana. The bridges locations ranged from Inner Harbor Navigation Canal in New Orleans to the Mississippi River in Baton Rouge. Data was then extracted from the multibeam data to provide depths at predetermined locations along the bridge and immediate area.
06/22 - 12/22	Crescent City Connection Bridges Hydrographic Survey, New Orleans, LA. <i>Principal-in-Charge</i> for the multibeam hydrographic survey on the Crescent City Connection bridges in New Orleans, LA. The focus of the project was to document 2 piers, scour/debris, and produce sounding tables at increments upstream and downstream of each pier. In order to capture the necessary vertical information on the 2 pier structures, the R2Sonic 2022 was tilted to 30 degrees, allowing data capture from the waterline down. A full multibeam survey from approximately 350' upstream and downstream was performed giving a comprehensive look at the water bottom around the bridge.
01/21 - 12/22	Contracts 4400010587 - Task Order 18; 4400015237- Task Order 1; 4400021974 - Task Orders 1, 3, and 4- H.003931 - Calcasieu River Bridge (HBI), Calcasieu Parish, LA. <i>Principal-in-Charge</i> for this project providing topographic survey, Mobile and Terrestrial LiDAR, Multibeam Hydrographic survey of Lake Charles, and drainage mapping. This project is in a high-traffic industrial area along I-210 and is approximately 7 miles long. This Survey included four Phases of work, which were completed within a condensed timeline, requiring up to 6 Survey Crews being mobilized in order to meet deadlines for each Phase. The topographic survey included collecting and utilizing LiDAR data to generate surface and bridge models.
01/18 - 04/20	H.004100- I-10: LA 415 to Essen Lane, East Baton Rouge Parish, LA. <i>Surveyor-in-Charge</i> for the topographic survey, LiDAR scanning, existing drainage map and SUE Quality Levels B, C and D. This project was for the widening design of Interstate 10 from LA 415 to Essen Lane in East Baton Rouge Parish. This Survey was part of a larger project that extended West to LA 415 and included a team of 4 Survey firms to complete the work on schedule. The topographic survey included collecting and utilizing LiDAR data to generate surface and bridge models.
06/16 - 02/17	H.000263 Chef Menteur Pass Bridge, Orleans Parish, LA. <i>Surveyor-in-Charge</i> for the topographic survey, LiDAR scanning, hydrographic survey, existing drainage map and SUE Quality Levels C and D. This project was for the design of new bridge to replace the existing swing bridge on US 90 over Chef Menteur Pass. The work consisted of completing a topographic survey, according to the LA DOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits. The topographic survey included a hydrographic survey of Chef Menteur Pass as well as collecting and utilizing LiDAR data to generate surface and bridge models.
06/15 - 12/15	H.011224 US 190 Guardrail / Rutting Repair, Pointe Coupee, LA. <i>Surveyor-in-Charge</i> for the topographic survey and 3D LiDAR scanning. This project was for constructing a replacement guardrail along US 190 in Pointe Coupee Parish due to damage. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits. The topographic survey was conducted utilizing mobile LiDAR to generate surface models and guardrail models.
12/14 - 03/16	H.011137 & H.011152- I-12 (LA 21 TO LA 59) St. Tammany Parish, LA - <i>Surveyor-in-Charge</i> for the topographic survey, LiDAR scanning, hydrographic survey, existing drainage map and SUE Quality Levels C and D. This project was for widening of Interstate 12 from LA 21 to La 59 in St. Tammany Parish. The topographic survey included a hydrographic survey of the Tchefuncte River as well as collecting and utilizing LiDAR data to generate surface and bridge models.
09/13 - 03/14	H.002375 Amite River Bridge Near French Settlement, Livingston Parish, LA. <i>Surveyor-in-Charge</i> for the topographic survey, LiDAR scanning, hydrographic survey, existing drainage map and SUE Quality Levels C and D. This project was for constructing a new bridge over Amite River in French Settlement Louisiana to the replace the existing swing bridge. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits. The topographic survey included a hydrographic survey of the Amite River as well as collecting and utilizing LiDAR data to generate surface and bridge models. This project demonstrates Bradley's ability to fulfill MPR 25 of having more than five (5) years in developing surface models from LiDAR data.
05/12 - 09/12	H.009456 - Tchefuncte River Bridge, Tangipahoa Parish, LA. <i>Surveyor-in-Charge</i> for the topographic survey, hydrographic survey, existing drainage map and SUE Quality Levels C and D. This project was for a bridge replacement over the Tchefuncte River in Tangipahoa Parish. The work consisted of completing a topographic survey, according to the LADOTD Location and Survey Manual, including all utilities with depths and all drainage required along with finished floor elevations of all building that fall within the survey limits. The topographic survey included a hydrographic survey of the Tchefuncte River.

16. Staff Experience:

<i>Firm employed by</i>	Michael Baker International, Inc.		
<i>Name</i>	Daniel Thornhill, PE	<i>Years of relevant experience with this employer</i>	5
<i>Title</i>	Principal in Charge	<i>Years of relevant experience with other employer(s)</i>	23
<i>Degree(s) / Years / Specialization</i>	B.S. / 1997 / Civil Engineering		
<i>Active registration number / state / expiration date</i>	PE.0032367 / LA / 09-30-2026 Traffic Control Technician-LA State Specific / April 2027 Traffic Control Supervisor -LA State Specific / April 2027		
<i>Year registered</i>	2006 / 2002	<i>Discipline</i>	Civil
<i>Contract role(s) / brief description of responsibilities</i>	MPR #1- Principal In Charge Mr. Thornhill has over two decades of consulting experience in a variety of engineering projects including roadway design, corridor/traffic operation concept analysis, bridge design, hydraulics design, subsurface drainage design, and sidewalk beautification projects. Mr. Thornhill has served as Project Manager/Senior Engineer in the Baton Rouge area since 2006, being responsible for Roadway/Transportation Design and Corridor Studies for both EBR DOTD, DOTD, Lafayette Consolidated Government and St. Tammany Parish Department of Public Works. Mr. Thornhill will serve as the Principal in Charge for this project.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
11/22 - 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surcharge Management, Beauregard Parish, Louisiana. DOTD. Principal in Charge. Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Thornhill was responsible for the overall execution of the project, contract administration, and client relations.		
11/22 - 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. Principal in Charge. Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Thornhill was responsible for the overall execution of the project, contract administration, and client relations.		
7/23 - 12/2024	LWI/SPP Group 1 Three Mile Lake, St. Landry Parish, Louisiana. DOTD. Principal in Charge. Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. Thornhill was responsible for the overall execution of the project, contract administration, and client relations.		
04/22 - Ongoing	Louisiana Watershed Initiative (LWI) Region 6, Louisiana. DOTD. Principal in Charge. Responsible for providing contract administration and assisting the project manager in general project management duties such as resource allocation, scheduling, coordination of team members, and financial analysis. Michael Baker supplemented data collection and analysis, continued stakeholder engagement services, and performed topographic, bathymetric, and channel surveys. Specifically, Mr. Thornhill was responsible for the overall execution of the project, contract administration, and client relations.		



10/21 - Ongoing	Juban Road (LA 1026) Widening (I-12 to US 190), Livingston Parish, Louisiana. <i>Livingston Parish. Project Manager/Lead Design Engineer.</i> Responsible for the development of construction plans for the widening of Juban Road from a 2-lane roadway to a 4-lane boulevard from just north of the I- 12 Interchange to US 190. Improvements included three (3) multi-lane roundabouts along Juban Road while including side paths on both sides of Juban Road to meet the DOTD complete streets initiative. Access Management was a priority along this route, therefore the median was reduced to 6' to 8' to discourage left turn movements and make all driveways right-in/right-out while utilizing the roundabouts for U-turn movements. The first roundabout was located at future driveway number 5 for the Juban Crossing Development. The second roundabout was located midway along the project, with the addition of service roads to encourage Livingston Parish to extend during future development to reduce driveways along Juban Road. The third roundabout was located at the Juban Road at the US 190 intersection. The roundabout would replace an existing signal that causes traffic congestion, especially during peak afternoon traffic. Project included all necessary improvements along US 190 for the new roundabout and additional turn lane for the new Sanctuary Development. Mr. Thornhill responsibilities included coordination with DOTD project manager, all geometric design both horizontal and vertical, coordination of topographic surveys and development of right-of-way maps for acquisition, development of existing and design drainage maps, analysis of both subsurface and storm water drainage using DOTD's Hydraulics Manual and HYDRWin, development of construction plans for both preliminary and final design, and development of public meeting displays and coordination with DOTD environmental section for the update to the Environmental Document for environmental clearance. Additionally, he was responsible for separating the project construction plans into two separate construction plans (LA 1026 Roundabout at US 190 and LA 1026 Widening) for bidding due to the need for an air conformity permit for the improvements along Juban Road south of the US 190 intersection. Recommendations from the Stage 0 Traffic Operations study were carried forward. Mr. Thornhill was Project Manager/Lead Design Engineer over the Line & Grade portion of the EA. He was responsible for the development of the Plan & Profile sketches for the Stage 1 report, development of the project implementation cost, and creation of the public meeting exhibits. For the Line & Grade, LiDAR was utilized with the Horizontal Alignments and Aerial Photography from the Stage 0 report. The updated sketches were used to develop the opinion of probable construction cost from the Line & Grade improvements, along with developing estimated cost for relocation of utilities, acquisition of additional right-of-way, engineering cost (design & survey) and CE&I. A staging phase approach was required to break the project out in several phases to be designed and constructed as funding became available. A priority matrix was created to determine the order in which the different phases should be constructed to provide the best Traffic Operation.
05/16 – 01/18	Green Light Plan (GLP), East Baton Rouge Parish, Louisiana. <i>East Baton Rouge Parish. Project Manager.</i> Responsible for the design and construction of 7 projects in East Baton Rouge Parish: Siegen Lane - Highland Road to Perkins Road (DOTD Roadway); Highland Road - Old Perkins Road to Airline Highway (DOTD Roadway) (Included new bridges and railroad coordination for at grade crossing); Jones Creek Road – Coursey Blvd to South Harrell's Ferry Road (Included new bridges); South Harrell's Ferry Road – Millerville Road to O'Neal Lane (Included new box culvert bridge); O'Neal Lane – South Harrell's Ferry Road to just south of I-12 (DOTD Roadway); and Lobdell Avenue – Government Street to Florida. Additional responsibilities included the preparation of bid documents, assisted DPW Field Engineering in construction progress meetings, distributed shop drawings and request for information for review and approval, made weekly site visits to projects to monitor the progress of the contractors, and assisted with in the field decisions in regard to adjustments due to utility conflicts or conflicts with the plans.
09/14 – 08/15	Ham Reid Road at Lake Street (LA 3092) Intersection Improvement. <i>Calcasieu Parish Police Jury. Project Manager/Lead Design Engineer.</i> Responsibilities included the development of construction plans for a new single lane roundabout at the intersection of Ham Reid Road and Lake Street (LA 3092). Project was studied as both a new signal and roundabout to provide traffic flow for land being developed along the southwest quadrant of the project. Through coordination with LA DOTD, it was determined a new single lane roundabout was the best alternative. The new roundabout would be a 4-leg roundabout that would connect to Spanish Mission Trail roadway of Trails Subdivision with one of roundabout legs to provide seamless connectivity with Ham Reid Road to eliminate a possible Z-intersection configuration with only a 3-leg roundabout. Mr. Thornhill's responsibilities included coordination with both Calcasieu Parish Project Manager, LA DOTD District 7 Engineers, and LA DOTD Project Permit Specialist; development of geometric layouts both horizontally and vertically, development of right-of-way taking lines and coordination of right-of-way maps with surveyor, and hydraulic analysis for both subsurface and storm water flow. Project was being done as a permit project for Calcasieu Parish through LA DOTD District 7.

SUPPORT PERSONNEL

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Justin West, PE, CFM		Years of relevant experience with this employer	3
Title	Civil Engineer		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		BS / 2019 / Environmental Engineering / Louisiana State A&M University		
Active registration number / state / expiration date		PE.0049277 / Louisiana / 3-31-2027 CFM US-22-12180 / 01-31-2028		
Year registered	2024	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Dam Inspection Team, Hydrology & Hydraulics Mr. West will serve as an assistant on Dam Inspection Team No. 1 as well as a hydraulics modeler for dams and spillway watershed analysis.		
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 years of experience specified in the applicable MPR(s).			
11/22 - 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surcharge Management, Beauregard Parish, Louisiana. DOTD. Hydraulic Modeler. Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. West provided HEC-RAS troubleshooting and QA/QC for the models, as well as inundation mapping. The project will determine improvements to Bundick Lake outlet works to reduce flooding within the watershed.			
11/22 - 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. Hydraulic Modeler. Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. West provided HEC-RAS troubleshooting and QA/QC for the models and provided inundation mapping. The project will determine improvements to both Vernon Lake and Anacoco Lake outlet works to reduce flooding within the watershed.			
7/23 - 12/2024	LWI/SPP Group 1 Three Mile Lake, St. Landry Parish, Louisiana. DOTD. Hydraulic Modeler. Responsible for the overall execution of the project, contract administration, and general project management duties, which include resource allocation, team coordination, sub-consultant coordination, scheduling, and financial analysis. Specifically, Mr. West completed all HEC_RAS modeling of the watershed basin, provided on-site inspection, improvement alternatives modeling, and provided inundation mapping. The project will determine improvements to infrastructure around Three Mile Lake to reduce backwater flooding from the Atchafalaya Floodway.			
04/24-Ongoing	St. Tammany Parish Comprehensive Drainage Plan, Louisiana. St. Tammany Parish Government. Assistant Project Manager and Lead Modeler. Mr. West is responsible for assisting with general project management duties, such as resource allocation, team coordination, scheduling, and financial analysis. Mr. West attended public outreach meetings and assists the public in understanding the project objective and goals. Mr. West completed the existing models for the parish consisting of 12 models.			
01/23 - Ongoing	IJA Off System Bridge Replacement, District 07 Parishes, Louisiana. DOTD. Hydraulics Reviewer. Mr. West assisted in the technical QA/QC process through reviewing the hydraulic and hydrologic models completed for several of the watersheds delineated within the project area and the associated hydraulic reports.			
09/21 - Ongoing	Louisiana Watershed Initiative (LWI) Region 6, Louisiana. DOTD. HEC-RAS Modeler. Mr. West is the Lead modeler for the Eastern Central Louisiana Coastal (Region 6) HEC-RAS model. Mr. West developed the loss method for infiltration, soils, and land use data. Mr. West created centerlines for the major streams in the watershed by filtering out small streams from the National Hydrology Database. Mr. West developed the hydraulic models' break lines, bridge structures, and mesh geometry, and simulated storms within the HEC-RAS models and adjusted calculated values to calibrate and validate the model.			





09/21 – Ongoing	Louisiana Watershed Initiative Modeling Contract – Region 1, Louisiana. <i>DOTD. HEC-RAS Modeler.</i> Mr. West was the lead modeler for Black Lake Bayou (Region 1) HEC-RAS model and technical QC reviewer for Lower Sabine. He developed the loss method for infiltration, soils, and land use data. I created centerlines for the major streams in the watershed by filtering out small streams from the National Hydrology Database and the hydraulic models' break lines, bridge structures, and 1-D geometry. He simulated storms within the HEC-RAS models and adjusted calculated values to calibrate and validate the model.
02/22 – 02/23	LCG Stormwater Master Plan, Lafayette Parish, Louisiana. <i>Lafayette Consolidated Government. HEC-RAS Modeler.</i> Mr. West completed the existing conditions model for one of the watersheds in this project. Mr. West assisted with the proposed alternatives to mitigate flooding for the basin that was also developed for the client. Mr. West was responsible for the proposed and existing models. Using the outcome of the proposed projects to establish mitigation alternatives for stormwater management. Mr. West reviewed the results and drafted a report highlighting the conclusions made.
02/22 – 02/2023	LCG Residential Buyout Plan, Lafayette Parish, Louisiana. <i>Lafayette Consolidated Government. GIS Analyst.</i> Mr. West used GIS programming to create a structure map of Lafayette Parish to locate at-risk structures for a buyout program. Using the outcome of the proposed locations to establish a mitigation plan that distinguished houses that would be the most at-risk alternatives from stormwater flooding. Mr. West reviewed the results and drafted a report highlighting the conclusions made.
05/22 – 02/23	RESTORE Parish Matching Grant Program, Louisiana. <i>CPRA. HEC-RAS Modeler.</i> The CPRA Parish Matching Program was designed to help coastal parishes that received RESTORE funds prioritize Coastal Master Plan projects while also recognizing and responding to the needs of parishes to implement projects that may not be contained in the Coastal Master Plan. Mr. West is responsible for the Existing and proposed models completed in the USACE HEC-RAS modeling program. Using the projects to establish non-structural mitigation alternatives for stormwater management. Mr. West reviewed the results and drafted a report highlighting the conclusions made.
02/22 – 02/23	Chennault Stormwater Plan, Louisiana. <i>Calcasieu Parish Public Works. HEC-RAS Modeler.</i> Mr. West analyzed the Chennault Airport's existing drainage conditions with 2D hydraulic modeling in HEC-RAS. Proposed alternatives to mitigate flooding for the Airport were also developed for the client. Mr. West was responsible for the proposed models. Using the outcome of the proposed projects to establish mitigation alternatives for stormwater management. Mr. West reviewed the results and drafted a report highlighting the conclusions made.
05/22 – 02/23	Comite River Improvements Feasibility Study, Louisiana. <i>East Baton Rouge Parish Department of Transportation and Drainage. Lead Modeler.</i> For the Comite River improvements, it was proposed that the removal of debris from the Comite River would improve drainage for the channel. Mr. West was the lead modeler for the project which consisted of a review of all video data received from an aerial drone survey, marking and sizing obstructions made, an existing model consisting of over 200 impacted channel locations, a proposed model, and the associated technical report. Mr. West created presentations and assisted in stake holder meetings.
06/20 – 02/21	Steady Flow 1D HEC-RAS Model, Beaver Creek, and Long-Slash Branch Watersheds. <i>H&H Modeling.</i> Mr. West completed 1D hydraulic and hydrologic models for the Beaver Creek and Long-Slash Branch watersheds. These studies involved the hydrologic and hydraulic analysis of drainage structures and drainage areas within the watersheds. Existing conditions and proposed conditions models were created along with a benefit-cost analysis for the improvements proposed in the proposed conditions model.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Afaq Ahmad Durrani, EI, CFM		Years of relevant experience with this employer	3
Title	Civil Associate		Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		M.S.E / 2022 / Civil Engineering / University of Louisiana at Lafayette		
Active registration number / state / expiration date		EI.0035541 / LA / 03-31-2028 CFM US-24-13499 / 01-31-2027		
Year registered	2023	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Inspector and Hydrology and Hydraulic Modeling Support Mr. Durrani will serve as an assistant on Dam Inspection Team No. 1 as well as a hydraulics modeler for dams and spillway watershed analysis for this contract. Mr. Durrani's experience includes H&H modeling, designing, and completing quality control on multi-million-dollar projects that range from large watershed modeling to individual bridge replacement hydraulic studies. Mr. Durrani is well versed in a variety of hydrologic and hydraulic software including the USACE HEC suite (HEC-HMS, HEC-RAS, HEC-DSSVue, HEC-FIA), ArcGIS Pro, ArcMap, Go Consequence and DOTD HydrWin suite.		
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 years of experience specified in the applicable MPR(s).			
11/22 - 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. Civic Associate. Mr. Durrani assisted in the alternative analysis and Benefit Cost Analysis of this project. The project will determine improvements to both Vernon Lake and Anacoco Lake outlet works to reduce flooding within the watershed.			
11/22 - 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surcharge Management, Beauregard Parish, Louisiana. DOTD. Civic Associate. Mr. Durrani assisted in the alternative analysis and Benefit Cost Analysis of this project. The project will determine improvements to Bundick Lake outlet works to reduce flooding within the watershed.			
7/23 - 12/2024	LWI/SPP Group 1 Three Mile Lake, St. Landry Parish, Louisiana. DOTD. Civic Associate. Mr. Durrani assisted in the alternative analysis and Benefit Cost Analysis of this project. The project will determine improvements to infrastructure around Three Mile Lake to reduce backwater flooding from the Atchafalaya Floodway.			
05/23 - Ongoing	IJA Off System Bridge Replacement, District 07 DOTD. Hydraulics Engineer/Modeler. Performed hydrological and hydraulic analysis and modeling in HEC-RAS. Hydraulic calculations were also performed in HYDRWIN. The hydraulic analysis consisted of HEC-RAS 1D and 2D models where applicable to identify existing hydraulic performance of each structure and recommend an equivalent structure that meets or improves the hydraulic capacity of the existing structure. Mr. Durrani also performed scour analysis and no-rise analysis for proposed structures. Prepared the final Hydraulic reports that were submitted to LA DOTD for approval. This project program requires Michael Baker International to deliver 12 bridge replacements within the 30.3 million dollars allocated for District 07.			
05/24 - Ongoing	Little Bogue Falaya Pond, St. Tammany Parish, Louisiana. Hydraulics Engineer/Modeler. Currently performing the Hydrological and Hydraulic analysis for this project. Little Bogue Falaya is located in Covington, St Tammany Parish. Identified and developed project alternatives by running multiple detention pond scenarios with different design details to ensure the most efficient pond characteristics are identified. Conceptual layouts of the different alternatives will be provided, as well as a Preliminary Engineering report that summarizes the hydrologic and hydraulic analysis efforts and their results. The BCA of the recommended pond alternative will be performed for 10%, 4%, 2% and 1% Annual Exceedance Probability events.			





08/24 - Ongoing	Jones Creek Detention , <i>East Baton Rouge Parish, Louisiana</i> . <i>Hydraulics Engineer/Modeler</i> . Currently performing the Hydrological and Hydraulic analysis for this project. The Jones Creek Detention project is a 40-acre storm water retention area that will serve to reduce flooding in the Jones Creek Watershed. Contracted by the City of Baton Rouge / Parish of East Baton Rouge, Michael Baker serves as a specialty sub-consultant to prime consultant GIS Engineering. Michael Baker will provide all hydraulic engineering and modeling for the project utilizing HEC-RAS and other hydraulic modeling software.
01/23-12/24	Louisiana Watershed Initiative Modeling Contract – Region 1, Louisiana . <i>DOTD. Hydraulics Modeler</i> . Modeler for Black Lake Bayou (Region 1) HEC-RAS model. Created a coupled 1D/2D hydraulic model along with developing break lines, refinement regions, culverts, bridge structures, cross sections, and mesh geometry in the hydraulic model. Simulated storms within the HEC-RAS models and adjusted calculated values for calibration and validation of the model. Prepared hydraulics and structure logbook for Black Lake Bayou. Mr. Afaq created 1D models for other HUC 08s in region 1, which include Saline Bayou and Bodcau Bayou. The LWI project was launched in 2018 and introduced a watershed-based approach to reducing flood risk. It is organized by seven modeling regions, each of which encompasses multiple HUC-8 watersheds. These models will be instrumental in providing stormwater management decisions regarding land use, policy, and infrastructure.
01/23 – 12/24	Louisiana Watershed Initiative Modeling Contract – Region 4, Louisiana . <i>DOTD. Hydraulics Modeler</i> . Served as a Hydraulic modeler for Lower Sabine located in Region 4 of the Louisiana Watershed Initiative. Responsibilities included calibrating and validating the hydraulic model for Lower Sabine and helped in preparing the modeler's logbook. Similar to the LWI Region 1 project above, these models will be instrumental in providing future stormwater management decisions regarding land use, policy, and infrastructure.
05/22 – 12/22	BLE model for Hazard Rd . <i>Iberia Parish Government, Louisiana</i> . <i>Intern</i> . Developed the Base Level Engineering model for Hazard Road to check the effect of asphalt overlay on flooding in the adjacent area while using HEC-RAS to create a 2D model. The BLE was presented in a Public meeting to show the benefits of asphalt overlay

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Achutam Baral, PE		Years of relevant experience with this employer	3
Title	Civil Engineering- Water		Years of relevant experience with other employer(s)	5.5
Degree(s) / Years / Specialization		M.Eng.Sc., 2019, Water Resources Engineering, University of Louisiana at Lafayette B.S.E., 2012, Civil Engineering, Tribhuvan University, Nepal		
Active registration number / state / expiration date		Civil/ LA Reg. No. PE0048564/ 09-30-2026 CFM/ US-24-13247 / 07-31-2026		
Year registered	2024	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Dam Inspection and Hydrology & Hydraulics Mr. Baral is a Water Resources Engineer with a background and a strong passion for hydrologic and hydraulic (H&H) modeling. His proficiency extends to hydrodynamic modeling software, including HEC-RAS, HEC-HMS, and ArcGIS. In addition, he possesses skills in programming languages such as MATLAB and Python, enabling him to conduct thorough data analysis, create complex models, and develop innovative algorithms to address real-world H&H challenges. Mr. Baral's dedication to solving water resources problems using cutting-edge technology and analytical expertise has been a driving force throughout his career.		
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 years of experience specified in the applicable MPR(s).			
7/23 - 12/2024	LWI/SPP Group 1 Three Mile Lake, St. Landry Parish, Louisiana. DOTD. Civil Engineer. Responsible for supporting the development of LWI Three Mile Lake Project by performing hydrologic and hydraulic modeling and QA/QC.			
05/23 - Ongoing	IIJA Off System Bridge Replacement, District 07. DOTD. Hydraulic Engineer. Performed hydraulic analysis of existing bridges and compared results to multiple bridge replacement alternative structures. Hydraulic analysis has been performed under DOTD hydraulic guidelines utilizing HEC-RAS as well as DOTD Hydrwin software. This project program requires Michael Baker to deliver 12 bridge replacements within the 30.3 million dollars allocated for District 07.			
05/23 - 12/24	Louisiana Watershed Initiative (LWI) Region 1 IDIQ, Louisiana. DOTD. Civil Associate. Addressed issues related to hydrological and hydraulic analysis of the watershed, including 1D/2D H&H modeling, and provided technical guidance to the team. Performed statistical analysis of the model results to identify parameter sensitivity to improve overall model results. Performed validation of the model utilizing multiple historical events.			
05/23 - Ongoing	Louisiana Watershed Initiative Modeling Contract - Region 6, Louisiana. DOTD. Modeler. Michael Baker is providing engineering and modeling services to the DOTD for Region 6 for the LWI. The LWI project was launched in 2018 and introduced a watershed-based approach to reducing flood risk. It is organized by seven modeling regions, each encompassing multiple HUC-8 watersheds. For the contract, Michael Baker is providing hydrologic and hydraulic modeling, data collection and analysis, stakeholder engagement, and surveying.			
01/22 - 05/23	Comprehensive H&H RAS 2D Modeling Project. Calcasieu Parish, Louisiana. Engineer In Training (EIT). The project's objective is to enhance and safeguard the drainage infrastructure within the Parish and ultimately ensure the protection of human life and private property. Part of the water resources team that developed an H&H model and provided drainage solutions to the Calcasieu Parish government. Analyzed the field survey data and created the cross-sections for the major channel within the Parish. Additionally, generated spatial value of the SCS curve number based on the land-use and soil type dataset. Also modified the natural channel to capture bathymetry using field survey data of the Vinton Region within a Parish. Lastly, performed H&H modeling and floodplain analysis of the Vinton Region and presented the Stormwater Master Plan to the Parish government.			





16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Shalin Sheth, PE		Years of relevant experience with this employer	3
Title	Structural Engineer		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		MS / 2019 / Civil Engineering (Structural); BTech / 2016 / Civil Engineering		
Active registration number / state / expiration date		PE No. 48337 / LA / 03/31/2028		
Year registered	2023	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Structural Assessment / Design		
Shalin brings extensive structural engineering experience that directly supports dam inspection and evaluation efforts, particularly for concrete and structural components such as spillways, gates, outlet works, and ancillary structures. His background includes bridge and structural design, load rating, and load testing—having performed hundreds of load ratings for DOTD structures—providing a strong foundation for assessing structural capacity, load paths, and performance under service conditions. He is well-versed in DOTD design guidelines and highly proficient in a broad range of structural analysis, design, and load-rating software, including training junior engineers in their application. His experience also includes drafting and detailing structural plans, preparing rehabilitation documents, developing quantities and cost estimates, conducting GPR surveys, and performing field testing and inspections, all of which translate directly to the evaluation, documentation, and rehabilitation planning needs encountered during dam inspections.				
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 years of experience specified in the applicable MPR(s).		
11/21 – Ongoing		US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana. DOTD. Bridge Engineer. Responsible for computation of engineering design calculations, determining structural feasibility of bridge geometry, structural design of all bridge components, computation of bridge quantities, and plan production at various preliminary and final submittal stages/milestones. Ensured that bridge plans meet both DOTD and KCS Railroad Design Guidelines. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfils KCS/CPKC crash-wall requirements. Michael Baker is currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.		
11/22 – Ongoing		Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program. DOTD, District 07. Bridge Engineer. Responsible for developing engineering design calculations, bridge geometry, bridge quantities, and design plans. Michael Baker was selected by DOTD to provide bridge, roadway and environmental services for the replacement of off-system bridges in the five parishes located in DOTD District 07. Structures replaced by this program include numerous culverts, box culverts, and slab span bridges. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.		
07/19 – 08/22		Macarthur Interchange Completion Phase II at US90-Z Eastbound, Jefferson Parish, Louisiana. DOTD. Engineer Intern. Responsible for structural analysis and girder capacity verification of prestressed concrete girders, developing spreadsheets and Mathcad files for computing development lengths and splice lengths, and deck reinforcement design. Also developed computing bridge quantities, girder riser elevations, riser thicknesses, deck elevations for the bridge, along with drafting CAD sheets in MicroStation for framing plans, pier cap details, and deck reinforcement plans in compliance with DOTD standards. This project consisted of demolition of an off-ramp and an on-ramp, along with reconstruction of both at different locations in addition to new construction to facilitate bridge widening.		
05/21 – 08/21		Mermentau River Swing Span Truss Bridge Repairs at Grand Cheniere, Louisiana. DOTD. Engineer Intern. Responsible for preparing a structural rehabilitation solution to repair a steel truss member with structural deficiency, along with repair solutions for floorbeams and stringers using steel cover plates. Drafted and redrew the fender system plans and railing repair plans and reviewing overall bridge repair quantities and the plan set. Assisted with bridge inspection and load rating services in the preliminary stage, and later prepared repair and rehabilitation plans and procedures for the entire superstructure and substructure along with the fender system for the movable bridge span.		



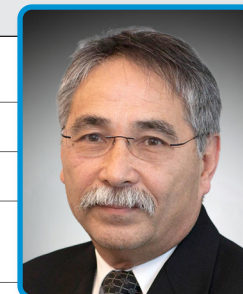


07/19 – 02/21	Load Rating of 311 Bridges, Louisiana. <i>DOTD. Engineer Intern.</i> Responsible for load rating 51 bridges of various types such as concrete slab bridges, reinforced concrete girder bridges, prestressed girder bridges, prestressed and reinforced channel bridges, reinforced concrete culverts, and timber beams/timber trestle bridges. For a typical bridge, the load rating process involved developing and analyzing the superstructure structural model in AASHTOWare BrR, substructure structural model in RC Pier (now LEAP Bridge Concrete), and post processing the analysis results using Mathcad to effectively determine the load carrying capacity of the bridge (load rating factors) and accordingly recommending the posting load to DOTD. This project's scope was initially the load rating of 311 bridges located across Louisiana, however later another 300+ bridges and culverts were added to the scope.
07/22 – 08/22	Load Rating of 176 Bridges, Louisiana. <i>DOTD. Engineer Intern.</i> Responsible for performing load rating for a total of 43 culverts out of 176. The typical process mainly involved developing and analyzing the structural model for concrete box culverts in AASHTOWare BrR, and then preparing reports with load posting recommendations, if applicable.
07/22 – 08/22	Load Rating of 114 Bridges, Louisiana. <i>DOTD. Engineer Intern.</i> Responsible for performing load rating for a historic steel beam bridge, and a prestressed concrete girder bridge. The typical load rating process involves modeling the superstructure and substructure in AASHTOWare BrR and LEAP Bridge Concrete respectively, along with compiling the load rating report. Also reviewed over 40 concrete slab bridges to be load rated by three junior engineer interns.
03/23 – 03/24	I-2/I-69C Interchange Construction Support (Design-Build). <i>Texas DOT. Bridge Engineer.</i> Responsibilities include addressing RFIs, FDCs (Field Design Change), NDCs (Notice of Design Change) by performing structural analysis, making changes to the construction plan set sheets using Microstation as required, reviewing changes and drawings by other engineers, ensuring conformance to TXDOT construction specifications, coordinating with subconsultants and prime contractor DPJV (Dragados-Pulice Joint Venture), working with Bentley and Axiom to prepare custom drawing configuration files to prepare record drawings in accordance with TxDOT's requirements for 19 bridges (steel, prestressed concrete, concrete slab bridges).
10/23 – 07/25	Load Rating based on 2023 & 2024 Bridge Inspection Recommendations. <i>Mississippi OSARC. Bridge Engineer.</i> Responsibilities include performing load rating evaluation for various types of bridges (concrete slabs, steel girders, steel and timber girder/stringer/floor-beam systems, steel railcar bridges) using AASHTOWare BrR for superstructure analysis and an in-house spreadsheet developed for substructure analysis, preparing load rating summary reports and critical finding recommendations if applicable, and providing guidance to engineer interns.
09/23 – 09/24	Bridge Inspections. <i>Mississippi OSARC. Assistant Team Lead.</i> Responsibilities included performing a preliminary study of previously available inspection reports, filling out inspection forms as required by OSARC both prior and after inspections, conducting in-depth inspections of bridges (concrete channels, concrete slabs, reinforced concrete girders, steel girder bridges), noting defects in both superstructure and substructure, documenting photographs and measurements, assigning condition ratings to bridge elements, and recommending bridge closures based on critical findings if applicable, for 43 bridges.

16. Staff Experience:

Firm employed by Michael Baker International, Inc.

Name	Don Green, PE	Years of relevant experience with this employer	19
Title	Geotechnical Specialist	Years of relevant experience with other employer(s)	28
Degree(s) / Years / Specialization	MS / 2004 / Civil Engineering, University of Pittsburgh; BS / 1978 / Civil Engineering / University of Pittsburgh		
Active registration number / state / expiration date	Professional Engineer No. PE034330E / Pennsylvania / 09/30/27		
Year registered	1985	Discipline	Civil
Contract role(s) / brief description of responsibilities	Geotechnical QA/QC		



Don has more than 47 years of experience in geotechnical engineering, encompassing materials testing, laboratory and field investigations, and complex foundation and earth-retaining system design for infrastructure located both on land and over water. The majority of his career has focused on foundation engineering for critical structures, providing a strong technical basis for evaluating dam foundations, embankments, spillways, retaining walls, and appurtenant structures as part of dam inspection and safety programs. Don's experience includes preparation and review of plans and specifications, project supervision and management, and evaluation of foundation performance under challenging subsurface and hydraulic conditions. He is an NHI-certified instructor for FHWA, teaching LRFD substructure design, and regularly serves as a geotechnical and structural reviewer for FEMA on CLOMR and LOMR submittals, bringing regulatory-level review experience relevant to dam safety and flood-risk infrastructure. His background also includes experience with a wide range of deep foundation systems, including micropiles, and providing expert testimony on geotechnical matters, underscoring his ability to deliver defensible, peer-review-quality assessments for high-risk infrastructure projects.

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 years of experience specified in the applicable MPR(s).		
02/09-11/18	Rehabilitation of Five Pennsylvania Dams, Various Locations, Pennsylvania. <i>Pennsylvania Fish & Boat Commission. Task Manager.</i> Responsible for completing a geotechnical investigation and provided design recommendations for collection of seepage and other drainage improvements, replacement of spillway, stability of gate house, extension of outlet conduit, articulated concrete block and roller compacted concrete overtopping protection, seepage toe berms, rock anchor stabilization of concrete spillway, graded filter design, retrofit design for concrete training walls, and design/implementation of an instrumentation monitoring system. Michael Baker is providing engineering services to bring five dams into compliance with Pennsylvania Department of Environmental Protection regulations. Michael Baker's services include dam inspections, hydrologic and hydraulic evaluations, geotechnical investigations, structural assessments, alternatives analyses, dam-break modeling, inundation mapping, permitting, agency coordination, and construction services.		
02/15-06/26	Lake Somerset Dam PH 2 Basic. <i>Pennsylvania Fish and Boat Commission. Geotechnical Engineer.</i> Responsible for investigating and designing a replacement earthen embankment dam with about a 25-foot high by 1,500 foot long crest. Also responsible to develop mitigation measures to accommodate existing dam underseepage that was originating from an alluvial foundation and underseepage at the left dam groin due to artesian head within a dipping fractured sandstone formation. Developed a replacement embankment section that incorporated partial removal of the existing embankment, raising the downstream half of the embankment with new seepage toe berm, blanket and chimney drain and upstream sheetpile cutoff. In addition, responsible to develop geotechnical-related recommendations to construct a new labyrinth spillway, low flow outlet extension, and investigation of potential borrow areas.		
06/16-01/20	Blue Rock State Park Dam Rehabilitation, Muskingum County, Ohio. <i>Confidential Client. Technical Specialist.</i> Responsible for completing a geotechnical investigation and developing geotechnical-related details to rehabilitate the Blue Rock State Park Dam. Developed project-specific design criteria, evaluated subsurface conditions, established boundary conditions and design parameters, and completed sensitivity analyses to evaluate seepage and slope stability concerns under both steady-state and rapid drawdown conditions. Completed analyses, evaluated alternatives, and completed final design to construct a new concrete labyrinth spillway and concrete chute that are stabilized with passive dowels. Michael Baker provided engineering services for the rehabilitation of Cutler Dam in Blue Rock State Park to ensure compliance with Ohio Department of Natural Resources Dam Safety Regulations regarding inadequate spillway capacity and overtopping protection. Michael Baker's services included site investigation, hydrologic and hydraulic analysis, permitting, dam inspection, rehabilitation design, and construction management and inspection services.		

02/09 - 11/20	Rehabilitation of Kyle Lake Dam, Washington Township, Pennsylvania. <i>Pennsylvania Fish and Boat Commission. Task Manager.</i> Responsible for completing a geotechnical investigation and provided design recommendations for collection of seepage and other drainage improvements, replacement of spillway, stability of gate house, and articulated concrete block embankment overtopping protection. Michael Baker provided engineering services for the Kyle Lake Dam, owned by the Pennsylvania Fish and Boat Commission (PBFC), to ensure compliance with Pennsylvania Department of Environmental Protection regulations regarding spillway capacity and overtopping protection, as the dam could not convey the design event. The Kyle Lake Dam, located in Jefferson County, Pennsylvania, was constructed in 1910 and creates Kyle Lake, a heavily used recreational facility. Michael Baker's tasks included reviewing drawings and reports; field-inspecting all elements, including spillways and gatehouse structures; performing a hydrologic and hydraulic analysis; performing a topographical survey, geotechnical investigation, and structural analysis to evaluate current conditions; identifying and analyzing rehabilitation alternatives; and providing construction management services.
08/12 - 01/16	Dam Rehabilitations, Scioto, Pike, and Vinton Counties, Ohio. <i>Ohio Department of Natural Resources. Geotechnical Engineer.</i> Responsible for conducting a subsurface investigation to characterize subsurface conditions at an existing earth dam, and provide geotechnical-related input to design a labyrinth spillway-replacement structure, construct a new embankment closure section with sheet pile cutoff and seepage toe berm, and develop a construction staging sequence to permit new construction under normal pool. This work was completed to provide interim risk reduction measures to improve dam stability. Michael Baker is providing engineering services for the rehabilitation of several dams to bring them into compliance with current state safety regulations. Michael Baker's services include dam inspection, hydrology and hydraulic evaluations, geotechnical investigations, structural assessments, dam break modeling, geotechnical investigations, foundation mapping, alternatives analyses, structural design, rehabilitation design, permitting, emergency action plans, bidding-phase support, and construction administration and construction inspection.
02/09 - 04/17	Rehabilitation of Donegal Lake Dam, Donegal Township, Pennsylvania. <i>Pennsylvania Fish and Boat Commission. Geotechnical Engineer.</i> Responsible for completing a geotechnical investigation and provided design recommendations for collection of seepage and other drainage improvements, replacement of spillway slabs, extension of outlet conduit, and roller compacted concrete embankment overtopping protection. Michael Baker provided engineering services for rehabilitation of the Donegal Lake Dam to ensure compliance with Pennsylvania Department of Environmental Protection regulations for spillway capacity and overtopping protection during the design event. Donegal Lake Dam, located in Westmoreland County, Pennsylvania, is owned by the Pennsylvania Fish and Boat Commission. The dam was constructed in 1967 and creates Donegal Lake, which is a heavily used recreational facility. Michael Baker's tasks included reviewing existing drawings and reports; performing a field assessment, hydrologic and hydraulic analysis, topographical survey, and subsurface investigation to evaluate the current condition of the dam; identifying and screening alternatives and developing remediation designs and cost estimates; and providing construction oversight.
01/13 - 08/15	Pike Lake Dam Rehabilitation, Pike County, Ohio. <i>Ohio Department of Natural Resources. Geotechnical Engineer.</i> Responsible for characterizing subsurface conditions and complete geotechnical-related final design to evaluate alternatives to reduce hazard potential, provide roller compacted concrete overtopping protection, and replace the primary concrete spillway. Michael Baker provided engineering services for rehabilitation of the Pike Lake Dam to ensure compliance with the department's dam safety regulations with regard to overtopping protection during the design event and spillway capacity. Michael Baker's services included site and geotechnical investigation, hydrologic and hydraulic analysis, permitting, dam inspection, alternatives identification and evaluation, rehabilitation design, and construction administration and inspection.
06/15 - 05/18	Lake Loramie Dam Rehabilitation, Shelby County, Ohio. <i>Ohio Department of Natural Resources. Geotechnical Engineer.</i> Responsible for design of replacement labyrinth spillway, embankment closure section with sheetpile cutoff and seepage toe berm, and partial demolition of an existing concrete spillway to provide interim risk reduction of potential dam hazard. Michael Baker provided engineering services for the rehabilitation of Lake Loramie Dam as an interim risk reduction (IRR) project. The existing spillway has exhibited severe structural deterioration and was replaced with a labyrinth spillway adjacent to the existing spillway. Michael Baker's services included site and geotechnical investigation, hydrologic and hydraulic analysis, permitting, dam inspection, rehabilitation design, and construction management and inspection services. The improvements to the dam included select partial dam removal, embankment construction (including drainage filters), construction of labyrinth spillway, stilling basin, bank floodwall, control tower, placement of a pedestrian bridge over the spillway, and site upgrades to the immediate dam area. Normal pool was maintained throughout construction to limit the impact to the park, homeowners, and businesses surrounding the lake. The rehabilitations were completed as part of an IRR project due to the unsatisfactory structural condition of the existing spillway.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Haley Stevens, EI		Years of relevant experience with this employer	1
Title	Civil Associate - Construction Services		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization			BS / 2025 / Civil Engineering, Louisiana State University	
Active registration number / state / expiration date			Engineer Intern No. 36075 / Louisiana / 09/30/27	
Year registered	2025	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Design Support	
Haley is a recent college graduate specializing in roadway design and construction engineering services, having supported our team on numerous DOTD IDIQ task orders and standalone projects. Haley previously interned with DOTD in their Dams and Reservoir Section assisting on various tasks designated by senior 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 years of experience specified in the applicable MPR(s).			
11/22 – 12/2024	LWI/SPP Group 1 Bundick Lake Flood Surcharge Management, Beauregard Parish, Louisiana. DOTD. Civil Associate. Created detailed plan set for the project including overall site plan, spillway sections and details, and plan and profile sheets. Reviewed and addressed any comments from DOTD, making updates as needed to meet requirements and keep the project moving forward.			
11/22 – 12/2024	LWI/SPP Group 1 Anacoco Creek Watershed upper and Lower, Vernon Parish, Louisiana. DOTD. Civil Associate. Created detailed plan set and completed design work for the project including overall site plans, drawdown structure, gate, and other accessories demolition and replacement details, and plan and profile sheets. Reviewed and addressed any comments from DOTD, making updates as needed to meet requirements and keep the project moving forward. Attended a project submittal meeting, collaborating with DOTD to discuss progress and next steps.			
06/25 - Ongoing	US 371: KCS Railroad Overpasses HBI, Webster Parish, LA. DOTD. Civil Associate. Responsible for the development of construction plans that meet DOTD and KCS RR requirements. Project includes the replacement of the twin bridges for the site at Minden with a single wider structure. The new bridge will be prestressed concrete girder-type and uses LG 63 and LG 36 girders and fulfils KCS/CPKC crash-wall requirements. We are currently evaluating phase construction and rehabilitation alternatives for the existing bridge at Sibley.			
08/25 - Ongoing	I-10 Mobile River Bridge and Bayway Project Management, Mobile, AL. Alabama DOT. Civil Associate. Responsible for the development of construction plans that meet ALDOT requirements. Michael Baker is providing project management with oversight responsibilities for all aspects of the Mobile River Bridge and Bayway Project. The project involves reconstruction of I-10 through downtown Mobile, Alabama, and across the Mobile Bay, with a total length of approximately 10 miles. The project includes a new two-tower cable stayed bridge over the Mobile River, and replacement of the seven-mile-long I-10 Bayway Bridge.			
08/25 - Ongoing	Three Notch Road Corridor Improvements, Mobile, AL. Mobile County Engineering Department. Civil Associate. Michael Baker is providing design and engineering services for corridor improvements to Three Notch Road in Mobile County. It is performing preliminary investigations and public involvement, preparing environmental documents, right-of-way maps, coordinating utility relocations, and developing plans for additional lanes for approximately 1.22 miles along Three Notch Road. Michael Baker is also providing agency coordination to manage geotechnical work and providing traffic signal design plans.			
06/25 - Ongoing	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, LA. DOTD. Civil Associate. Participated in the development of construction plans for 12 Off-System Bridge replacement locations for the five parishes in District 07. This project program requires Michael Baker to deliver 12 bridge replacements within the \$30.3 million dollars with allocated for District 07. Currently, Michael Baker has submitted stamped final plans for two projects (4 bridges/culverts) while other six projects are at various final submittal stages. There are a total of 12 bridges and culverts among the eight projects under this contract.			
06/25 - Ongoing	IDIQ for CE&I Services in District 61. DOTD. Civil Associate. Supporting the Project Manager/Project Engineer in the delivery of comprehensive CE&I and staff augmentation services.			
06/25 - Ongoing	IDIQ for CE&I Services Statewide with Majority of Work in District 03. DOTD. Civil Associate. Supporting the Project Manager/Project Engineer in the delivery of comprehensive CE&I and staff augmentation services.			

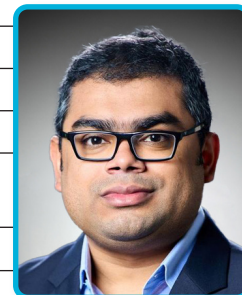




16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Tanveer Ahmed		Years of relevant experience with this employer	2
Title	Civil Associate		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		B.S.E., 2015, Water Resource Engineering, Bangladesh University of Engineering and Technology (BUET) M.S., 2022, Civil Engineering, University of Louisiana at Lafayette		
Active registration number / state / expiration date		N/A		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Hydrology & Hydraulics Support Mr. Ahmed is a Water Resources Engineer with an extensive background of hydrologic and hydraulic (H&H) modeling and a strong passion data analytics. He is proficient in hydrodynamic modeling software, including HEC-RAS, HEC-HMS, and ArcGIS. In addition, he possesses skills in programming languages such as MATLAB and Python, enabling him to conduct thorough data analysis, to assist in large watershed level modeling challenges.		
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 years of experience specified in the applicable MPR(s).			
08/22 - Ongoing	LWI Region 6 IDIQ. Louisiana Department of Transportation and Development (DOTD) H&H Modeler. Responsible for assisting the task manager in modeling of several design storms scenarios, and conducting a Flood Frequency analysis of available gauges in the watershed basin. Michael Baker supplemented data collection and analysis, continued stakeholder engagement services, and performed topographic, bathymetric, and channel surveys.			
11/22 - Ongoing	Little Bogue Falaya Detention Project. St. Tammany Parish Dept. of Engineering. St. Tammany Parish. Michael Baker is providing hydraulic and hydrologic modeling for the proposed 70-acre regional detention pond located near Covington, Louisiana in St. Tammany Parish. The project consisted of evaluating several pond locations, sizes, outfall configurations to ensure the most benefit in reducing water surface elevations in the Little Bogue Falaya Watershed. Mr. Ahmed assisted in troubleshooting H&H modeling issues.			
11/21 - Ongoing	Parish Comprehensive Drainage Plan. St. Tammany Parish, Louisiana. Hydraulic Modeling/Calculations. Responsible for helping with community and public outreach presentations. Assisted with data acquisition and processing to determine areas of high flood risk and reports. Michael Baker conducted a comprehensive drainage plan for the Saint Tammany Parish located on the north shore of Lake Pontchartrain. The plan evaluated the existing state of drainage in the parish including flood risk, water quality and development guidelines, recommended capital projects, and potential policy changes that would lead to reduced flood damage and increased safety. The Michael Baker team provided data gathering efforts, ranked a list of problem areas, and provided four in-person public and stakeholder outreach throughout Phase I of this project. Mr. Ahmed prepared break out H&H models for several watershed in the parish.			





16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Brian Rhett, PE		Years of relevant experience with this employer	3.5
Title	Program Manager		Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization		BS / 2009 / Civil & Environmental Engineering / The Citadel Military College of SC MS / Structural Engineering / Auburn University		
Active registration number / state / expiration date		PE.0082976 / California / 09-30-2026		
Year registered	2012 (CA)	Discipline	Civil: Structural	
Contract role(s) / brief description of responsibilities		Underwater Investigations Lead Mr. Rhett is a Project Manager and Civil/Structural Engineer with over a decade of experience designing, managing, and conducting above and underwater inspections on dams, waterfront facilities, and bridges. He is responsible for managing Michael Baker's Underwater Inspection and Rehabilitation Program and is an ADCI certified Surface-Supplied Air Diving Supervisor. Over his career, he has led and participated in the underwater and topside inspection of waterfront structures in 33 of the 50 states, in several U.S. territories, and internationally in Canada and several Caribbean countries. Augmenting his inspection capabilities, Mr. Rhett has experience designing a wide array of marine structures including bridges, docks, wharfs and piers, bulkheads, marinas, port facilities, and various ancillary marine structures. He has experience conducting traditional, finite-element, and dynamic time-history analyses.		
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 years of experience specified in the applicable MPR(s).			
05/21-PRESENT	SCDOT On-Call Bridge Inspection and Load Rating Program, Statewide, South Carolina. <i>South Carolina DOT.</i> Underwater Project Manager, Team Leader. Project includes Bridge Maintenance Office support in developing underwater and scour policy, procedures, and general support. Responsible for the Quality Assurance reviews of all other consultants' underwater inspections, as well as performing approximately 360 underwater inspections, of which 250 have been completed to date. Bridge types include concrete, masonry, timber, and steel substructure bridges, including several bridges integrated into masonry, concrete, and earthen dams. Sluice gates, weirs, contraction dikes and other bridge adjacent structures were also inspected. For certain structures, coordination was required to access restricted sites owned by the USACE, nuclear entities, waterway authorities, and other private entities. All inspections were performed following the NBIS and the SCDOT Bridge Inspection Guidance Document. Detailed reports were prepared for each underwater bridge inspection that included a list of findings, a record of bridge soundings and stream velocity data, bridge profile, an evaluation and assessment of the bridge, and recommendations for repair. Responsible for management of the underwater portion of the project, inspection safety, leading structural inspections, scour inspections, client coordination, supervising reporting, and quality control.			
01/14 - 11/16	Underwater Bridge Inspections, Statewide, Louisiana. <i>Louisiana Department of Transportation and Development. Team Leader/ Assistant Project Manager.</i> Project included the inspection of over 400 bridges following the National Bridge Inspection Standards. Inspected, assessed, and analyzed bridges' condition and recommended repairs and improvements. Bridges consisted of single-span and multi-span bridges, and swing bridges constructed of concrete, steel, and timber. High-resolution scanning sonar was used on selected bridge elements. Timber coring, timber resistometers, and ultrasonic thickness gauges were utilized to assess deterioration of bridge elements. Commercial surface supplied and SCUBA diving methods were utilized to complete the inspections. Responsible for project management and the conducting of inspections as a team leader.			
04/21 - 01/22	USACE Cofferdam Inspection at Hugh Leatherman Terminal, Charleston, South Carolina. <i>South Carolina Port Authority. Project Manager.</i> Project included the above and underwater inspection of a 750-foot-long contraction dike owned by the U.S. Army Corps of Engineers located on the Cooper River. Deepening of the berths at the adjacent SCPA Hugh Leatherman Terminal created concerns about scour affecting the global stability of the contraction dike, so monitoring criteria were established to ensure that the dike's foundation remained stable. The contraction dike consisted of a steel sheet-pile wall and a cofferdam, which were inspected per ASCE Waterfront Inspection Manual No. 130, Standards. Responsible for project management, engineering review, recommending inspection and surveying intervals, quality control and inspection supervision.			

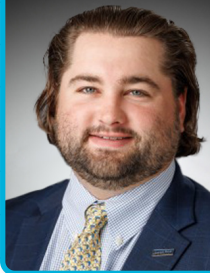




04/14 - 01/15	Front Street Wharf Rehabilitation, Morgan City, Louisiana. <i>Morgan City. Structural Engineer.</i> Project included performing structural and geotechnical design to repair and retrofit the existing aging timber wharf. Conducted above and below water inspection of wharf to assess foundation and superstructure suitability for repair or replacement. Assisted in design of piles and bulkhead sheeting; and developing plans, specifications, and cost estimates. Provided construction oversight and resident engineer and liaison between client and contractor. Responsible for conducting inspections and structural design.
03/15 - 04/16	City Docks Facility-Wide Inspection, Port of Lake Charles, Lake Charles, Louisiana. <i>Port of Lake Charles. Team Leader/ Assistant Project Manager.</i> Project included above and underwater facility-wide inspection which included the City Docks and Bulk Terminal 1. Over 1 mile of wharf face and bulkhead and over 8,000 piles were inspected. Recommendations for repairs as well as overall assessments were generated from the inspection. Inspection methods included topside inspection, surface-supplied and SCUBA underwater inspection, and side-scan sonar imaging. Responsible for project management, conducting inspections as a team leader, and developing repair recommendations.
04/16 - 08/16	Baton Rouge Refinery RB-2 Cofferdam Inspection, Baton Rouge, Louisiana. <i>ExxonMobil. Project Manager.</i> Project included the structural inspection and assessment of a steel sheet-pile cofferdam used to retain refinery water runoff. A Level III HAZMAT Dive suit was used for the inspection of the containment basin. Sluice gates and weirs were inspected in addition to the sheet-pile cofferdam. Developed a comprehensive inspection report including repairs to patch holes in the cofferdam structures. Responsible for conducting inspections, safety coordination, and structural repair design.
02/15 - 09/15	Cornerstone Dock Rehabilitation, Waggaman, Louisiana. <i>Cornerstone Chemical Company. Structural Engineer/Inspector.</i> Project included the inspection and assessment of aging steel cofferdam dock structure located along the Mississippi River, which was used for the import and export of various liquid chemicals. Conducted above and underwater inspection of the dock structure and made structural repair recommendations. Designed detail repairs, including patching and over sheeting of the cofferdams, and prepared plans for improvements to the cofferdam and the addition of safety appurtenances. Responsible for conducting inspections, preparing condition reports, performing structural design, and developing plans and specifications.
08/17 - 10/19	IAAM Bulkhead Repair, Charleston, South Carolina. <i>City of Charleston. Project Manager/Structural Engineer.</i> Project included performing engineering design for the repair of a seawall bulkhead after previously conducting an above-water inspection in 2016. Conducted a design-level inspection from above-water to evaluate current conditions and locate structural deficiencies. Analysis and designed a new sheet pile bulkhead and developed bid and construction documents including technical specifications for repair and rehabilitation of portions of the existing bulkhead. Responsible for the management of inspection and structural design.
06/23- PRESENT	Columbus Street Terminal Post-Loading Inspections, Charleston South Carolina. <i>J.E. Oswalt & Sons. Project Manager.</i> Project included multiple structural inspections of the deck, pile caps, bulkhead walls, and piles for portions of the S.C. Port Authority Columbus Street Terminal. Performed both a pre-loading and post-loading inspection of the aging structure to document existing conditions. The pre-loading inspection documented the condition of primary structural elements, and the post-loading assessment included an investigation for new deterioration that may have been caused by the heavy concentrated loads imparted when the ship cargo, a mega-load electrical generator, was transferred from ship to shore. All defects and deterioration were rated per ASCE Manual of Practice 130 and the reports included numerous photos to document the overall condition of the inspected area. The wharf was comprised of prestressed concrete piles and a concrete superstructure. Responsible for project management, leading inspections, client coordination, and reporting.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	William Gwaltney, EIT		Years of relevant experience with this employer	3
Title	Engineer-Diver		Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization		BS / 2014 / Civil Engineering / Clemson University		
Active registration number / state / expiration date		EIT 19700 / South Carolina / No Expiration		
Year registered	2015	Discipline	Civil	
Contract role(s) / brief description of responsibilities		Underwater Investigations Mr. Gwaltney is a Civil/Structural Engineering Technician experienced in designing, managing, and conducting above and underwater inspections on bridges and waterfront facilities. Over his career, he has led and participated in the underwater and topside inspection of bridge and waterfront structures throughout Alabama, Arkansas, Colorado, Georgia, Florida, Indiana, Iowa, Kentucky, Louisiana, Mississippi, North Carolina, Ohio, South Carolina, Tennessee, Texas, Wisconsin, Wyoming, Puerto Rico, and St. Lucia. His experience is supplemented by being an ADCI certified Surface- Supplied Air Diving Supervisor. As part of underwater inspections of structures, Mr. Gwaltney has conducted ultrasonic testing and sonar imagery. Heightening his inspection expertise, he has experience with design and construction administration for a variety of marine structures including bridges, marinas, docks, piers, and bulkheads.		
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 years of experience specified in the applicable MPR(s).			
05/21-PRESENT	SCDOT On-Call Bridge Inspection and Load Rating Program, Statewide, South Carolina. South Carolina DOT. Underwater Deputy Project Manager, Team Leader. Project includes Bridge Maintenance Office support in developing underwater and scour policy, procedures, and general support. Responsible for the Quality Assurance reviews of all other consultant's underwater inspections as well as performing approximately 360 underwater inspections of which 250 have been completed to date. Bridge types include concrete, masonry, timber, and steel substructure bridges including several bridges integrated into masonry, concrete, and earthen dams. Sluice gates, weirs, contraction dikes and other bridge adjacent structures were also inspected. For certain structures, coordination was required to access restricted sites owned by the USACE, nuclear entities, waterway authorities, and other private entities. All inspections were performed in accordance with the National Bridge Inspection Standards (NBIS) and the SCDOT Bridge Inspection Guidance Document. Detailed reports were prepared for each underwater bridge inspection that included a list of findings, a record of bridge soundings and stream velocity data, bridge profile, an evaluation and assessment of the bridge, and recommendations for repair. Responsible for management of the underwater reporting, inspection safety, leading structural inspections, scour inspections, and quality control.			
06/23-PRESENT	Columbus Street Terminal Post-Loading Inspections, Charleston South Carolina. J.E. Oswalt & Sons. Deputy Project Manager. Project included multiple structural inspections of the deck, pile caps, bulkhead walls, and piles for portions of the S.C. Port Authority Columbus Street Terminal. Performed both a pre-loading and post-loading inspection of the aging structure to document existing conditions. The pre-loading inspection documented the condition of primary structural elements, and the post-loading assessment included an investigation for new deterioration that may have been caused by the heavy concentrated loads imparted when the ship cargo, a mega-load electrical generator, was transferred from ship to shore. All defects and deterioration were rated per ASCE Manual of Practice 130 and the reports included numerous photos to document the overall condition of the inspected area. The wharf was comprised of prestress concrete piles and a concrete superstructure. Responsible for inspections, client coordination, and reporting.			





04/21 - 01/22	USACE Cofferdam Inspection at Hugh Leatherman Terminal, Charleston, South Carolina. <i>South Carolina Port Authority. Inspector.</i> Project included the above and underwater inspection of a 750-foot-long contraction dike owned by the U.S. Army Corps of Engineers located on the Cooper River. Deepening of the berths at the adjacent SCPA Hugh Leatherman Terminal created concerns about scour affecting the global stability of the contraction dike, so monitoring criteria was developed to established to ensure that dike's foundation remained stable. The contraction dike consisted of a steel sheet-pile wall and a cofferdam, which were inspected per ASCE Waterfront Inspection Manual No. 130 Standards. Responsible inspection and reporting.
08/17 - 10/19	IAAM Bulkhead Repair, Charleston, South Carolina. <i>City of Charleston. Project Engineer.</i> Project included performing engineering design for the repair of a seawall bulkhead after previously conducting an above-water inspection in 2016. Conducted a design-level inspection from above-water to evaluate current conditions and locate structural deficiencies and developed bid and construction documents including technical specifications for repair and rehabilitation of the bulkhead. Responsible for the inspection and design.
0418 -05/18	Water Intake Inspections. Freeport, TX. <i>Department of Energy. Project Engineer.</i> Project included the underwater inspection of three power plant water intake structures for the Department of Energy in Texas and Louisiana. The underwater inspection was performed with a 3-man ADCI dive team using surface-supplied air equipment and rope access equipment due to access restrictions. All inspections were performed simultaneously at all three locations per client requirements. A detailed report was prepared including maintenance recommendations. Responsibilities included coordination with the client for onboarding following DOE security precautions and leading the field inspection for one team located outside of Houston Texas. Responsible for underwater inspections.
0319 - 04/22	Shelter Cove Seawall and Boardwalk Inspection Repair Design, and Construction Administration, Hilton Head Island, SC. <i>Shelter Cove Community. Project Engineer/Assistant Project Manager.</i> Project included a structural assessment of the seawall and boardwalk at the Shelter Cove Marina in Hilton Head, SC. Performed an above-water and underwater visual structural assessment of the Shelter Cove Marina seawall. Performed an abovewater and underwater visual structural assessment of the timber boardwalk along the Shelter Cove Marina and Disney resort reviewing the condition of the boardwalk structure, light poles, concrete panels, and railings. Provided a report summarizing the results of the assessment and recommendations for conceptual repairs for defective conditions observed. Repairs were designed based on inspection findings. Construction was performed over a one-year period. Responsible for providing inspections, repair drawings, and construction administration. Responsible for conducting construction site visits and creating subsequent reports.
01/19 - 12/19	MDOT Underwater Bridge Inspection, Statewide, Mississippi. <i>Mississippi DOT. Project Manager, Team Leader, Dive Supervisor.</i> Project included the inspection and assessment of 74 bridges located throughout Mississippi in accordance with NBIS and the FHWA Bridge Inspection Reference Manual. Bridges ranged in size from small creek crossings to large movable bridges and included timber and concrete substructures. Inspections were performed on all bridges extending from the high-water mark to the channel bottom of all substructure and foundation bridge elements located within the waterway. Heavy drift/debris removal from the waterway was completed as needed. Deterioration of the structural members and observed scour was documented and a report that included inspection findings and recommendations for repairs was prepared for each bridge. Responsible for dive safety, leading inspections, project coordination and planning, report oversight, and quality control.

16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Erika Rodgers, PE		Years of relevant experience with this employer	14
Title	Civil Engineer		Years of relevant experience with other employer(s)	14
Degree(s) / Years / Specialization		B.S.C.E., 2012, Civil Engineering, Geneva College		
Active registration number / state / expiration date		PE086263/ Pennsylvania/ 09-30-2027		
Year registered	2017	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Dam Breach and Emergency Action Plans		
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 years of experience specified in the applicable MPR(s).			
02/26- Ongoing	LWI/SPP Group 1 Beauregard, Vernon and St. Landry Parishes. DOTD. <i>Civil Engineer</i>. Responsibilities include Hydrologic and Hydraulic modeling of the proposed Labyrinth spillway. The modeling efforts led to the final dimensions of the proposed spillway. Also assisted in the Hydraulic design of both upstream entrance channel design and downstream outfall channel design. The project will determine improvements to Bundick Lake outlet works in order to reduce flooding within the watershed.			
11/17-12/17	Hinckley Lake Dam Modifications, Hinckley, Ohio. Cleveland Metroparks. <i>Civil Engineer</i>. Responsibilities included Hydrologic (HEC-HMS) and Hydraulic (HEC-RAS) modeling for the preliminary design phase. Michael Baker is providing engineering services to design modifications for Hinckley Lake Dam to ensure compliance with ODNR Dam Safety Regulations. The dam, in its current configuration, does not have adequate capacity to convey the Probable Maximum Flood design event over the spillway without overtopping the dam. Michael Baker is providing professional services to rehabilitate and modify the dam to meet ODNR regulations. These services include site investigation and assessment, hydrologic and hydraulic analysis, geotechnical analyses and assessment, alternatives evaluation, permitting, and rehabilitation design. During construction, the contractor encountered artesian conditions in the right spillway training wall. Michael Baker's hydraulic and geotechnical engineers were on site within two hours to develop a drainage plan to mitigate this condition.			
04/21-Ongoing	Rehabilitation of Five Pennsylvania Dams, Various Locations, Bell Township, Pennsylvania. Pennsylvania Fish and Boat Commission. <i>Civil Engineer</i>. Responsible for assisting with the dam breach analysis, technical review, and determining peak wave run-up and set up elevations. Michael Baker is providing engineering services to bring the Cloe Lake Dam into compliance with Pennsylvania Department of Environmental Protection regulations. Services include dam inspections, hydrology and hydraulics evaluations, geotechnical investigations, structural assessments, alternatives analyses, dam-break modeling, inundation mapping, permitting, agency coordination, and construction services.			
09/16-12/21	Pennsylvania DCNR Dam Safety Projects, Various locations, Pennsylvania. DCNR. <i>Civil Associate</i>. Responsibilities included performing hydrologic and hydraulic analyses; calculating drainage areas, curve numbers, and time of concentration; developing and updating HEC-1 hydrologic models and HEC-RAS dam breach models; and preparing flood inundation mapping. Duties included preparing Hydrology and Hydraulics reports, responding to technical and quality review comments, and updating emergency action plans. Additional responsibilities included preparing project drawings, permitting documents, cost estimates, specifications, and supporting spillway inspections, seepage control measures, and erosion and sediment control design. Michael Baker provided dam inspection and assessment, hydrology and hydraulic evaluations, geotechnical investigations, structural assessments, dam break modeling, geotechnical investigations, foundation mapping, alternatives analyses, structural design, rehabilitation design, permitting, emergency action plans, bidding-phase support, and construction administration and construction inspection to assist the client with implementing its dam safety program. Projects under this contract include Little Buffalo Dam inspection, Pymatuning Dam, Raccoon Creek Dam, Laurel Mountain State Park Water Supply Dams, Lackawanna State Park - Trostle Pond Dam, and Laurel Hill State Park - Penn Scenic View Lake Dam.			



03/19-02/26	Wheeling Creek Site 25 Dam Rehabilitation, Marshall County, West Virginia. <i>Department of Agriculture. Civil Engineer.</i> Responsibilities included preparation of a HECRAS model to analyze existing and proposed spillway, perform a dam breach analysis, and prepare reports. Michael Baker, as part of the North Wind Resources Partnership JV, provided engineering services for rehabilitation of the Wheeling Creek Site 25 Dam. There had been significant development downstream of the site since original construction, so the dam was reclassified as a high-hazard potential structure. The structure underwent rehabilitation to meet current West Virginia Department of Environmental Protection (WVDEP) Dam Safety criteria and Natural Resources Conservation Service (NRCS) design criteria and standards. Michael Baker provided hydrologic and hydraulic analysis, structural investigation and design, geotechnical investigation and design, and construction administration.
04/16-05/19	Blue Rock State Park Dam Rehabilitation, Muskingum County, Ohio. <i>Confidential Client. Civil Associate.</i> Responsibilities include hydrologic and hydraulic calculations for labyrinth spillway, stilling basin, phasing, and control of water. Work included preparing reports and responding to comments received from technical, quality, and internal reviews, all associated CAD work including plans, profiles, sections, details, erosion and sediment control plans, and post construction stormwater plans to a 60% design level, preparing spillway report, hydrologic and hydraulic dam breach analysis, preparation of emergency action plan, and flood inundation maps. Michael Baker provided engineering services for the rehabilitation of Cutler Dam in Blue Rock State Park to ensure compliance with Ohio Department of Natural Resources Dam Safety Regulations regarding inadequate spillway capacity and overtopping protection. Michael Baker's services included site investigation, hydrologic and hydraulic analysis, permitting, dam inspection, rehabilitation design, and construction management and inspection services.
04/24-01/26	Architectural Engineering Services for Lake Katharine Dam Rehabilitation, Liberty Township, Ohio. <i>Ohio Department of Natural Resources. Water Resources Engineer.</i> Responsibilities included dam breach modelling and inundation mapping for Lake Katharine Dam. Michael Baker provided architectural engineering services to support the rehabilitation of Lake Katharine Dam within the Lake Katharine State Nature Preserve in Liberty Township, Ohio. The team provided hydrologic and hydraulic analysis, geotechnical analysis, alternatives development, emergency action planning, regulatory permitting construction documents, and construction administration tasks.
09/21-11/24	Trostle Pond Emergency Action Plan (EAP). <i>DCNR. Water Resources Engineer.</i> Responsibilities included preparing the Emergency Action Plan (EAP) with the 2019 Probable Maximum Precipitation (PMP) Study and prepared an EAP Inundation Map. Developed HEC1 models for existing and proposed conditions. Prepared erosion and sediment control drawings, and Hydraulic and Hydrologic reports. Conducted technical reviews, dam breach analysis, and inundation mapping. Michael Baker updated the hydrologic model and dam breach modeling parameters, Sunny Day Breach, PMF Non-Breach, and PMF Breach scenarios to account for the 2019 update to the Pennsylvania PMP study. The Emergency Action Plan (EAP) was updated to account for changes in stakeholder personnel, warning and evacuation notifications, and phone contact rosters. The update required coordination with the Lackawanna County Department of Emergency Services and Management.
02/25-11/25	Seph Mack Dam Emergency Action Plan (EAP) Update. <i>DCNR. Water Resources Engineer.</i> Updated the Emergency Action Plan (EAP) with the 2019 Probable Maximum Precipitation (PMP) Study and prepared an EAP Inundation Map. Developed HEC1 models for existing and proposed conditions. Prepared erosion and sediment control drawings, and Hydraulic and Hydrologic reports. Conducted technical reviews, dam breach analysis, and inundation mapping. Michael Baker prepared an emergency action plan (EAP) update to ensure the dam's safety by addressing any identified deficiencies and implementing necessary improvements. The project included a topographic survey of the dam and its surrounding areas, an updated dam breach analysis, and inundation mapping. A Hydraulic and Hydrologic model was created to account for updates from the 2019 update to the Pennsylvania Probable Maximum Precipitation (PMP) study.
09/21-11/24	DSSMPs, DSSMRs, and Dam Inspection and Rehabilitation, Various locations throughout, Pennsylvania, Virginia, and West Virginia. <i>Cube Hydro Partners, LLC. Civil Engineer.</i> Responsible for reviewing inspection reports, photographs, and instrumentation and monitoring data and updating the Dam Safety Surveillance and Monitoring Report with a summary of changes, and an evaluation of instrumentation data. Michael Baker provided engineering services for preparation of Dam Safety Surveillance and Monitoring Plans and Dam Safety Surveillance and Monitoring Reports for eight hydroelectric projects in Pennsylvania, Virginia, and West Virginia. Michael Baker also performed regular inspections and prepared preliminary designs for rehabilitation of Millville Dam in West Virginia.

16. Staff Experience:

<i>Firm employed by</i>	Michael Baker International, Inc.		
<i>Name</i>	Donald Gregor, PE	<i>Years of relevant experience with this employer</i>	19
<i>Title</i>	Civil Engineer	<i>Years of relevant experience with other employer(s)</i>	19
<i>Degree(s) / Years / Specialization</i>	B.S., 2007, Civil Engineering, University of Pittsburgh		
<i>Active registration number / state / expiration date</i>	PE079933/Pennsylvania/ 09-30-2027		
<i>Year registered</i>	2012	<i>Discipline</i>	Civil Engineering
<i>Contract role(s) / brief description of responsibilities</i>	Mr. Gregor is a licensed engineer with experience in hydraulics and hydrology (H&H). He has performed several roles on water resource projects relating to dam rehabilitation including spillway design, hydraulic modeling, and EAPs. He has also served as Michael Baker's construction oversight representative on numerous dam rehabilitation projects.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
11/22- 12/24	LWI/SPP Group 1 Bundick Lake Flood Surge Management, Beauregard Parish, Louisiana. DOTD. <i>Water Resources Engineer.</i> Responsible for supervising the hydraulic analysis of labyrinth type spillways. The project will determine improvements to Bundick Lake outlet works in order to reduce flooding within the watershed.		
12/19-12/24	Wheeling Creek Site 25 Dam Rehabilitation, Marshall County, West Virginia. Department of Agriculture. <i>Water Resources Engineer.</i> Assisted with development of hydrologic and hydraulic analysis. Michael Baker, as part of the North Wind Resources Partnership JV, provided engineering services for rehabilitation of the Wheeling Creek Site 25 Dam. There had been significant development downstream of the site since original construction, so the dam was reclassified as a high-hazard potential structure. The structure underwent rehabilitation to meet current West Virginia Department of Environmental Protection (WVDEP) Dam Safety criteria and Natural Resources Conservation Service (NRCS) design criteria and standards. Michael Baker provided hydrologic and hydraulic analysis, structural investigation and design, geotechnical investigation and design, and construction administration.		
08/21-OnGoing	Rehabilitation of Five Pennsylvania Dams, Various Locations, Bell Township, Pennsylvania. Pennsylvania Fish and Boat Commission. <i>Water Resources Engineer.</i> Responsible for development of hydrologic and hydraulic analysis. Michael Baker is providing engineering services to bring the Cloe Lake Dam into compliance with Pennsylvania Department of Environmental Protection regulations. Services include dam inspections, hydrology and hydraulics evaluations, geotechnical investigations, structural assessments, alternatives analyses, dam-break modeling, inundation mapping, permitting, agency coordination, and construction services.		
10/16- 06/26	Pennsylvania DCNR Dam Safety Projects, Various locations, Pennsylvania. DCNR. <i>Water Resources Engineer.</i> Responsible for the hydrological and hydraulic dam break analysis, flood inundation mapping, and alternative cost estimates that PA DCNR used for master planning efforts. Michael Baker provided dam inspection and assessment, hydrology and hydraulic evaluations, geotechnical investigations, structural assessments, dam break modeling, geotechnical investigations, foundation mapping, alternatives analyses, structural design, rehabilitation design, permitting, emergency action plans, bidding-phase support, and construction administration and construction inspection to assist the client with implementing its dam safety program. Projects under this contract include Little Buffalo Dam inspection, Pymatuning Dam, Raccoon Creek Dam, Laurel Mountain State Park Water Supply Dams, Lackawanna State Park - Trostle Pond Dam, and Laurel Hill State Park - Penn Scenic View Lake Dam.		
01/24-08/26	Dragonfly Pond Dam Breach Work Order 8, Charlotte, North Carolina. DCNR. <i>Water Resources Engineer.</i> Assisted with the development of hydrologic and hydraulic analysis. Michael Baker prepared an emergency action plan to ensure the dam's safety by addressing any identified deficiencies and implementing necessary improvements. The project included a topographic survey of the dam and its surrounding areas, an updated dam breach analysis, inundation mapping, and cost estimate for rehabilitation and decommissioning.		



12/16-06/18	Blue Rock State Park Dam Rehabilitation, Muskingum County, Ohio. <i>Confidential Client. Water Resources Engineer.</i> Led the development of the Blue Rock State Park Dam Emergency Action Plan (EAP). The EAP was based on an unsteady HEC-RAS analysis of the dam breach. Flood mapping was done in ArcGIS. Michael Baker provided engineering services for the rehabilitation of Cutler Dam in Blue Rock State Park to ensure compliance with Ohio Department of Natural Resources Dam Safety Regulations regarding inadequate spillway capacity and overtopping protection. Michael Baker's services included site investigation, hydrologic and hydraulic analysis, permitting, dam inspection, rehabilitation design, and construction management and inspection services.
12/22-Ongoing	Muskingum Lock and Dam 7, McConnelsville, Ohio. <i>Ohio Department of Natural Resources. Water Resources Engineer.</i> Responsible for development of hydrologic and hydraulic analysis. Michael Baker is providing engineering services to design modifications for the Muskingum River Dam Number. Michael Baker was originally selected to serve as the criteria engineer for the design-build delivery of this project. When the design-build team failed to reach agreement with the client, Michael Baker's contract was rescoped to serve as the design engineer. Tasks include hydrology and hydraulics analysis, structural design, geotechnical investigation and analysis, construction documents, emergency action planning, regulatory permitting, and construction administration services.
03/15-08/18	Somerset Lake Dam Renovations, Somerset Township, Pennsylvania. <i>Pennsylvania Fish and Boat Commission. Water Resources Engineer.</i> Responsible for development of hydrologic and hydraulic analysis including a Labyrinth Spillway. Also aided in the design of the Labyrinth Spillway and energy dissipator. Michael Baker is providing engineering services for the Somerset Lake Dam to ensure compliance with Pennsylvania Department of Environmental Protection regulations. Michael Baker's tasks include reviewing drawings and reports; field-inspecting all elements, including spillways and gatehouse structures; performing a hydrologic and hydraulic analysis; performing a topographical survey, geotechnical investigation, and structural analysis to evaluate current conditions; identifying and analyzing rehabilitation alternatives; and providing construction management services.
08/23-04/26	Shreve Lake Dam Improvements, Shreve, Ohio. <i>Ohio Department of Natural Resources. Water Resources Engineer.</i> Assisted with the development of hydrologic and hydraulic analysis. Michael Baker provided engineering services to design modifications for Hinckley Lake Dam in Shreve, Ohio, to ensure compliance with the client's Dam Safety Regulations. Tasks included study and report verification, hydrology and hydraulics analysis, structural investigation and design, geotechnical investigation and design, construction documents, and construction administration.
04/12-09/18	Rehabilitation of Kyle Lake Dam, Washington Township, Pennsylvania. <i>Pennsylvania Fish and Boat Commission. Hydraulic Engineer.</i> Responsible for H&H analyses, inundation mapping, GIS mapping, and rehabilitation design. Michael Baker provided engineering services for the Kyle Lake Dam, owned by the Pennsylvania Fish and Boat Commission (PBFC), to ensure compliance with Pennsylvania Department of Environmental Protection regulations regarding spillway capacity and overtopping protection, as the dam could not convey the design event. The Kyle Lake Dam, located in Jefferson County, Pennsylvania, was constructed in 1910 and creates Kyle Lake, a heavily used recreational facility. Michael Baker's tasks included reviewing drawings and reports; field-inspecting all elements, including spillways and gatehouse structures; performing a hydrologic and hydraulic analysis; performing a topographical survey, geotechnical investigation, and structural analysis to evaluate current conditions; identifying and analyzing rehabilitation alternatives; and providing construction management services.
09/12-08/19	Chapman Dam Rehabilitation Contract 2012-2020, Pleasant Township, Pennsylvania. <i>Pennsylvania Fish and Boat Commission. Civil Engineer.</i> Assisted with the development of hydrologic and hydraulic analysis relating to dam rehabilitation. Michael Baker performed analyses, provided permitting services, developed designs, and performed construction administration for the rehabilitation of the Chapman Dam, located on the West Branch of Tionesta Creek, within Chapman State Park. Michael Baker was responsible for designing the renovations of the existing spillway and outlet works, addressing stability and seepage concerns with the embankment, and evaluating the dam's compliance with PADEP regulations regarding overtopping protection during the design event.
06/24-OnGoing	George B Stevenson EAP Update. <i>DCNR. Water Resources Engineer.</i> Assisted with the development of hydrologic and hydraulic analysis. Provided GIS mapping and support related to the hydrologic and hydraulic analysis. The project included updating the dam breach modeling parameters for the Sunny Day Breach, Probable Maximum Flood (PMF) Non-Breach, and PMF Breach scenarios to account for the 2019 update to the Pennsylvania Probable Maximum Precipitation (PMP) study. The breach model and inundation mapping included 136 miles of reach length including 53 miles backwater effects, one of the largest dam breach inundation maps in Pennsylvania. The Emergency Action Plan (EAP) was updated to account for changes in municipal boundaries and provided warning and evacuating notifications as well as phone contacts for key emergency personnel. The update required coordination with nine different county Emergency Management Agencies (EMA) across Pennsylvania.

16. Staff Experience:

<i>Firm employed by</i>	Michael Baker International, Inc.		
<i>Name</i>	Andrew Durkin, PE	<i>Years of relevant experience with this employer</i>	1
<i>Title</i>	Civil Engineer- Water	<i>Years of relevant experience with other employer(s)</i>	7
<i>Degree(s) / Years / Specialization</i>	B.S., 2016, Civil Engineering, The Ohio State University		
<i>Active registration number / state / expiration date</i>	PE 91937 / Ohio / 12-31-2027		
<i>Year registered</i>	2025	<i>Discipline</i>	Civil Engineering
<i>Contract role(s) / brief description of responsibilities</i>	Mr. Durkin is a civil engineer with experience in hydraulic design, hydrologic design, plan development, and construction administration as the acting consultant of the contract authority for high-hazard dam improvement projects. His areas of expertise include construction administration, soil-cement construction, dam/levee inspection, and hydrologic/hydraulic evaluation of a structure's compliance with both federal and local guidelines.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
08/25-OnGoing	LWI Anacoco Creek Watershed Design. DOTD. Project Engineer. Responsible for onsite inspection and evaluation of the earthen dam and associated structural features to determine the need for remediation and improvements to site functionality and logistics. Results of this inspection will be used to develop recommendations to address any deficiencies that were identified to ensure the structure remains functional and within compliance with proper design guidelines.		
09/25-OnGoing	LWI Bundick Lake Design. DOTD. Project Engineer. Responsible for grading design of the improvements to the dam and new spillway. Mr. Durkin managed the preparation of the civil drawings for the dam improvement project. These drawings included general notes, surveying, grading, embankment modifications, and the earthwork required for the new spillway. Also, Mr. Durkin was responsible for calculating the excavation and fill quantities for the project.		
08/25-06/26	BCCWF Spillway Design. Jackson County Port Authority. Project Engineer. Mr. Durkin was responsible for the grading design of the Black Creek Dam Improvements. The existing spillway at the project does not meet current Mississippi dam safety requirements and a new spillway will be constructed adjacent to the existing spillway. Mr. Durkin is responsible for the grading plans required for the embankment modifications, the spillway construction, and the approach and discharge channels constructed as part of the work. Mr. Durkin was also responsible for calculating the excavation and fill quantities for the project.		
01/25-12/26	Muskingum Lock and Dam 7, McConnellsville, Ohio. Ohio Department of Natural Resources. Water Resources Engineer. Responsible for managing the construction administration tasks. Michael Baker is providing engineering services to design modifications for the Muskingum River Dam Number. Michael Baker was originally selected to serve as the criteria engineer for the design-build delivery of this project. When the design-build team failed to reach agreement with the client, Michael Baker's contract was rescoped to serve as the design engineer. Tasks include hydrology and hydraulics analysis, structural design, geotechnical investigation and analysis, construction documents, emergency action planning, regulatory permitting, and construction administration services.		
01/25-12/26	Statewide Canal Assessments and Improvements, Akron, Ohio. Ohio Department of Natural Resources. Water Resources Engineer. Responsible for the management of construction administration tasks and field assessments of multiple dam rehabilitation projects. Michael Baker is performing site assessments and analysis to determine deficiencies for the Ohio and Erie Canal, Miami and Erie Canal, and Tuscarawas Feeder Canal Systems near Akron, Ohio, to determine deficiencies at each structure. The team's scope of work includes document review and site investigations, preliminary surveying and subsurface investigations, environmental and cultural resources studies, semi-qualitative risk assessment on key deficiencies, conceptual rehabilitation alternatives analysis, grant research, master planning recommendations, developing a prioritization plan, alternative evaluations, and providing construction administration.		
02/25-04/26	Shreve Lake Dam Improvements, Shreve, Ohio. Ohio Department of Natural Resources. Water Resources Engineer. Responsible for the design of H&H site features and the coordination of project closeout activities. Michael Baker provided engineering services to design modifications for Shreve Lake Dam in Shreve, Ohio, to ensure compliance with the client's Dam Safety Regulations. Tasks included study and report verification, hydrology and hydraulics analysis, structural investigation and design, geotechnical investigation and design, construction documents, and construction administration.		



16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	John M. Laux		Years of relevant experience with this employer	12
Title	Civil Associate		Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization		B.S., 2014, Civil Engineering, Mount Union College		
Active registration number / state / expiration date		N/A		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Mr. Laux has geotechnical and environmental site experience. Mr. Laux's experience includes developing and performing sampling programs for subsurface soils, sediment, and water, soil and rock classification, infiltration testing, stream and groundwater assessment, and wetland delineation. He has conducted work across multiple departments including, oil and gas, geotechnical, mining, cultural resources, surveying, and mobile LiDAR.		
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 years of experience specified in the applicable MPR(s).			
08/25-OnGoing	LWI Anacoco Creek Watershed Design. DOTD. Civil Associate. Responsible for providing Geotech analysis and reporting to DOTD as well as support of design process. Results of this inspection will be used to develop recommendations to address any deficiencies that were identified to ensure the structure remains functional and within compliance with proper design guidelines.			
09/25-OnGoing	LWI/SPP Group 1 Bundick Lake Flood Surcharge Management, Beauregard Parish, Louisiana. DOTD. Civil Associate. Responsible for providing Geotech analysis and reporting to DOTD as well as supporting design features in regards to foundations and retaining walls. The project will determine improvements to Bundick Lake outlet works in order to reduce flooding within the watershed.			
01/22- OnGoing	Rehabilitation of Five Pennsylvania Dams, Various Locations, Bell Township, Pennsylvania. Pennsylvania Fish and Boat Commission. Civil Associate. Responsible for performing geotechnical analysis calculations. Michael Baker is providing engineering services to bring the Cloe Lake Dam into compliance with Pennsylvania Department of Environmental Protection regulations. Services include dam inspections, hydrology and hydraulics evaluations, geotechnical investigations, structural assessments, alternatives analyses, dam-break modeling, inundation mapping, permitting, agency coordination, and construction services.			
06/23 - OnGoing	Muskingum Lock and Dam 7, McConnelsville, Ohio. Ohio Department of Natural Resources. Civil Associate. Reviewed daily site and construction activity reports to monitor conditions. Performed drilled shaft calculations for the dam abutment to support changing site conditions. Michael Baker is providing engineering services to design modifications for the Muskingum River Dam Number. Michael Baker was originally selected to serve as the criteria engineer for the design-build delivery of this project. When the design-build team failed to reach agreement with the client, Michael Baker's contract was rescoped to serve as the design engineer. Tasks include hydrology and hydraulics analysis, structural design, geotechnical investigation and analysis, construction documents, emergency action planning, regulatory permitting, and construction administration services.			
04/24 - OnGoing	Shreve Lake Dam Improvements, Shreve, Ohio. Ohio Department of Natural Resources. Civil Associate. Michael Baker provided engineering services to design modifications for Hinckley Lake Dam in Shreve, Ohio, to ensure compliance with the client's Dam Safety Regulations. Tasks included study and report verification, hydrology and hydraulics analysis, structural investigation and design, geotechnical investigation and design, construction documents, and construction administration.			
03/24 - OnGoing	Hinckley Lake Dam Modifications, Hinckley, Ohio. Cleveland Metroparks. Civil Associate. Michael Baker is providing engineering services to design modifications for Hinckley Lake Dam to ensure compliance with ODNR Dam Safety Regulations. The dam, in its current configuration, does not have adequate capacity to convey the Probable Maximum Flood design event over the spillway without overtopping the dam. Michael Baker is providing professional services to rehabilitate and modify the dam to meet ODNR regulations. These services include site investigation and assessment, hydrologic and hydraulic analysis, geotechnical analyses and assessment, alternatives evaluation, permitting, and rehabilitation design. During construction, the contractor encountered artesian conditions in the right spillway training wall. Michael Baker's hydraulic and geotechnical engineers were on site within two hours to develop a drainage plan to mitigate this condition.			



05/19- 06/25	Wheeling Creek Site 25 Dam Rehabilitation, Marshall County, West Virginia. <i>Department of Agriculture. Civil Associate.</i> Michael Baker, as part of the North Wind Resources Partnership JV, provided engineering services for rehabilitation of the Wheeling Creek Site 25 Dam. There had been significant development downstream of the site since original construction, so the dam was reclassified as a high-hazard potential structure. The structure underwent rehabilitation to meet current West Virginia Department of Environmental Protection (WVDEP) Dam Safety criteria and Natural Resources Conservation Service (NRCS) design criteria and standards. Michael Baker provided hydrologic and hydraulic analysis, structural investigation and design, geotechnical investigation and design, and construction administration.
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16. Staff Experience:

Firm employed by		Michael Baker International, Inc.		
Name	Fereshteh Noorbakhsh, P.E.		Years of relevant experience with this employer	4
Title	CIVIL ENGINEER - WATER		Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization			Ph.D., 2020, Civil Engineering - Water Resources, University of Louisville	
Active registration number / state / expiration date			PE 6201314318 / Michigan / 09-20-26	
Year registered	2024	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Ms. Noorbakhsh is a Civil Associate with hydraulic modeling (2D) and analysis, hydrodynamic simulation of river flow, stormwater management features, stream and wetland restoration, erosion, and sediment management in the water resources management field. She is skilled in hydrodynamic simulation of river flow, modeling, erosion, and stability of rivers in systems; stream and wetland restoration design; hydraulic modeling sediment transport dynamics; and statistical data analysis and interpretation. At the University of Louisville's Stream Institute, she improved the success rate of stream restoration designs by developing design criteria for the velocity and shear stress. She is proficient in TUFLOW, SMS; MicroStation; StormCAD; HECRAS and familiar with AutoCAD and ARC GIS.	
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 years of experience specified in the applicable MPR(s).		
07/22- 01/26		Architectural Engineering Services for Lake Katharine Dam Rehabilitation, Liberty Township, Ohio. <i>Ohio Department of Natural Resources. Water Resources Engineer.</i> Responsible for preparing inundation maps. Michael Baker provided architectural engineering services to support the rehabilitation of Lake Katharine Dam within the Lake Katharine State Nature Preserve in Liberty Township, Ohio. The team provided hydrologic and hydraulic analysis, geotechnical analysis, alternatives development, emergency action planning, regulatory permitting construction documents, and construction administration tasks.		
02/25- OnGoing		Dragonfly Pond Dam Breach Work Order 8, Charlotte, North Carolina. <i>DCNR. Civil Engineer.</i> Assisted in drafting Emergency Action Plan reports. Michael Baker prepared an emergency action plan to ensure the dam's safety by addressing any identified deficiencies and implementing necessary improvements. The project included a topographic survey of the dam and its surrounding areas, an updated dam breach analysis, inundation mapping, and cost estimate for rehabilitation and decommissioning.		
10/24- OnGoing		Hinckley Lake Dam Modifications, Hinckley, Ohio. <i>Cleveland Metroparks. Water Resources Engineer.</i> Assisted with preparation of the OMI and EAP reports and maps. Michael Baker is providing engineering services to design modifications for Hinckley Lake Dam to ensure compliance with ODNR Dam Safety Regulations. The dam, in its current configuration, does not have adequate capacity to convey the Probable Maximum Flood design event over the spillway without overtopping the dam. Michael Baker is providing professional services to rehabilitate and modify the dam to meet ODNR regulations. These services include site investigation and assessment, hydrologic and hydraulic analysis, geotechnical analyses and assessment, alternatives evaluation, permitting, and rehabilitation design. During construction, the contractor encountered artesian conditions in the right spillway training wall. Michael Baker's hydraulic and geotechnical engineers were on site within two hours to develop a drainage plan to mitigate this condition.		
10/24- OnGoing		Muskingum Lock and Dam 7, McConnellsville, Ohio. <i>Ohio Department of Natural Resources. Water Resources Engineer.</i> Responsible for preparing Operation, Maintenance, and Inspection (OMI) and Emergency Action Plan (EAP) reports Michael Baker is providing engineering services to design modifications for the Muskingum River Dam Number. Michael Baker was originally selected to serve as the criteria engineer for the design-build delivery of this project. When the design-build team failed to reach agreement with the client, Michael Baker's contract was rescoped to serve as the design engineer. Tasks include hydrology and hydraulics analysis, structural design, geotechnical investigation and analysis, construction documents, emergency action planning, regulatory permitting, and construction administration services.		
06/25- OnGoing		Ryerson Dam Removal Phase 2. <i>DCNR.</i> Ryerson Station Dam is located within Ryerson Station State Park in Richhill Township, Greene County, Pennsylvania. The Dam is approximately 42 feet high and 515 feet long and was constructed in 1960. In 2005, seepage and cracking were observed at the dam, and in response, the reservoir was drained, and the dam was partially breached. Building on the previously submitted design drawings and report from 2017, Michael Baker revised the dam removal design to incorporate the ADA path into the rock buttress. Stability and hydraulic analyses were also updated and incorporated into revised drawings.		





10/22-OnGoing	Shreve Lake Dam Improvements, Shreve, Ohio. <i>Ohio Department of Natural Resources. Water Resources Engineer.</i> Responsible for H&H analysis of the dam and designing the proposed conditions. Michael Baker provided engineering services to design modifications for Hinckley Lake Dam in Shreve, Ohio, to ensure compliance with the client's Dam Safety Regulations. Tasks included study and report verification, hydrology and hydraulics analysis, structural investigation and design, geotechnical investigation and design, construction documents, and construction administration.
01/25- 11/25	Seph Mack Dam Emergency Action Plan (EAP) Update. <i>DCNR. Water Resources Engineer.</i> Assisted in drafting Emergency Action Plan reports. Michael Baker prepared an emergency action plan (EAP) update to ensure the dam's safety by addressing any identified deficiencies and implementing necessary improvements. The project included a topographic survey of the dam and its surrounding areas, an updated dam breach analysis, and inundation mapping. A Hydraulic and Hydrologic model was created to account for updates from the 2019 update to the Pennsylvania Probable Maximum Precipitation (PMP) study.

16. Staff Experience:

Firm employed by		Eustis Engineering, L.L.C.		
Name	Gwendolyn P. Sanders, PE		Years of relevant experience with this employer	33
Title	Engineering Manager		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		Master of Science / 1992 / Engineering Bachelor of Science / 1990 / Civil Engineering		
Active registration number / state / expiration date		PE.0027104 / LA / 9-30-2027		
Year registered	1997	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		As President, Mrs. Sanders will be responsible for the overall services provided by Eustis Engineering.		
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 years of experience specified in the applicable MPR(s).			
09/12 - 02/18	Terrebonne Levee & Conservation District – Morganza to the Gulf of Mexico Hurricane Protection Project, Floodgate Structure at Falgout Canal, Terrebonne Parish, Louisiana (21949): Eustis Engineering developed geotechnical recommendations and analyses to support the design of flood protection at Falgout Canal in Terrebonne Parish, Louisiana. Flood protection consisted of a 195-ft swinging barge floodgate in Falgout Canal and braced walls that extended from the floodgate and tie-in to an earthen levee alignment on the northern and southern sides of Falgout Canal. As engineering manager, Ms. Sanders allocated resources to complete pile load capacity estimates as well as stability (SLOPE/W) and seepage (SEEP/W) analyses for the floodgate and braced walls. She also performed an independent technical review for the most recent phase of the project.			
03/13 - 05/16	St. Mary Levee District – Bayou Chene Flood Protection and Diversion Structure, St. Mary Parish, Louisiana (21838, 22147, 24043.00-.05): Eustis Engineering self-performed the entire field exploration program that involved accessing land, marsh/swamp, and marine areas. The marine operations were performed by two means: a truck-mounted drill rig positioned on a jack-up boat and a skid rig delivered to locations with a small shallow draft elevating boat. Ms. Sanders served as engineering manager during this project. She took a senior role in allocating resources for the completion of our engineering services. She also performed an independent technical review for various aspects of the project.			
03/12 - 04/12	U.S Army Corps of Engineers – Houma Navigational Canal Lock Complex Optimization, Terrebonne and Lafourche Parishes, Louisiana (21757): Ms. Sanders and other members of our staff performed engineering analyses necessary for a reconnaissance level of design including, but not limited to, global stability, pile foundations, temporary retaining structures, and allowable excavation cuts for an earthen lock chamber. For the temporary retaining structure analyses, Ms. Sanders reviewed two-dimensional analyses of a multi-level braced cofferdam and evaluated consolidation settlement and means to accelerate the rate of consolidation settlement in these areas.			
09/09 - 08/11	U.S. Army Corps of Engineers -Periodic Inspection Program (20770, 20781, 20869): Eustis Engineering participated on a team comprising a civil/structural engineer and a geotechnical engineer to perform visual inspections of completed civil works structures. The tasks performed by the team included gathering surveying and instrumentation data for specific features, such as scour survey cross-sections (both hydrographic and overbank data) and profiles, settlement mark readings, joint movement readings, joint alignment readings, and piezometer readings; compiling the field data into the appropriate digital format for use in various software; producing plots and Excel plates from the compiled data; analyzing the field data; and preparing instrumentation evaluation reports that were incorporated into the site report. Sites in Eustis Engineering's evaluations were all located within Louisiana and within the boundaries of the New Orleans District, including the Morganza Control Structure, Leland Bowland Access Bridge, Charenton Floodgate, West Atchafalaya Basin Protection Levee Floodwall, Berwick Floodwall, East Atchafalaya Basin Protection Levee Floodwall, Empire Floodgate, New Duvic Pump Station Floodwall, Grand Liard Pump Station Floodwall, East Calumet Floodgate, West Calumet Floodgate, Golden Meadow Floodgate, and Leeland Bowman Lock. As the project manager, Ms. Sanders reviewed and analyzed the field data and prepared preliminary and final reports to support the USACE's periodic inspection program.			





08/22 – 02/24	U.S. Army Corps of Engineers – Rehabilitation and Testing of the Seepage Relief Wells Along the Mississippi River Levee (24851.00, .01): As program manager for Eustis Engineering's IDIQ with the USACE New Orleans District, Mrs. Sanders oversaw the project schedule and managed monthly billing, status reports, and review of project deliverables. Project deliverables included a site-specific safety plan, work plan, and summary report of the test results. The scope of service included aquifer pump testing for all sites and mechanical and chemical rehabilitation for selected sites, including 40 wells within the Hermitage relief well site, located in Pointe Coupee Parish, Louisiana; 30 wells within the Arbroth relief well site, located in West Baton Rouge Parish, Louisiana; 45 wells within the New Roads relief well site, located in Pointe Coupee Parish, Louisiana, and 63 wells within the Point Pleasant relief well site, located in Iberville Parish, Louisiana. Inspections initially included downhole camera observations for all sites to identify any obstructions, confirm depths of the screened interval, visually inspect scaling present, and measure sediment depth. Mechanical and chemical rehabilitation were only performed for Hermitage and Arbroth wells. Results of all testing along with a discussion of the results and conclusions were also provided in our reports.
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16. Staff Experience:

Firm employed by		Eustis Engineering, L.L.C.		
Name	James J. Hance, P.E.		Years of relevant experience with this employer	22
Title	Engineering Manager		Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		Master of Business Administration / 2011 / Business Administration Master of Science / 2003 / Civil Engineering Bachelor of Science / 1998 / Civil Engineering		
Active registration number / state / expiration date		PE.0031270 / LA / 9-30-2026		
Year registered	2004	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		As senior project manager, Mr. Hance will be responsible for managing a variety of design and construction phase projects; management of staff engineers and development of their skill set; and development of scopes of work.		
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 years of experience specified in the applicable MPR(s).		
09/12 - 02/18	Terrebonne Levee & Conservation District – Morganza to the Gulf of Mexico Hurricane Protection Project, Floodgate Structure at Falgout Canal, Terrebonne Parish, Louisiana (21949): Eustis Engineering developed geotechnical recommendations and analyses to support the design of flood protection at Falgout Canal in Terrebonne Parish, Louisiana. Flood protection consisted of a 195-ft swinging barge floodgate in Falgout Canal and braced walls extending from the floodgate and tie-in to an earthen levee alignment on the northern and southern sides of Falgout Canal. Mr. Hance directed and performed quality control design review of lateral load-deflection analyses of pipe piles planned to support the floodgate structure and adjoining walls. In addition, Mr. Hance reviewed geotechnical evaluations of structures (i.e., swing gates, barge gates, and floodwalls) and levee tie-ins for various project phases. He reviewed data files from the GeoStudio software suite for stability and seepage analyses.			
03/13 - 05/16	St. Mary Levee District – Bayou Chene Flood Protection and Diversion Structure, St. Mary Parish, Louisiana (21838, 22147, 24043.00-.05): Mr. Hance represented Eustis Engineering as the sole geotechnical engineer attending design team meetings of four design firms. He made significant effort with the team on developing an appropriate field exploration program and defining a consistent design criteria document for the design firms to reference. Eustis Engineering self-performed the entire field exploration program involving accessing land, marsh/swamp, and marine areas. The marine operations were performed by two means: a truck-mounted drill rig positioned on a jack-up boat and a skid rig delivered to locations with a small shallow draft elevating boat. Mr. Hance also provided quality control checks and review of SLOPE/W analyses of global stability of the various project features.			
03/12 - 04/12	U.S Army Corps of Engineers – Houma Navigational Canal Lock Complex Optimization, Terrebonne and Lafourche Parishes, Louisiana (21757): As senior project manager for this project, Mr. Hance worked closely with URS to provide reconnaissance level design documentation and examine changes for the 100-year level risk reductions. Global stability and seepage analyses were implemented that included use of GeoStudio's SLOPE/W and SEEP/W computer software.			





16. Staff Experience:

Firm employed by		Eustis Engineering, L.L.C.		
Name	Sean G. Walsh, PE		Years of relevant experience with this employer	14
Title	Engineering Manager		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization		Master of Science / 2010 / Civil Engineering Bachelor of Science / 2007 / Civil Engineering		
Active registration number / state / expiration date		PE.0037905 / LA / 9-30-2027		
Year registered	2013	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		As engineering manager, Mr. Walsh is responsible for personnel resource allocation, the overall engineering schedule, and execution of engineering services. Mr. Walsh also functions as a mentor to the engineering staff.		
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 years of experience specified in the applicable MPR(s).			
09/12 - 02/18	Terrebonne Levee & Conservation District – Morganza to the Gulf of Mexico Hurricane Protection Project, Floodgate Structure at Falgout Canal, Terrebonne Parish, Louisiana (21949): Mr. Walsh served as the geotechnical project engineer, developing axial pile load capacity estimates, stability analyses using SLOPE/W, and seepage analyses for the floodgate and braced walls using SEEP/W. As part of the engineering team, Mr. Walsh performed detailed analyses of soil-structure interaction in accordance with the State of Louisiana, Coastal Protection and Restoration Authority's (CPRA's) Louisiana Flood Protection Design Guidelines (LFPDG). Analyses included downdrag and settlement analyses, settlement-induced bending moments in piles, and 3D modeling of fill and structural load placements to predict time-rate settlements using Settle3. This was a significant project because soil-structure interaction modeling (SSI) using the finite element method (FEM) was performed using SIGMA/W. We used our FEM modeling of flood protection structures to define stresses and deformations. This work provided insight to the CPRA on how FEM can be used for flood protection structures that are not standard flood protection systems (e.g., Hurricane and Storm Damage Risk Reduction System Design Guidelines).			
03/13 - 05/16	St. Mary Levee District – Bayou Chene Flood Protection and Diversion Structure, St. Mary Parish, Louisiana (21838, 22147, 24043.00-.05): As geotechnical project engineer, Mr. Walsh directed the activities associated with an extensive geotechnical field exploration to support the design of the earthen and structural systems used to provide flood protection to the project area. Geotechnical engineering design recommendations were developed for a braced sheetpile floodwall (using CWALSHT), float-in barge gate (using SLOPE/W), earthen levee tie-ins at the floodwall extents (using SLOPE/W and Settle3), dredging design recommendations, levee design and construction recommendations, levee settlement (using Settle3), pile settlement, estimates of allowable axial and lateral pile capacity, and deep-seated and local stability analyses of walls and gates using Spencer's Method within SLOPE/W. Our engineering analyses and recommendations were generally in accordance with the CPRA's LFPDG dated 16 July 2015.			
06/10 - 08/11	National Levee Safety Program – Periodic Levee Inspections, Louisiana (various parishes), U.S. Army Corps of Engineers (USACE), New Orleans District: Mr. Walsh served as a geotechnical engineer and field inspector on multiple USACE Levee Safety Periodic Inspections (PI) across Louisiana, including the Oakville to City Price Levee System (Plaquemines Parish), Melville Ring Levee (Rapides Parish/Atchafalaya Basin), Krotz Springs Ring Levee (St. Landry Parish), Bayou Sale Levee System (St. Mary Parish), and portions of the Morganza Floodway Levee System (Atchafalaya River and adjacent Mississippi River levees). His responsibilities included pre inspection documentation review; geotechnical design criteria evaluation; and field inspections of earthen levees, floodwalls, revetments, pump stations, and levee appurtenances. He conducted assessments of embankment conditions, underseepage potential, settlement, slope stability, and revetment performance; identified deficiencies; and contributed to overall system ratings in accordance with the USACE Levee Safety guidance. He worked as part of a multidisciplinary inspection team (geotechnical, civil, structural, hydraulic, electrical, and geographic information system) supporting flood risk management and public safety for federally authorized levee systems.			





16. Staff Experience:

<i>Firm employed by</i>	Eustis Engineering, L.L.C.		
<i>Name</i>	Jonathan W. Sherwood, P.E.	<i>Years of relevant experience with this employer</i>	1
<i>Title</i>	Project Manager	<i>Years of relevant experience with other employer(s)</i>	8
<i>Degree(s) / Years / Specialization</i>	Bachelor of Science / 2018 / Civil Engineering		
<i>Active registration number / state / expiration date</i>	PE.0046048 / LA / 3-31-28		
<i>Year registered</i>	2021	<i>Discipline</i>	Civil Engineering
<i>Contract role(s) / brief description of responsibilities</i>	As a project manager, Mr. Sherwood will be responsible for directing a team which provides project planning, design, and execution of complex engineering projects.		
<i>Experience dates (mm/yy-mm/yy)</i>	<i>Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).</i>		
09/18 - 03/26	New Orleans to Venice Level of Risk Reduction (LORR) Against Storm Surge Events: Mr. Sherwood took over as the U.S. Army Corps of Engineers (USACE) Mississippi Valley Division (MVD) lead engineer for the current construction and design of the New Orleans to Venice (NOV) Hurricane Storm Damage Risk Reduction System (HSDRRS), which is located in Plaquemines Parish and includes approximately 37 miles of back levees and 29 miles of co-located Mississippi River levees (MRLs) along the west bank of the Mississippi River from St. Jude (approximately 39 miles south of New Orleans), down to the vicinity of Venice, Louisiana (Mississippi River Miles 47.1 to 10.0). As the USACE New Orleans District (MVN) lead geotechnical engineer, Mr. Sherwood provided project design, construction oversight, and technical advice across multiple projects led and designed by multiple districts. Mr. Sherwood's responsibilities included interpreting original design specifications, conducting site-specific evaluations, and coordinating with original designers of record. Mr. Sherwood performed technical designs over multiple projects including, but not limited to, developing axial pile load capacity estimates, pile downdrag analyses, settlement-induced bending moments on pile foundations, stability analyses (SLOPE/W), settlement analyses, preload designs, wick drain designs, levee foundation designs utilizing geotextile reinforcement, and seepage analyses (SEEP/W) for both structural and earthen flood protection features. Responsibilities also included managing geotechnical investigations and design; implementing instrumentation (including settlement and real-time piezometric pressure monitoring) to verify strength gains and settlement at critical locations; and ensuring compliance with USACE standards and federal regulations.		
04/21 - 03/26	Dugas to Celotex Seepage Control Project: Mr. Sherwood served as the geotechnical project engineer for 0.6 mile of levee on the right descending bank of the MRL in Jefferson Parish, adjacent to Mississippi River Mile 100.4. The right-of-way limits extend from baseline Station Nos. 734+00 to 770+00. The land side of the project runs along LA Highway 541. The area had reported consistent seepage as pin boils and water blisters during high river events. The seepage remediation consists of a hydraulic sheetpile cutoff through the core of the levee. The predesign foundation investigation utilized multiple methods such as geophysical testing, undisturbed borings, cone penetration tests (CPTs), and historical observations. The investigation also involved working with the USACE Environmental and Engineering Geophysics (EEG) Community of Practice (CoP) to utilize experts in soil resistivity testing and mapping to develop the limits of the design remediation. SEEP/W models were utilized to design the embedment of the sheetpile cutoff.		
03/19 - 03/26	Principal Geotechnical Engineer for Flood and Hurricane Events: Mr. Sherwood served as the principal geotechnical engineer for high river events in November 2018, February 2019, May 2019, and January 2020, during which he reviewed points of concern along the Mississippi River Flood Control System. The system is made up of earthen levees, floodwalls, gates, locks, spillways, and other hardened water flow control structures. His work included multiple weeks of deployment to conduct daily monitoring and inspections of the Old River Control Structure (ORCS), as well as to monitor instrumentation. Inspection points included areas of erosion, damage, or other conditions affecting the features' foundations that could result in changes to their designed performance. As part of the inspection and reporting effort, Mr. Sherwood utilized the USACE ArcGIS Field Maps application to document locations; take photographs and videos; and capture relevant notes. Throughout the events and at the conclusion, Mr. Sherwood compiled the data into reports for distribution within the USACE and to local levee districts.		



09/21 – 10/24	Principal Geotechnical Engineer for Hurricane Events: Mr. Sherwood served as the principal geotechnical engineer for multiple emergency hurricane events. He performed damage assessments for federal and non-federal levee systems after Hurricane Ida in September 2021. Inspection points included areas of erosion, damage, or other conditions affecting the features' foundations that could result in changes to designed performance. The damage assessment team worked with local and state sponsors to determine damage caused by the hurricane. Mr. Sherwood participated as a field engineer during dewatering operations for Hurricane Ida in Plaquemines Parish. During the dewatering mission, the non-federal levee had engineered cuts placed at chosen points to allow the trapped water to drain. The field engineer monitored the cuts and water levels by airboats daily and reported and documented observations. Mr. Sherwood was part of the bunker team during Hurricane Francine in September 2024 for the USACE, where the team assessed overtopping risk and severity using updated storm surge modeling as the hurricane approached the Louisiana coast. Mr. Sherwood deployed to the USACE Jacksonville District (SAJ) as part of the dewatering team during Hurricane Milton in October 2024. He inspected and provided technical assistance to local government authorities for flood mitigation utilizing temporary dams and pumps. Mr. Sherwood deployed to Ashville, North Carolina, as part of the Hurricane Helene recovery in October 2024, assisting with the mission to help restore potable water distribution to the area. His role included providing quick field assessments to ensure the safe placement and loading of the needed equipment.
09/18 – 03/26	Principal Geotechnical Engineer Performing Technical Review and Quality Control: During his employment with the USACE, Mr. Sherwood served as a national reviewer of Drilling and Invasive Program Plans (DIPPs) for the USACE Risk Management Center (RMC), which focuses primarily on the review of vertical drilling and Horizontal Directional Drilling (HDD) under or within federal flood control infrastructure, such as dams and levees. He served as the primary reviewer for the USACE MVN, handling technically complex permits involving HDD beneath the Mississippi River and its flood control system, as well as Section 408 permits involving work on or over flood control. He also acted as a mentor and advisor to engineers and geologists within the USACE MVN and other districts on the technical aspects of HDD installations and best practices. Mr. Sherwood performed Agency Technical Reviews (ATRs) and District Quality Control (DQC) reviews of technical analyses, reports, and manuals for USACE MVD projects throughout the design process to ensure compliance with USACE standards. He was the reviewer for over 1,000 work request permits to ensure proposed work did not negatively impact federal and non-federal levee systems, and he assisted in training junior engineers to perform this task.

16. Staff Experience:

Firm employed by		Forte & Tablada, Inc.		
Name	Trenton Iglehart		Years of relevant experience with this employer	2.5
Title	Senior CAD Technician		Years of relevant experience with other employer(s)	23
Degree(s) / Years / Specialization			N/A	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Senior CAD Technician	
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 years of experience specified in the applicable MPR(s).		
02/26-03/26		H.015047 – Three Mile Lake / Two O’Clock Bayou Survey - <i>Hydrographic Technician</i> for this project that included a full topographic survey with aerial LiDAR flights over the the Darbonne Bayou levee and roadway corridor between Two O’Clock Bayou and Three Mile Lake.		
01/26-01/26		H.015040 Anacoco LWI Dam Survey - <i>Hydrographic Technician</i> for this project that included aerial LiDAR flights, terrestrial laser scanning and a multibeam bathymetric survey of the Anacoco Lake Dam and Spillway.		
01/26-01/26		H.015041 – Vernon LWI Dam Survey - <i>Hydrographic Technician</i> for this project that included aerial LiDAR flights, terrestrial laser scanning of the Vernon Lake Dam and Spillway.		
12/25-12/25		H.015044 – Bundick LWI Dam Survey- <i>Hydrographic Technician</i> for this project that included aerial LiDAR flights, terrestrial laser scanning and a multibeam bathymetric survey of the Bundick Lake Dam.		
06/23-08/23		LA DOTD Underwater Acoustic Imaging - LA 14 Over Delcambre Canal Hydrographic Survey, Iberia Parish, LA - <i>Technician</i> for the area around the LA-14 Bridge over Delcambre Canal. The work included typical cross-sections, and water bottom features below waterline were collected using multi-beam and single beam sonar equipment. Terrestrial LiDAR was used to capture the above water surface.		
09/22-12/22		LaDOTD IDIQ Contract for Hydrographic Surveying Services, Statewide, LA (4400019715) - <i>Senior CAD Technician</i> for Hydrographic bridge surveys at scheduled intervals upstream and downstream for 11 sites throughout the southern districts.		
10/14 – 07/17		IDIQ-Vicksburg & Memphis CORPS of Engineers Districts - Contract No. W912EE-14-D-0002- Various Levee Item surveys, River Revetment Hydrographic surveys and Flood Structure surveys – <i>Senior CAD Technician/Hydrographic Technician</i> for the review, editing, data compilation, and then submitting the project to the Vicksburg District in the required formats. Services under this contract included Topographic, Hydrographic Surveys, Structure Inspection and Evaluation I&E Monitoring Surveys, Geodetic Control Surveys, and Boundary Surveys on over 44 task orders.		
2003-2006		A-E Services for Surveying support services for the Construction Division within the Vicksburg District, U.S. Army Corps of Engineers – <i>CAD Technician/Hydrographic Technician</i> for the review, editing, data compilation, and then submitting the project to the Vicksburg District in the required formats. Services under this contract included Topographic and Hydrographic Surveys. Construction surveying services were performed under 63 delivery orders. Most of these task orders included layout and alignment surveys performed during all phases of construction associated with levees, drainage canals and ditches, breakwaters, foreshore protections, dikes, groins, embankments, and maintenance of navigation channels.		
2006-2009		IDIQ – A&E Contract for Surveying Support Services for the Vicksburg CORPS of Engineers District - Contract No. W912EE-05-D-0003 – <i>CAD Technician/Hydrographic Technician</i> for the review, editing, data compilation, and then submitting the project to the Vicksburg District in the required formats. Services under this contract included Topographic, Hydrographic Surveys, Structure Inspection and Evaluation I&E Monitoring Surveys, Geodetic Control Surveys, and Boundary Surveys on 32 task orders.		

2009-2011	IDIQ – A&E Contract for Surveying Support Services for the Vicksburg CORPS of Engineers District - Contract No. W912EE-07-D-0004– <i>Senior CAD Technician/Hydrographic Technician</i> for the review, editing, data compilation, and then submitting the project to the Vicksburg District in the required formats. Services under this contract included Topographic, Hydrographic Surveys, Structure Inspection and Evaluation I&E Monitoring Surveys, Geodetic Control Surveys, and Boundary Surveys on 26 task orders.
09/23	H.015047 Three Mile Lake Flood Reduction– <i>Senior CAD Technician/Hydrographic Task Manager</i> for field data collection and processing for all Hydrographic survey data. Field data processing and drafting for topographic surveys. This project consisted of Bathymetric cross sections, the survey of the weir and 3d terrestrial laser scans of 4 bridges surrounding 3 Mile Lake.
07/17-07/22	H.010885 LA 91 Bayou Plaquemine Brule Bridge Replacement Acadia Parish (4400010586) – <i>Senior CAD Technician/Hydrographic Task Manager</i> for field data collection and processing for all Hydrographic survey data. Field data processing and drafting for topographic surveys. This project consisted of 0.25 miles of roadway/bridge topographic survey and 500' upstream & downstream bathymetric cross sections for Bridge Replacement.
01/12-12/12	Massman Construction/ N.O. COE – IHNC Lake Borgne Surge Protection Barrier, LA – Primary tasks – Field hydrographic surveys for closure structures, floodgate seals and rock placement, and data processing and mapping of all survey data.
01/11-12/11	Rhodia Chemicals, Baton Rouge, LA – Dock surveys for dock rehabilitation and rock placement for scour protection. Primary tasks – Field topographic and hydrographic surveys, data processing and mapping of all survey data.
01/05-12/11	Spectra Energy Corp., Statewide, LA – River crossing monitor surveys Including: The Mississippi River, Atchafalaya River, Calcasieu River, Brazos River, Neches River, Breton Sound, Tiger Pass and Grand Pass. Primary tasks included Field topographic and hydrographic surveys, data processing and mapping of all topographic, hydrographic and magnetometer survey data.
09/13 – 04/14	H.002375: LA DOTD – Amite River Bridge near French Settlement – Route LA 16 – Livingston Parish – <i>Senior CAD Technician/Hydrographic Task Manager</i> for field data collection and processing for all Hydrographic survey data. Field data processing and drafting for topographic surveys. 3D terrestrial laser scanning and modeling for bridge substructures. This project was for constructing a new bridge over Amite River in French Settlement Louisiana to the replace the existing swing bridge.
2009 - 2010	British Petroleum Docking Facility – GIWW- Port Allen – <i>Senior CAD Technician/Hydrographic Technician</i> Field topographic and hydrographic surveys, data processing and mapping of all survey data. Before and after maintenance dredging operation.
03/24 – 04/24	H.015935 LA Hwy 47 Over Bayou Bienvenue – Emergency Bridge Replacement, St. Bernard/Orleans Parish, LA – <i>Hydrographic Task Manager</i> for Topographic surveying for an emergency bridge replacement of the LA 47 bridge over Bayou Bienvenue. Due to the emergency status of the project, the project was completed in a condensed timeline.
2001-2004	A-E Surveying Services in Support of District Wide Construction Operations Contract No. DACW29-01-D-0004 New Orleans District, U.S. Army Corps of Engineers – <i>Survey Crew Chief/CAD Technician/Hydrographic Technician</i> Topographic and Hydrographic pre, during and post construction surveying services in support of 50+ task orders issued under this contract.
1999-2001	A-E Services for Hydrographic, Topographic, Geodetic, Property, Boundary and Construction Surveys within the Jacksonville District COE Contract No. DACW– <i>Instrument Technician/Hydrographic Technician</i> performed work under 21 task orders which have included topographic, planimetric, large scale conventional and automated hydrographic, cadastral/boundary, real property, right-of-way, construction/route alignment and layout, dredged quantity measurements/payment, channel condition, tidal demarcation, beach nourishment, horizontal and vertical geodetic control along the Atlantic and Gulf Coast of Florida.
2011	Louisiana Department of Natural Resources/Office of Costal Protection and Restoration-Violet Canal Surveying Support of Maintenance Dredging (PO-01) Allen – <i>Senior CAD Technician/Hydrographic Technician</i> Field topographic and hydrographic surveys, data processing and mapping of all survey data. Before and after maintenance dredging operation.

SECTION 17

FIRM EXPERIENCE

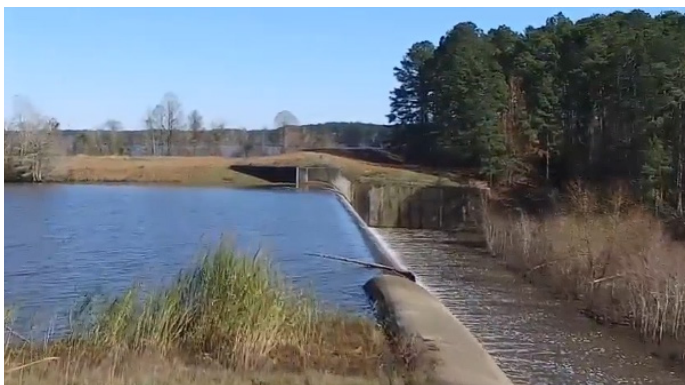


17. Firm Experience:

<i>Firm name</i>	Michael Baker International, Inc.		<i>Past Performance Evaluation Discipline(s) *</i>	Other (Dams and Spillways), Environmental, Geotech
<i>Project name</i>	Anacocco Creek Watershed Improvements Upper and Lower		<i>Firm responsibility (prime or sub?)</i>	Prime
<i>Project number</i>	H.015040, H.015041	<i>Owner's Name</i>	Louisiana Department of Transportation and Development	
<i>Project location</i>	Vernon Parish, LA	<i>Owner's Project Manager</i>	Lillie Carpenter, PE	
<i>Owner's address, phone, email</i>		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV		
<i>Services commenced by this firm (mm/yy)</i>		09/22	<i>Total consultant contract cost (\$1,000's)</i>	\$442
<i>Services completed by this firm (mm/yy)</i>		12/24	<i>Cost of consultant services provided by this firm (\$1,000's)</i>	\$433

Michael Baker provided engineering and modeling services for the Louisiana Watershed Initiative/State Projects Program (LWI-SPP) Group 1 Projects. The project was launched in 2018 and introduced a watershed-based approach to reducing flood risk in Louisiana. Michael Baker collected existing watershed datasets, models, and studies, for the Upper and Lower Anacoco Creek Watershed which contains two reservoirs, Vernon Lake and Anacoco Lake. Under this contract Michael Baker first performed an on-site inspection of both dams as well as reviewed past inspection reports. Our team then developed a Potential Failure Mode Analysis (PFMA) and Semi Quantitative Risk Analysis (SQRA), performed H&H Modeling and Engineering evaluations, site inspections, and prepared a Conceptual Design Report. Michael Baker leveraged the Lower Sabine HUC8 model that it developed for LWI Region 4 as the basis for the watersheds hydraulic model. Michael Baker developed five potential probable maximum precipitation events in the watershed and selected the highest intensity storm.

All simulations were computed three times to test effects on Upper Anacoco dam, Lower Anacoco dam, and both dams. Upper Anacoco dam is classified as a high hazard dam and Lower Anacoco dam is classified as a low hazard dam. Michael Baker verified that these classifications are correctly assigned for present day conditions. Several improvement alternatives were analyzed through the H&H models to gauge the effectiveness of each. Michael Baker's collection of watershed datasets, models and studies included the following deliverables: hydrological and hydraulic (H&H) modeling data, LiDAR and survey data, detailed preliminary engineering report, cost estimates, and benefit-cost analysis. Michael Baker studied the two reservoirs in series within the watershed and proposed potential structural and non-structural alternatives to reduce flooding and mitigate failure risk for both.



PROJECT SIMILARITIES

- ✓ Dam and Outlet Works Inspection
- ✓ H&H Modeling
- ✓ Preliminary Engineering Report
- ✓ Analysis for Dam Safety
- ✓ SQRA / PFMA

PROJECT TEAM MEMBERS

- ✓ L.R. "Eric" Erikson, PE
- ✓ Mujahid Chandoo, PE
- ✓ Justin West, PE
- ✓ Achutam Baral, PE
- ✓ Afaq Durrani, EI
- ✓ Joe Hlebicki, PE
- ✓ Andrew Durkin, PE
- ✓ John Laux
- ✓ Pete Nix, PE
- ✓ Joe Troxell, PE
- ✓ Haley Stevens, EI

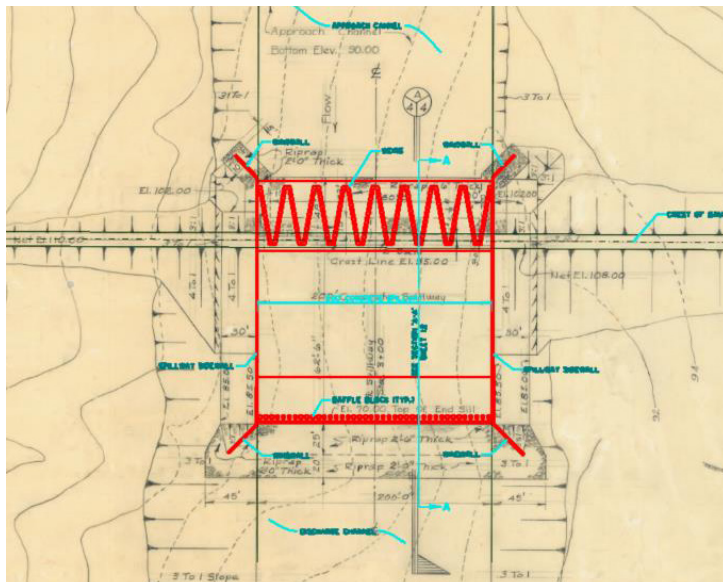
17. Firm Experience:

Firm name	Michael Baker International, Inc.		Past Performance Evaluation Discipline(s)*	Other (Dams and Spillways), Environmental, Geotech
Project name	Bundick Lake Flood Surge Management Project		Firm responsibility (prime or sub?)	Prime
Project number	H.015044	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Beauregard Parish, LA	Owner's Project Manager	Lillie Carpenter, PE	
Owner's address, phone, email		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV		
Services commenced by this firm (mm/yy)		10/22	Total consultant contract cost (\$1,000's)	\$257
Services completed by this firm (mm/yy)		12/24	Cost of consultant services provided by this firm (\$1,000's)	\$253

Michael Baker provided on-site dam and outlet works inspection, hydrologic and hydraulic modeling, geotechnical and structural analyses, alternative evaluation, and conceptual design, relative to Bundick Lake Dam located in Beauregard Parish, Louisiana. Bundick Lake Dam was constructed in 1963 and serves a watershed encompassing 418 square miles. Through an in-depth hydrologic and hydraulic analysis procedure, recommendations for improvements to the dam and spillway to reduce/mitigate recurrent flooding and reduce the risk of catastrophic failure was provided.

Modification to the dam, spillway, and outlet structures were model tested utilizing the latest technology in 2D unsteady hydraulic modeling procedures for a range of storms from the 50-year storm up to the Full Probable Maximum Flood (PMF). In addition to the hydrologic and hydraulic analysis, a Probable Failure Mode Analysis and a Semi-Quantitative Risk Assessment was performed to identify high-risk areas of the dams and tailor improvements to mitigate these.

Dam Break analysis was conducted to determine downstream effects and flood inundation areas and the timing of a dam breach for the existing dam infrastructure as well as any proposed alternatives. Additional Stages of the project will include Environmental Evaluation and Permitting, Final Design, and Construction. Environmental permitting will be by "Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities" as described in 24 CFR part 58.



PROJECT SIMILARITIES

- ✓ Dam and Outlet Works Inspection
- ✓ H&H Modeling
- ✓ Preliminary Engineering Report
- ✓ Analysis for Dam Safety
- ✓ SQRA / PFMA

PROJECT TEAM MEMBERS

- ✓ L.R. "Eric" Erikson, PE
- ✓ Mujahid Chandoo, PE
- ✓ Justin West, PE
- ✓ Achutam Baral, PE
- ✓ Afaq Durrani, El
- ✓ Joe Hlebicki, PE
- ✓ Andrew Durkin, PE
- ✓ John Laux
- ✓ Pete Nix, PE
- ✓ Joe Troxell, PE
- ✓ Haley Stevens, El
- ✓ Erika Rodgers, PE
- ✓ Don Gregor, PE

17. Firm Experience:

Firm name	Michael Baker International, Inc.		Discipline(s)*		Other (Dams and Spillways), Environmental, Geotech
Project name	LWI –SPP Group 1: Three Mile Lake-Flood Reduction Project		Firm responsibility (prime or sub?)		Prime
Project number	N/A	Owner’s Name		Louisiana Department of Transportation and Development	
Project location		Owner's Project Manager		Lillie Carpenter, PE	
Owner's address, phone, email		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV			
Services commenced by this firm (mm/yy)		07/23	Total consultant contract cost (\$1,000’s)		\$778
Services completed by this firm (mm/yy)		OnGoing	Cost of consultant services provided by this firm (\$1,000’s)		\$340

Michael Baker is providing engineering and modeling services for the Louisiana Department of Transportation and Development through the Louisiana Watershed Initiative State Projects program for the Three Mile Lake Flood Reduction Project. The project was launched in 2018 and introduced a watershed-based approach to reducing flood risk in Louisiana.

The primary goal of the project is to address concerns of flooding from the residents of the Three Mile Lake area. The main concern from residents in the Three Mile Lake project area is the flood risk during parts of the year where water levels are elevated by rain events, or changes in flow conditions from nearby flood control structures, which results in a rise in water surface elevation in the Atchafalaya River, Mississippi River, and their associated floodways. An elevated water surface elevation in the Atchafalaya River floodway creates a backflow of water into Henderson Swamp which migrates north through 2 O'clock Bayou into Three Mile Lake.

The specific objectives were performed and carried out in a list of consecutive tasks:

Task 1.1: Involved comprehensive background research, document verification, and site inspections, laying the foundation for the subsequent stages. This task also includes all project management activities throughout the course of the project.

Task 1.2: Was to provide a Data Gap Analysis which is used to understand what data would need to be attained to successfully evaluate the Three Mile Watershed. Consultant will review all available data including gage data, precipitation data, flood control operation data, LiDAR data, pictures, news articles, and previous correspondence from lake residents.

Task 1.3: Involves a topographic and bathymetric survey, where the subconsultant will perform select topographic surveys based on available information. This information will include culvert elevations, roadway elevations, water cross sections, bridge surveys, and limited lake bathymetry.

Task 1.4: Entails Hydrologic and Hydraulic Modeling (H&H), following Louisiana Watershed Initiative Guidance, involving the development of models using HEC-RAS for the flood alternative evaluations with a concentration on reducing or eliminating the backwater effects on Three Mile Lake from high water elevations in the Atchafalaya floodway.

Task 1.5: Concludes the scope with the preparation of a Conceptual Design Report which will summarize all the tasks above including flood reduction alternative evaluation, identification of environmental impacts, and permitting requirements.



PROJECT SIMILARITIES

- ✓ Data collection
- ✓ Survey
- ✓ H&H Modeling
- ✓ Alternative Analysis
- ✓ Flood reduction
- ✓ Benefit Cost Analysis
- ✓ Conceptual Design

PROJECT TEAM MEMBERS

- ✓ L.R. "Eric" Erikson, PE
- ✓ Justin West, PE
- ✓ Achutam Baral, PE
- ✓ Afaq Durrani, EI

17. Firm Experience:

Firm name	Michael Baker International, Inc.		Past Performance Evaluation Discipline(s) *	Other (Dams and Spillways)
Project name	Peer Review of Multiple Dam and Spillway Improvement Preliminary Engineering Reports		Firm responsibility (prime or sub?)	Prime
Project number	Varies	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Varies	Owner's Project Manager	Lillie Carpenter, PE	
Owner's address, phone, email		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV		
Services commenced by this firm (mm/yy)		12/23	Total consultant contract cost (\$1,000's)	\$55
Services completed by this firm (mm/yy)		12/24	Cost of consultant services provided by this firm (\$1,000's)	\$55

Michael Baker was contracted with DOTD to perform cursory reviews of the preliminary and final deliverables of Hydrologic and Hydraulic Modeling, Alternative Evaluation, Conceptual Designs, and cost estimates relative to:

Project No. H.015042 – Bayou Cocodrie Structure Modification

- Also known as Cocodrie Lake Dam originally completed in 1959 and supports recreation and water management, with a high hazard potential classification and a condition rating historically reported as “fair” in DOTD/NID summaries.
- Runoff Retention and Critical Infrastructure Improvement.

Project No. H.015043 – Black Bayou Dam Structure Hardening and Runoff Retention

- An earthen embankment dam as part of the Black Lake-Clear Lake system, originally constructed to support water level control for ecological, recreational, and flood management purposes.

Project No. H.015045 – Caney Lake Flood Control Surge Management PER

- A man-made impoundment managed for flood control, recreation, and water level regulation, with a surge management component.

Project No. H.015046 – Iatt Lake Drawdown Improvements

- This project is a dam/spillway improvement focused on improving drawdown functionality and flood management reliability to manage vegetation and lake health.

Project No. H.015048 – Turkey Creek Infrastructure Hardening

- Earthen dam originally constructed in 1953 including a spillway and gated outlet works.
- Retention improvements and critical infrastructure hardening, driven by flood risk concerns and aging infrastructure.

Michael Baker provided reviews of preliminary and final reports, H&H models (HEC-HMS, HEC RAS, and HEC-FIA), alternative analysis, structural details, and cost estimates for each project listed above. MBI reviewed the provided documents and data files, offered comments, & backcheck review comment responses from consultant. MBI also participated in coordination meetings with DOTD and their consultant as needed or requested.



PROJECT SIMILARITIES

- ✓ Hydrologic and Hydraulic Modeling
- ✓ Alternative Evaluation
- ✓ Conceptual Designs
- ✓ Cost Estimates

PROJECT TEAM MEMBERS

- ✓ Eric Erikson, PE
- ✓ Justin West, PE

17. Firm Experience:

<i>Firm name</i>	Michael Baker International, Inc.		<i>Past Performance Evaluation Discipline(s) *</i>	Data Collection; Geotech; Survey; Environmental; Other (Dams and Spillways)
<i>Project name</i>	Rehabilitation of 10 Pennsylvania Dams		<i>Firm responsibility (prime or sub?)</i>	Prime
<i>Project number</i>	N/A	<i>Owner's Name</i>	Pennsylvania Department of General Services/PA Fish and Boat Commission	
<i>Project location</i>	Various Locations, Pennsylvania	<i>Owner's Project Manager</i>	Bryan Anthony	
<i>Owner's address, phone, email</i>		1800 Herr Street, Harrisburg PA 17103, (717) 787-5616, branthony@pa.gov		
<i>Services commenced by this firm (mm/yy)</i>		01/09	<i>Total consultant contract cost (\$1,000's)</i>	\$4,500
<i>Services completed by this firm (mm/yy)</i>		Ongoing	<i>Cost of consultant services provided by this firm (\$1,000's)</i>	\$3,500

Michael Baker is responsible for bringing ten dams owned by the Pennsylvania Fish and Boat Commission (PFBC) into compliance with the current PADEP regulations. These projects included an initial inspection of the dams to assess the conditions of the embankments, spillways, and outlet works. Hydrology and hydraulic evaluations, geotechnical investigations, and structural assessments were conducted for each of the dams. The dams were divided into two groups, the first group of five dams completed from 2009 through 2021.

Of the five dams, four were earthen dams and required overtopping protection to pass flood events, while the fifth dam was concrete and required post-tensioned rock anchors to stabilize the dam. Overtopping protection was provided through the use of Articulated Concrete Blocks (ACB) or Roller Compacted Concrete (RCC) depending on the depth of overtopping. Three of the earthen dams required the replacement of the spillways based on the results of the structural assessment and geotechnical investigations. Improvements to the seepage collection systems and replacement of outlet works, including slip lining, installation of new gates and stoplogs, and concrete repairs and replacements were incorporated for all of the dams.

Michael Baker held joint review meetings with PADEP, PADGS, and the owner PFBC which achieved buy-in during the design process and expedited the review and approval process. Michael Baker developed construction documents for each of the dams, two of which are completed, and three others are currently in construction. Michael Baker provided construction oversight for each project to ensure that the construction is conducted in accordance with the drawings and specifications.

The second group of five dams is being completed from 2021 through 2025. The deficiencies for these dams include inadequate spillway capacity, seepage and inadequate drainage systems, concrete deterioration, and outlet works deficiencies.

One challenge was inadequate spillway capacity at multiple projects with limited construction budget. Michael Baker developed or is developing site specific solutions to address spillway capacity while maintaining pool levels, downstream impacts, and the construction budget. The solutions include labyrinth spillways, overtopping protection, embankment raises, and a combination of solutions.



PROJECT SIMILARITIES

- ✓ High Hazard Dam Rehabilitations
- ✓ Geotechnical Investigation
- ✓ Survey and Mapping
- ✓ Hydrologic and Hydraulic Analysis
- ✓ Spillway Capacity Improvements
- ✓ Embankment Improvements
- ✓ Concrete Repairs and Replacement
- ✓ Permitting
- ✓ Construction Administration

PROJECT TEAM MEMBERS

- ✓ Don Green, PE
- ✓ Don Gregor, PE
- ✓ Erika Rodgers, PE
- ✓ Joe Hlebiczk, PE
- ✓ Pete Nix, PE
- ✓ Fereshteh Noorbakhsh, PE
- ✓ John Laux
- ✓ Andrew Durkin, PE

17. Firm Experience:

Firm name	Eustis Engineering, L.L.C	Past Performance Evaluation Discipline(s) *	Geotech
Project name	Bayou Chene Flood Protection and Diversion Structure		Firm responsibility (prime or sub?) Sub
Project number	Eustis Engineering Project Nos. 22147, 21838, 24043.00-.05	Owner's Name	St. Mary Levee District Through CB&I
Project location	St. Mary Parish, Louisiana	Owner's Project Manager	Jeffery Pena
Owner's address, phone, email	197 Elysian Drive, Houma, LA, 70363 / 985-868-3434 / Jeffery.pena@cbi.com		
Services commenced by this firm (mm/yy)	03/13	Total consultant contract cost (\$1,000's)	Unknown
Services completed by this firm (mm/yy)	12/21	Cost of consultant services provided by this firm (\$1,000's)	\$980

Eustis Engineering performed an extensive geotechnical exploration to support the design of earthen and structural systems that would collectively be used to provide flood protection to the project area. St. Mary Parish planned to phase the entire project into four construction contracts. Phase 1 was dredging and material placement along the south bank of Bayou Chene and Tabor Canal. Phases 2 and 3 were the construction of the Bayou Chene floodgate and adjacent floodwalls. Phase 4 comprised earthen levee embankment construction along Avoca Road and Avoca Island.

Our field explorations in 2012 and 2013 comprised 74 soil borings (both 3 and 5-in. diameter), 38 cone penetration tests, and 32 auger borings to assess subsoil stratification at the project site. Soil mechanics laboratory tests were performed in our in-house laboratory to evaluate the physical properties of the substrata.

Eustis Engineering developed preliminary design recommendations for this project in 2012 and 2013 in accordance with the U.S. Army Corps of Engineers' Hurricane and Storm Damage Risk Reduction Design Guidelines. Since completing the geotechnical explorations, a new set of geotechnical guidelines was issued by the State of Louisiana, Coastal Protection and Restoration Authority entitled Louisiana Flood Protection Design Guidelines. Therefore, engineering analyses associated with this project reflect both design guidelines.

The focus of Phase 1 was to dredge the Bayou Chene channel bottom and excavate the side slopes of Bayou Chene. Material was placed along the south bank of Bayou Chene and west bank of Tabor Canal to serve as a bridge lift for a future levee section. To establish acceptable design slopes and dimensions near dredge locations (for Phase 4), Eustis Engineering performed analyses with earthen levees adjacent to slopes to determine necessary setbacks between the cut slopes and earthen levees. Engineering analyses concentrated on settlement and levee overbuild estimates, deep seated global stability analyses, and construction recommendations. The focus of Phases 2 and 3 were design and construction of a barge flood gate, adjoining braced "Plumb & Batter" steel sheetpile floodwalls within Bayou Chene, and a tidal control structure within Tabor Canal. We performed deep seated global stability analyses for the floodgate structure; seepage and piping analyses; estimates of axial pile load capacities; and horizontal soil reaction as well as lateral pile deflection relationships.

Phase 4 comprised earthen levee embankment construction along Avoca Road and Avoca Island. The project is currently in Phase 4B. For this portion, Eustis Engineering sampled the bridge lift material (33 hand borings taken through the bridge lift, each to a depth of 4 feet), tested the soil in our laboratory (visual classification, natural water content, percent organics, particle size distribution, and Atterberg limits determinations), and developed new estimates of potential levee settlement based on the current, expedited construction schedule. Engineering During Construction efforts included project submittal and RFI reviews along with development and execution of a dynamic pile test program to substantiate the use of 2.5 as the foundation design safety factor.

Eustis Engineering utilized GeoStudio software (SLOPE/W, SEEP/W, etc.) to perform the stability and seepage analyses for this project. Gwen Sanders, P.E. served as the Principal for this project. James Hance, P.E. was the Project Manager on several phases and performed analyses and reviews. Sean Walsh, P.E. was the Project Engineer for these projects responsible for analyses using GeoStudio and other software.

PROJECT SIMILARITIES

- ✓ Flood Risk Infrastructure
- ✓ Louisiana-Specific design and regulatory criteria
- ✓ Subsurface Exploration
- ✓ Inspection across multiple asset types
- ✓ Engineering During Construction Support
- ✓ Technical Oversight

PROJECT TEAM MEMBERS

- ✓ Gwen Sanders, PE
- ✓ James Hance, PE
- ✓ Sean Walsh, PE



17. Firm Experience:

Firm name	Eustis Engineering, L.L.C.	Past Performance Evaluation Discipline(s) *	Geotech
Project name	Houma Navigational Canal Lock Complex Optimization		Firm responsibility (prime or sub?) Sub
Project number	Eustis Engineering Project No. 21757	Owner's Name	USACE Through URS Corporation
Project location	Terrebonne & Lafourche Parishes, Louisiana	Owner's Project Manager	Barry Fehl
Owner's address, phone, email	1001 Highlands Plaza Drive West, St. Louis, MO 63310 / 314-743-4147 / barry_fehl@urs.com		
Services commenced by this firm (mm/yy)	03/12	Total consultant contract cost (\$1,000's)	Unknown
Services completed by this firm (mm/yy)	04/12	Cost of consultant services provided by this firm (\$1,000's)	\$21

Eustis Engineering was part of the AECOM/URS Corporation team for this project. Together, URS and Eustis Engineering provided (1) reconnaissance level engineering and design, and (2) preparation of a value engineering study Appendix to the Post Authorization Change report (including preparation of plans, performance of reconnaissance level geotechnical analyses, preparation of reconnaissance level quantity estimates, and a reconnaissance level design documentation). The purpose of the project was to examine changes for the 100-year level risk reductions and a sill level of -23 to the existing Houma Navigation Canal lock complex as detailed in the 50% plans and specifications developed by URS in 2008. The geotechnical stability reconnaissance level design, of the levees into the channel to determine T-wall lengths, would be performed for both 35 and 100-year levels of risk reduction. The temporary retaining structural reconnaissance level would be performed for both a sill elevation of -18 and -23.

For Eustis Engineering specifically, our geotechnical design documentation would be prepared in accordance with the U.S. Army Corps of Engineers' ER-1110-2-1150, Engineering and Design for Civil Works Projects (31 August 1999). Eustis Engineering would perform analyses necessary for a reconnaissance level of design including, but not limited to, global stability (using GeoStudio's SLOPE/W software), pile foundations, temporary retaining structures, and allowable excavation cuts for an earthen lock chamber. Data used to perform these analyses were provided from previous USACE data and multiple investigations performed by Eustis Engineering between 1999 and 2002. To evaluate the earthen lock chamber side slopes, Eustis Engineering's personnel considered the prior geotechnical studies when evaluating a suitable slope configuration. For the temporary retaining structure analyses, Eustis Engineering performed two-dimensional analyses of a multi-level braced cofferdam. Eustis Engineering evaluated consolidation settlement and means to accelerate the rate of consolidation settlement in these areas. James J. Hance, P.E., was the project manager and Gwendolyn P. Sanders, P.E., performed internal reviews of the data reports.

PROJECT SIMILARITIES

- ✓ Dam & Flood-Risk Infrastructure
- ✓ Assessment of Existing Infrastructure under revised risk and performance criteria
- ✓ Reconnaissance-level evaluation to support decision-making and prioritization
- ✓ USACE Dam Safety and Design Guidance
- ✓ Geotechnical Stability
- ✓ Seepage Analysis

PROJECT TEAM MEMBERS

- ✓ James Hance, PE
- ✓ Gwendolyn Sanders, PE



17. Firm Experience:

Firm name	Eustis Engineering, L.L.C.	Past Performance Evaluation Discipline(s) *	Geotech
Project name	Floodgate Structure at Falgout Canal		Firm responsibility (prime or sub?)
Project number	Eustis Engineering Project Nos. 21948.00-.04, 21949, 23689	Owner's Name	Terrebonne Levee & Conservation District Through GIS Engineering, L.L.C.
Project location	Terrebonne Parish, Louisiana	Owner's Project Manager	Dustin Malbrough
Owner's address, phone, email	2503 Petroleum Drive, Houma, LA 70363 / 985-219-1000 / dustinm@gisy.com		
Services commenced by this firm (mm/yy)	09/12	Total consultant contract cost (\$1,000's)	Unknown
Services completed by this firm (mm/yy)	02/19	Cost of consultant services provided by this firm (\$1,000's)	\$717

Eustis Engineering L.L.C. developed geotechnical recommendations and analyses to support the design of flood protection at Falgout Canal in Terrebonne Parish, Louisiana. Flood protection consisted of a 195 ft swinging barge floodgate in Falgout Canal and braced walls that extended from the floodgate and tie-in to an earthen levee alignment on the northern and southern sides of Falgout Canal. A borrow canal would be constructed on the floodside of the earthen levee alignment, and the borrow material obtained from this canal would be used as fill for constructing the earthen levees. Our geotechnical exploration supplemented data from existing borings and cone penetration tests performed by FFEB JV, L.L.C. (of which Eustis Engineering was a member) with nine new soil borings. The soil borings were accessed with one of our drill rigs mounted on a marsh cargo buggy or a barge.

We provided axial pile load capacity estimates, stability analyses, and seepage analyses for the floodgate and braced walls. Stability analyses and settlement analyses were performed for the two levee tie-ins. These stability and seepage analyses were performed using GeoStudio's SLOPE/W and SEEP/W software. We performed detailed analyses of soil-structure interaction in accordance with the Coastal Protection and Restoration Authority's (CPRA's) Louisiana Flood Protection Design Guidelines. Our analyses included downdrag and settlement analyses, numerical modeling using the Finite Element Method (FEM), settlement induced bending moments in piles, and 3D modeling of fill and structural load placements for predictions of time-rate settlements. We used our FEM modeling of flood protection structures to define stresses and deformations. This numerical modeling is rarely provided in practice, typically only on massive design-build projects that involve value engineering. James J. Hance, P.E., and Sean G. Walsh, P.E., presented the results of Eustis Engineering's findings to the CPRA in May 2015. The findings were also presented with members of Eustis Engineering, the CPRA, and CB&I at the ASCE-ACI Fall Technical Conference in New Orleans in September 2015. After our initial exploration was completed, we were asked to perform additional analyses to provide access to equipment and material during construction. A boat shed and a temporary bridge crossing a drainage canal would be built. Our analyses included estimates of allowable load capacity for various sizes of timber piles and square, prestressed, precast concrete piles. Our analyses also addressed settlement estimates due to structural loads, levee construction, and fill placement. We later completed engineering services associated with instrumentation services for the levee and floodwall tie-ins. The geotechnical instrumentation was used to assess the response of the foundation soils to the earthen preloading. The assessment included monitoring the rates and magnitudes of consolidation settlement and dissipation of excess pore pressures due to the earthen preload program to verify/modify the design.



PROJECT SIMILARITIES

- ✓ Flood-Risk Infrastructure
- ✓ Stability Evaluations
- ✓ Seepage/Piping Risk Analysis
- ✓ Foundation and pile capacity
- ✓ Geotechnical Modeling
- ✓ Stakeholder Coordination

PROJECT TEAM MEMBERS

- ✓ James Hance, PE
- ✓ Sean Walsh, PE



17. Firm Experience:

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s) *	Survey
Project name	Anacoco LWI Dam Survey		Firm responsibility (prime or sub?)	Sub
Project number	H.015040	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Vernon Parish, LA	Owner's Project Manager	Lillie Carpenter, PE	
Owner's address, phone, email		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV		
Services commenced by this firm (mm/yy)		01/26	Total consultant contract cost (\$1,000's)	\$21.5
Services completed by this firm (mm/yy)		01/26	Cost of consultant services provided by this firm (\$1,000's)	\$21.5

Forte & Tablada provided professional surveying services for LADOTD State Project H.015040.1, Task Order No. 8, associated with the Anacoco Lake Dam and Spillway, located in Vernon Parish, Louisiana. Project control was established and referenced to Louisiana State Plane North coordinates (NAD83 [2011]) with vertical control on NAVD88 (GeoID 2018).

Aerial LiDAR flights were performed for the full length of the dam and spillway. Terrestrial laser scanning was conducted at the open channel spillway, including channel guide walls and baffles above the water surface, with scan coverage extending 25 feet beyond each structure where site conditions permitted. Terrestrial laser scanning was also performed for the drawdown pipe and drawdown outflow structure to the natural ground transition.

A multibeam bathymetric survey was completed within a 200-foot by 200-foot area surrounding the drawdown pipe, including the adjacent dam embankment and extending 50 feet beyond the toe along the length of the embankment. A pipe crawler ROV video inspection survey of the drawdown outflow pipe was performed from the downstream side. Spillway outflow basin bottom data were collected where water conditions allowed.



PROJECT SIMILARITIES

- ✓ Survey for State-Regulated Dam and Spillway
- ✓ Establishment of Inspection-Grade Horizontal and Vertical Control
- ✓ Aerial LiDAR Mapping
- ✓ High-Resolution Terrestrial Laser Scanning of critical structures
- ✓ Integration of Surface and Structural Survey Methods
- ✓ Underwater and Inaccessible Features

PROJECT TEAM MEMBERS

- ✓ Brad Holleman, PLS, PE
- ✓ Trenton Iglehart



17. Firm Experience:

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s) *	Survey
Project name	Vernon LWI Dam Survey		Firm responsibility (prime or sub?)	Sub
Project number	H.015041	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Vernon Parish, LA	Owner's Project Manager	Lillie Carpenter, PE	
Owner's address, phone, email		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV		
Services commenced by this firm (mm/yy)		01/26	Total consultant contract cost (\$1,000's)	\$17
Services completed by this firm (mm/yy)		01/26	Cost of consultant services provided by this firm (\$1,000's)	\$17

Forte & Tablada provided surveying services for LADOTD State Project H.015041.1, Task Order No. 8, supporting inspection and evaluation of the Vernon Lake Dam and Spillway located in Vernon Parish, Louisiana. Survey control was established and referenced to Louisiana State Plane North coordinates (NAD83 [2011]) with vertical control on NAVD88 (Geoid 2018).

Aerial LiDAR flights were conducted for the full length of the dam and spillway. Terrestrial laser scanning was performed at the open channel spillway, including channel guide walls and baffles above the water surface, with coverage extending 25 feet beyond each structure. Spillway outflow basin bottom data were collected where flow conditions allowed.

Conventional elevation cross sections were performed along the spillway outflow basin.

PROJECT SIMILARITIES

- ✓ Survey for State-Regulated Dam and Spillway
- ✓ Establishment of Inspection-Grade Horizontal and Vertical Control
- ✓ Aerial LiDAR Mapping
- ✓ High-Resolution Terrestrial Laser Scanning of critical structures
- ✓ Integration of Surface and Structural Survey Methods
- ✓ Underwater and Inaccessible Features

PROJECT TEAM MEMBERS

- ✓ Brad Holleman, PLS, PE
- ✓ Trenton Iglehart



17. Firm Experience:

Firm name	Forte and Tablada, Inc.		Past Performance Evaluation Discipline(s)*	Survey
Project name	Bundick LWI Dam Survey		Firm responsibility (prime or sub?)	Sub
Project number	H.015044	Owner's Name	Louisiana Department of Transportation and Development	
Project location	Vernon Parish, LA	Owner's Project Manager	Lillie Carpenter, PE	
Owner's address, phone, email		1201 Capitol Access Rd. Baton Rouge, LA 70802 (225) 379-3022 Lillie.Carpenter@LA.GOV		
Services commenced by this firm (mm/yy)		12/25	Total consultant contract cost (\$1,000's)	\$23.8
Services completed by this firm (mm/yy)		12/25	Cost of consultant services provided by this firm (\$1,000's)	\$23.8

A Forte & Tablada provided surveying services for LADOTD State Project H.015044, Task Order No. 9, supporting the Bundick Lake Dam inspection and evaluation program. The project is located in Beauregard Parish, Louisiana. Project control was established and tied to Louisiana State Plane South coordinates (NAD83 [2011]) with vertical control on NAVD88 (Geoid 2018).

Aerial LiDAR flights were performed for the full length of the dam and spillway. Terrestrial laser scanning was conducted for the open channel spillway, channel guide walls, and baffles above the water surface, extending 25 feet beyond structures where site and flow conditions permitted. Terrestrial laser scanning was also completed for the drawdown pipe and drawdown outflow structure to natural ground.

A multibeam bathymetric survey was performed around the upstream spillway area, surrounding dam embankment, and extending 50 feet beyond the toe along the length of the embankment. Conventional survey cross sections were collected downstream of the spillway and along approximately 600 feet of Bundick Creek. A pipe crawler ROV video inspection survey of the drawdown outflow pipe was also completed.

PROJECT SIMILARITIES

- ✓ Survey for State-Regulated Dam and Spillway
- ✓ Establishment of Inspection-Grade Horizontal and Vertical Control
- ✓ Aerial LiDAR Mapping
- ✓ High-Resolution Terrestrial Laser Scanning of critical structures
- ✓ Integration of Surface and Structural Survey Methods
- ✓ Underwater and Inaccessible Features

PROJECT TEAM MEMBERS

- ✓ Brad Holleman, PLS, PE
- ✓ Trenton Iglehart



SECTION 18

APPROACH & METHODOLOGY



APPROACH AND METHODOLOGY

PROJECT UNDERSTANDING

Michael Baker fully understands that this contract is a five-year, statewide Indefinite Delivery/Indefinite Quantity (IDIQ) program supporting DOTD Statewide Dam Inspections. Work will be authorized through individual task orders and will require rapid response, consistent quality, and the ability to manage multiple concurrent assignments across several districts. The scope extends well beyond routine inspections and includes the full spectrum of dam safety services such as:

- ✓ Periodic and special dam and spillway inspections
- ✓ Hazard classification and dam safety evaluations
- ✓ Breach and inundation analyses
- ✓ Emergency Action Plan (EAP) development and updates
- ✓ Hydrologic and Hydraulic (H&H) modeling
- ✓ Geotechnical and structural evaluations
- ✓ Underwater and specialty inspections
- ✓ Engineering analysis, rehabilitation design, and construction support

Michael Baker's approach is designed to support DOTD as a long-term program partner, providing consistent staffing, standardized processes, and scalable resources that **ensure regulatory compliance, public safety, and efficient delivery throughout the life of the contract.**

FIRM OVERVIEW

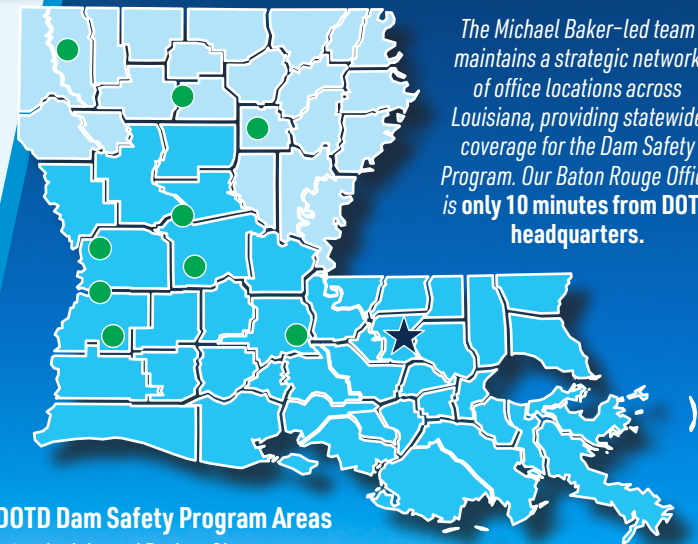
Michael Baker has been providing complete engineering services to municipalities and county governments since 1940. We have grown to become an **international firm with over 6,000 employees** providing services in civil engineering, geographic information technology, environmental services, transportation, and architecture. Our civil engineers are not only infrastructure experts, as DOTD has come to know us, but are also **dam subject-matter experts.**

Michael Baker has **provided dam rehabilitation, inspection, and assessment engineering services for over 50 years**, partnering with dam owners nationwide to deliver comprehensive dam safety solutions. We are **currently ranked No. 7 in the Engineering News-Record for work on Dams and Reservoirs**, indicating our commitment and experience with dam safety projects. **Our Dams Department** consists of engineers and supporting staff who work solely on dam projects across the nation.

From **decades of experience working with DOTD**, Michael Baker has extensive knowledge and understanding of the planning and project requirements that are integral to the successful execution of services from scientific and technical analysis, concept through design stages, regulatory permitting, bidding, and construction. **Our partnerships with Forte and Tablada and Eustis Engineering, strengthens our team.** Our entire team has longstanding relationships with DOTD and each other, ensuring that we understand the Department's mission, values, and needs for this Statewide Dam Inspection IDIQ. Improvements are durable, maintainable, and aligned with TxDOT standards.

PAST PERFORMANCE AND CURRENT WORKLOAD WITH DOTD

Our team has intimate, end-to-end knowledge of **Anacoco Dam, Vernon Dam, Bundick Dam, and Three Mile Lake**, where we have performed formal inspections, hydrologic and hydraulic (H&H) modeling, engineering analyses, and prepared construction plans and specifications for infrastructure and dam-related improvements. This depth of involvement has provided Michael Baker with a strong understanding of DOTD expectations, regulatory considerations, and constructability challenges. Our current workload allows us to readily accept additional assignments, and our familiarity with DOTD personnel and processes enables rapid mobilization with minimal startup time.



The Michael Baker-led team maintains a strategic network of office locations across Louisiana, providing statewide coverage for the Dam Safety Program. Our Baton Rouge Office is only 10 minutes from DOTD headquarters.

DOTD Dam Safety Program Areas

- Anticipated Project Sites
- Previous Experience (Dams, Spillways, EAPs, H&H modeling, Design, etc.)
- ★ Michael Baker Team Offices



We have provided peer review and technical advisory support for DOTD-serviced facilities, including review of H&H analyses for **Black Bayou Dam (pictured above), Bayou Cocodrie Dam, Caney Creek Dam, Iatt Lake Dam, and Turkey Creek Dam**, broadening our familiarity with dam conditions and analytical approaches across Louisiana.

PROGRAM-LEVEL DELIVERY APPROACH

Michael Baker executes statewide dam safety IDIQ contracts using a program-based delivery model, rather than a series of disconnected inspections. This model emphasizes early planning, efficient deployment of resources, proactive communication, and disciplined quality control. Our approach is organized into **five integrated phases**:

1. **Task Order Initiation and Pre-Inspection Planning**
2. **Field Inspection and Data Collection**
3. **Engineering Evaluation and Analysis**
4. **Reporting, Review, and Regulatory Support**
5. **Corrective Action Tracking and Ongoing Program Management**

This repeatable framework allows Michael Baker to deliver consistent results while maintaining flexibility to accommodate DOTD priorities, emergency needs, and accelerated schedules.

1 TASK ORDER INITIATION AND PRE-INSPECTION PLANNING

Upon receipt of a task order notice to proceed, Michael Baker initiates a structured pre-inspection planning process to maximize efficiency and minimize field risk. Key activities include:

Kickoff Coordination: Internal kickoff meeting and coordination call with DOTD to confirm scope, priorities, schedules, reporting requirements, and points of contact.

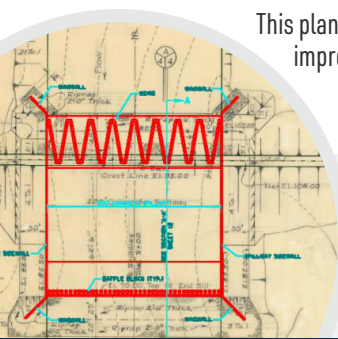
Data Compilation and Review: Collection and review of available information, including National Inventory of Dams (NID) data sheets, prior inspection reports, as-built drawings, EAPs, inundation maps, and historical performance data.

GIS and Desktop Analysis: Use of GIS tools and available datasets to identify drainage areas, access routes, site constraints, and data gaps requiring field verification.

Geographic Grouping: Grouping dams by geographic proximity to reduce travel time, improve schedule efficiency, and minimize overall program costs.

Owner and Stakeholder Notification: Coordination with DOTD to issue formal notifications to dam owners and operators in advance of inspections, ensuring site access and availability of records.

This planning-driven approach allows field teams to **arrive on site fully informed**, improving safety, data quality, and inspection efficiency.



Michael Baker has established strong working relationships with DOTD district engineers as well as with Dam Safety Program leadership, including **Billy Williamson, P.E., Dam Safety Program Manager**, and **Tim Harper, P.E., State Dam Safety Engineer**. We are currently working with DOTD on the redesign of the Bundick Lake Spillway (pictured above and left), developing a higher-capacity, labyrinth-style spillway to improve hydraulic performance, reduce flooding, and improve overall dam safety. This innovative solution represents **the first of its kind** implemented for a state-owned dam in Louisiana, demonstrating our ability to collaborate with DOTD to deliver **forward-thinking, technically advanced solutions tailored to the State's evolving dam safety needs**.

FIELD INSPECTION AND DATA COLLECTION

Michael Baker deploys qualified, multi-disciplinary inspection teams **tailored to the size, complexity, and hazard classification of each dam**. Each team includes experienced dam safety professionals supported by senior technical oversight. Field inspection activities include:

- Visual inspections of embankments, spillways, outlet works, appurtenant structures, and downstream conditions
- Identification and documentation of distress, deterioration, seepage, erosion, or structural anomalies
- Developing condition ratings in the field to use in risk assessments and priority rankings. Michael Baker has used this approach on other projects to expedite schedules and quickly identify issues that require immediate attention.
- Comparison of observed conditions against previous findings to identify trends or risks
- Use of standardized checklists ensuring consistency with DOTD and regulatory requirements
- Documentation using field notes, annotated sketches, and **georeferenced digital photos**
- Deployment of specialty personnel or equipment (e.g., survey, underwater inspection, geotechnical exploration) as required by site conditions

Michael Baker maintains sufficient staffing to support **multiple concurrent inspection teams**, allowing DOTD to issue overlapping task orders without delay.

3 ENGINEERING EVALUATION AND ANALYSIS

In addition to inspections, Michael Baker **provides the full range of engineering services** anticipated under this IDIQ contract. These services are **integrated seamlessly** into the inspection program when required by findings or task order scope. Our Capabilities include:

Breach and Inundation Analysis: Development of dam breach models and inundation mapping using industry-standard tools (e.g., HEC-RAS), supporting hazard classification and emergency planning. Michael Baker has experience creating **2D hydraulic modeling** to better approximate dam breach scenarios and delineate inundation limits if a development of a more accurate inundation mapping is required. Complex spillway geometries, like the labyrinth spillway with two stages and converging chute walls, may be analyzed using **3D computational fluid dynamic (CFD) modeling** to better understand discharge capacity, flow regimes, necessary wall heights to contain design events, and even inundation limits. **Open source CFD modeling, like OpenFOAM**, provides an accurate and cost-effective solution when complex modeling of spillways and floodplains is required.

Emergency Action Plans: Preparation and update of EAPs in coordination with dam owners, emergency management agencies, and DOTD. **Over the last four years, Michael Baker has developed more than 40 EAPs in several different states.** Michael Baker can provide support to dam owners in EAP development, maintenance, exercise, and implementation to promote emergency preparedness and assist in the training of personnel and demonstrate operational capability.

Hydrologic and Hydraulic Analysis: Evaluation of spillway capacity, watershed characteristics, and hydraulic performance under current regulatory criteria. From our past experiences, the H&H and routing analyses are critical for evaluating deficiencies relating to spillway capacity and embankment overtopping. In addition, the routing analyses are used to establish critical design elevations for the embankment and spillway stability analyses. Michael Baker anticipates performing a new comprehensive H&H analysis for each structure as part of preliminary design, but we will thoroughly review any existing H&H analyses and reports.

Geotechnical and Structural Evaluation: Assessment of embankment stability, foundation conditions, seepage, and structural performance of concrete and mechanical components. Michael Baker has conducted numerous seepage investigations to develop designs to address seepage through either enhanced cutoffs or improving the seepage collection capabilities of the dam.

Underwater and Specialty Inspections: Occasionally, a problem may be occurring underwater that is not visible without the assistance of underwater inspections or the **use of sonar technology**. Michael Baker will provide coordination and execution of **underwater surveys, dive inspections, and remote assessments** as required.

Michael Baker's team of licensed Professional Engineer divers and technicians have performed over 2,500 NBIS Underwater Inspections.



Michael Baker can supplement the design survey with a **bathymetric survey using dual-frequency echoes** to detect and map layering within the beds of ponds, lakes, streams, rivers, and estuaries. The harder the target or strata, the harder and more resolute the sonar's echo is to the transducer. The technology can be used to three dimensionally locate, map, and compute the depth of the water body and lakebed sediment. This technology is of most importance when establishing a dredging plan.

Michael Baker has been successfully providing **aerial mapping and LiDAR services** for over two decades. We use **Unmanned Aerial Vehicles (UAVs)** to facilitate structural and site inspections for dams with limited access. Michael Baker has also invested in UAV mapping and surveying technologies. With our fleet of **unmanned aerial systems (UAS)**, Michael Baker provides innovative, cost-effective approaches that complement traditional manned-aircraft acquisitions or ground-based surveys. With many professional-grade UAS vehicles, multiple aircraft can be operated simultaneously at one location to provide same-time, precise, aerial solutions for large areas.

Rehabilitation and Design Support: Michael Baker can provide **engineering analysis, design, and construction phase services** to support corrective actions and dam improvements. One issue that arises with dam owners with a portfolio of dam projects is prioritizing repairs and improvements across the portfolio. This prioritization can be impacted by many factors, including hazard classification, severity of the distress, and costs. Michael Baker can help **prioritize capital improvement funds** so that they get the most 'bang for the buck' from their dam repair budgets.

These services allow DOTD to **address identified deficiencies efficiently without procuring separate contracts**.

4 REPORTING, REVIEW, AND REGULATORY COORDINATION

Michael Baker employs a structured, quality-driven reporting process that emphasizes clarity, traceability, and alignment with DOTD expectations. Our reporting process includes:

- Preparation of draft reports summarizing inspection findings, analyses, and recommendations
- Internal technical and QA/QC reviews prior to submission
- Incorporation of DOTD comments and participation in review meetings as requested
- Final report submission in DOTD-approved formats

Michael Baker emphasizes clarity, consistency, and traceability to ensure reports are usable by DOTD staff, dam owners, and regulators.

QUALITY ASSURANCE, RISK MANAGEMENT, AND SAFETY

Quality and safety are embedded throughout Michael Baker's approach.

Quality Assurance / Quality Control

- Formal QA/QC procedures with defined review milestones
- Senior engineer oversight for all inspection and engineering deliverables
- Standardized checklists and templates to ensure consistency
- Continuous improvement through lessons learned and post-task reviews

Risk Management

- Early identification of risks related to access, weather, safety, and data limitations
- Proactive mitigation strategies incorporated into schedules and work plans
- Flexibility to adjust staffing and sequencing as conditions change

Safety

- Compliance with Michael Baker's corporate safety program
- Field personnel trained in site safety, hazard recognition, and emergency procedures

SPRING LAKE DAM RECEIVES ACEC MISSISSIPPI ENGINEERING EXCELLENCE HONOR AWARD 2023

The project consisted of the reconstruction of an 800-linear-foot earthen dam in the Vancleave community in northern Jackson County. The reconstruction created a dam with 1,500 linear feet of new roadway across the crest of the dam. The project included significant excavation and grading activities to construct the downstream slope of the dam.



Michael Baker provided field surveys, environmental permitting, preliminary and final roadway, and box culvert design; hydraulics and hydrology; maps and deeds; construction administration and inspection services; and quality control/quality assurance for the Spring Lake Dam reconstruction.

5 CORRECTIVE ACTION TRACKING AND PROGRAM MANAGEMENT

Michael Baker supports DOTD's long-term dam safety objectives through structured corrective action management.

- Maintenance of a **living corrective action inventory** tracking findings, priorities, and status
- Coordination with DOTD on follow-up inspections and engineering services
- Support for **prioritization and programming of rehabilitation** efforts

This program-level perspective ensures inspection results **translate into meaningful risk reduction over time**.

STAFFING, CAPACITY, AND AVAILABILITY

Michael Baker has assembled a team of engineers, inspectors, and technical specialists with extensive dam safety experience and the capacity to support DOTD statewide.

- Ability to support **multiple simultaneous task orders**
- Senior technical leadership **available throughout the contract**
- Readiness to **initiate work immediately** upon task order authorization

Our staffing plan ensures continuity, responsiveness, and consistent quality throughout the life of the IDIQ contract. Dam safety services under this IDIQ will require DOTD to manage multiple concurrent task orders while maintaining the ability to respond quickly to **time-sensitive and emergency dam conditions**. Michael Baker's **program-based delivery model** and dedicated dam safety teams are structured to provide this responsiveness without compromising quality, safety, or regulatory compliance.

Michael Baker maintains **multiple staffed dam inspection and engineering teams** capable of working simultaneously across districts. This structure allows DOTD to issue overlapping task orders—for routine inspections, special inspections, and engineering evaluations—without resource

conflicts or startup delays. Staffing and workload distribution are actively managed at the program level to ensure continuity and rapid mobilization as priorities shift.

When urgent or emergency conditions arise—such as post-storm assessments, seepage observations, spillway performance concerns, or suspected instability—Michael Baker can **immediately mobilize experienced personnel**. Our Louisiana-based staff, supported by national dam safety resources, enable **rapid on-site inspections, expedited engineering assessments, and timely technical recommendations**, coordinated directly with DOTD Dam Safety staff and district personnel.

Because inspection, engineering analysis, Emergency Action Plan support, and rehabilitation planning are delivered **within a single integrated team**, Michael Baker can transition seamlessly from emergency inspection to engineering evaluation, breach or inundation analysis, and corrective action development. Standardized procedures and disciplined QA/QC processes ensure deliverables remain consistent and defensible—even under accelerated schedules.

Through this IDIQ, Michael Baker provides DOTD with **scalable capacity and operational resilience**, supporting multiple simultaneous task orders while delivering a rapid, technically sound response to dam-related emergencies that protects public safety and advances long-term risk reduction statewide.

SCHEDULE

The creation of schedules will depend on the scope, complexity, and time expectations set by DOTD during the initial scoping meeting. Schedules will incorporate all previously defined project delivery milestones, along with a minimum review period of 2–3 weeks by DOTD. Below you'll find an example task order schedule developed for a medium-sized project, excluding any review time for DOTD deliverables. Construction support will be provided for the duration of the contractor's construction schedule.

Tasks	Duration	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
Annual Planning Session with Dam Safety Staff (Repeats Annually)	1 Day													
Determine Dams to be Inspected this year (Repeats Annually)	1 Day													
Develop Monthly Inspection Schedule for Entire Year (Repeats Annually)	1 Week													
Pre-Inspection coordination with DOTD Dam Safety, Districts and Owners	2 Weeks													
Monthly Dam Inspection	4 Weeks													
Submit Draft Inspection reports to DOTD	1 Week													
Finalize Dam Inspection Reports	2 Weeks													
Provide Copy of Dam Inspection Reports to Dam Owner	1 Week													
Provide Monthly Progress Report to Dam Safety at End of Each Month	1 Week													

SECTION 19

WORKLOAD



19. Workload:

<i>Firm(s)</i> ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	<i>Past Performance Evaluation Discipline(s)</i>	<i>Contract Number and State Project Number</i>	<i>Project Name</i>	<i>Remaining Unpaid Balance **</i>
Michael Baker International, Inc.	Road	Contract No. 4400021519	US 371: KCS RR Overpasses HBI	\$40,000
	Bridge	S.P. No. H.012030.5 F.A.P. No. H012030		
	Road	Contract No. 4400021519	US 371: KCS RR Overpasses HBI and US 371: ICG RR Overpass – Supplemental No. 3	\$66,164
	Bridge	S.P. No. H.012030.5 and S.P. No. H.016471.5		
	Road	Contract No. 4400025026	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, Supplemental Agreement No. 1	\$54,350
	Bridge	S.P. No. H.015338 F.A.P. No. H015338		
	Road	Contract No. 4400019379	LA 30: EBR PL-I-10	\$310,000
	Bridge	S.P. No. H.013797		
	Environmental	F.A.P. No. H013797		
	Road	Contract No. 4400019379	LA 30: EBR PL-I-10 SA#1	\$110,650
	Environmental	S.P. No. H.013797 F.A.P. No. H013797		
	Road	Contract No. 4400019379	LA 30: EBR PL-I-10 SA#2	\$52,225
	Environmental	S.P. No. H.013797 F.A.P. No. H013797		
	Environmental	Contract No. 4400005484 S.P. No. H.005168 F.A.P. No. DE-9208 (500)	NORG EIS, New Orleans, Louisiana	\$189,351
	Environmental	Contract No. 4400005484 S.P. No. H.005168	NORG – Avondale PEL Study, New Orleans, Louisiana Supplemental Agreement	\$264,655
	Other (Water)	Contract No. 4400017092 Task Order No. 5	HUC8 Specific Hydrologic and Hydraulic Modeling for All HUC8s in the Contracted Region LWI Region 6 – Task Order #5	\$179,640
	Other (Water)	Contract No. 4400023101 Task Order No. 5 S.P. No. H.015047.2 F.A.P. No. H015047	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Three Mile Lake Flood Reduction	\$71,011

Michael Baker International, Inc.	Other (Water)	Contract No. 4400023101 Task Order No. 6 S.P. No. H.015040.2 and H.015041.2 F.A.P. No. H015040 and H015041	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Anacoco Creek Watershed Improve Lower and Upper	\$83,020
	Other (Water)	Contract No. 4400023101 Task Order No. 7 S.P. No. H.015044.2 F.A.P. No. H015044	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Bundick Lake Flood Surcharge Management	\$55,126
	Other (Water)	Contract No. 4400023101 Task Order No. 8 S.P. No. H.015040.2 and H.015041.2 F.A.P. No. H015040 and H015041	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Anacoco Creek Watershed Upper & Lower	\$559,143
	Other (Water)	Contract No. 4400023101 Task Order No. 9 S.P. No. H.015044.2 F.A.P. No. H015044	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Bundick Lake Flood Surcharge Management	\$1,066,579
	Other (Water)	Contract No. 4400023101 Task Order No. 10 S.P. No. H. 015047.5 F.A.P. No. H015047	IDIQ Contract For Louisiana Watershed Initiative/State Projects Program (LWI-SPP) – Group 1 Three Mile Lake Flood Reduction	\$38,000
	CE&I/OV	Contract No. 4400025536 Task Order No. 3 S.P. No. H.013458 F.A.P. No. H013458	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Manchac Acres & HH Wilson Rd Bridges	\$20,758
	CE&I/OV	Contract No. 4400025536 Task Order No. 5 S.P. No. H.012057 F.A.P. No. H012057	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 431: Villar Canal and Drainage Bridges	\$459,473
	CE&I/OV	Contract No. 4400025536 Task Order No. 8 S.P. No. H.015944 F.A.P. No. H015944	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 3125: LA 70 – LA 3213	\$82,537
	CE&I/OV	Contract No. 4400025536 Task Order No. 10 S.P. No. H.014088.6 F.A.P. No. H.014088	IDIQ Contract for Construction Engineering and Inspection Services in District 61, US 61: INT. Improvements at LA 427	\$479,006
	CE&I/OV	Contract No. 4400025536 Task Order No. 11 S.P. No. H.015440.6 F.A.P. No. H.015440	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 69: 0.5 MI N of LA 404 – LA 1	\$314,364

Michael Baker International, Inc.	CE&I/OV	Contract No. 4400025536 Task Order No. 12 S.P. No. H.014993.6 F.A.P. No. H.014993	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Lemon Rd Over Drainage Bayou	\$161,641
	CE&I/OV	Contract No. 4400024660 Task Order No. 2 H.014415.6 S.P. No. H.014415.6	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 LA 352 Drainage Improvement	\$189,157
	CE&I/OV	Contract No. 4400024660 Task Order No. 3 H.009629.6 S.P. No. H009629.6	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 US 90 RR-Pinhook_ LA 92-LA 88	\$154,558
	CE&I/OV	Contract No. 4400024660 Task Order No. 4 S.P. No. H.005967.6 F.A.P. H005967	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 Nelson Rd Ext & Bridge	\$135,187
	CE&I/OV	Contract No. 4400024660 Task Order No. 5 S.P. No. H.012174.6 F.A.P. H012174	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 03 I-10: JEFF DAV PL-I-49(OGFC/SLAB REPAIR)	\$914,769
	CE&I/OV	Contract No. 4400031142 S.P. No. H.010155.6 F.A.P. H010155	US 90 Railroad Overpass SE of LA 85 (CE&I) Route: US 90, Iberia Parish, LA	\$2,856,346
	CE&I/OV	Contract No. 4400031953 S.P. No. H.012587.6 F.A.P. H012587	I-10: W End of BR 290 - W End of LA 415 (CE&I)	\$217,470
Forte and Tablada, Inc.	Survey	4400021594/H.011965.6	Task Order No. 2 - IWGO Bridge Rehabilitation (Drone Flyover)	\$47,688
	Bridge	4400021594/H.009859.5	Task Order No. 6 - Load Rate Selected Statewide Bridges	\$903,945
	Bridge	4400021594/H.009730.5	Task Order No. 8 - In-Depth Bridge Inspections	\$117,677
	Bridge	4400021594/H.015546.6	Task Order No. 9 - Caplis Sligo Road Over Red Chute Bayou	\$5,244
	Bridge	4400021594/H.009859.5	Task Order No. 10 - Statewide Bridge Rating	\$890,877
	Bridge	4400023921/H.015519.6	Task Order No. 5 - Smith Road over Red Chute Bayou	\$9,024
	Bridge	4400024589/H.014990.5	OSBR S. Tiger Bend Rd & East Achord Rd Bridges	\$41,837
	Bridge	4400013387/H.013137.5	OSBR Ouachita	\$23,249
	Bridge	4400019864/H.014318.5	OSBR Gurney Road Bridges	\$4,708
	Bridge	4400025037/H.014994.5	OSBR Bonne Idee Rd over Bonne Bayou	\$3,487
	Bridge	4400024586/H.014981.5	OSBR Hosston River Road	\$5,689
	Road	4400024641/H.005734.5	LA 447 Corridor	\$50,843

Forte and Tablada, Inc.	CE&I/OV	4400023837/H.013714.6	Valhi Blvd Shared-Use Path (Houma)	\$99,071
	Survey	4400021974/H.016401.5	I-10: I-55 & US 51 Intch Ltg. (LaPlace)	\$63,337
	Survey	4400021532/H.010116.5	LA 1088: Soult & Trinity Roundabouts	\$22,187
	Survey	4400021532/H.012059.5	LA 19: Bridges near Zachary	\$19,490
	Survey	4400021532/H.013195.5	LA 98 Curve Realignment	\$6,464
	Survey	4400021532/H.005734.5	LA 447 Corridor Study	\$109,275
	Survey	4400021532/H.012563.5	LA 73: Bayou Manchac Bridge (HBI)	\$461
	Survey	4400027919/H.015587.5	LA 3211 @ Yokley Rd Roundabout	\$14,063
	Survey	4400021532/H.004100.5	I-10: LA 415 to Essen on I-10 & I-12	\$102,019
	Survey	4400031906/H.004791.6	LA 23: Belle Chasse Bridge & Tunnel (HBI)	\$246,518
	Survey	4400030630/H.015724.5	Kings Hwy: Healthcare & Dev Corridor	\$60,278
	Survey	4400025029/H.015341	D61(EBR) IJJA Off-System Bridge	\$53,978
	Survey	4400025029/H.015341	D61(EBR) IJJA Off-System Bridge - SA 3	\$9,113
	Survey	H.004100	I-10 Capital Corridor	\$5,760
	Survey	4400004128/H.004273.5	I-49 Connector Additional ROW	\$6,692
	Survey	4400031228/H.015469.5	Shreveport Pavement Program	\$44,235
Eustis Engineering, L.L.C.	CE&I/OV	DOTD S.P./Task Order No. H.015028.6. Boh Bros. Subcontract No. 23210-009. Boh Bros. Project No. 2321034. Work Order No. 23210-017	Louisiana, State of - Department of Transportation and Development, LA 302: Bayou Barataria Bridge Replacement, Phase 1, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24515.02 (Construction materials testing services and vibration monitoring)	\$15,000
	Geotech	DOTD S.P No. H.015028.6. Contract No. 4400024654, Task Order 1	Louisiana, State of - Department of Transportation and Development, IDIQ Contract for Geotechnical Services Statewide, LA Highway 302: Bayou Barataria Bridge Replacement, Phase 1, Jefferson Parish, Louisiana. S.P. No. H.015028.6. F.A.P. No. H015028. Contract No. 4400024654. Task Order No. 1, Eustis Engineering Project No. 24515.04	\$51,000
	CE&I/OV	LADOTD Contract No. 4400021740. S.P. No. H.004100.6. F.A.P. No. H004100. 11265001.000 I-10 CMAR	Louisiana, State of - Department of Transportation and Development, Roosevelt Boulevard, Intersection of West Napoleon Avenue to Intersection of West Metairie Avenue, Kenner (Jefferson Parish), Louisiana. Prime Contract No. 4400031036. S.P. No. H015120. F.A.P. No. H015120. Digital Engineering Project No. 25R00002.000, Eustis Engineering Project No. 25500	\$5,000
	CE&I/OV	Louisiana. S.P. No. H.012867.6. F.A.P. No. H012867	Louisiana, State of - Department of Transportation and Development, Urban System Project, South Larriviere Road, LA Highway 92 to Chemin Metairie Parkway, Youngsville (Lafayette Parish), Louisiana. S.P. No. H.012867.6. F.A.P. No. H012867, Eustis Engineering Project No. B0822	\$1,000

SECTION 20

CERTIFICATIONS / LICENSES



20. Certifications/Licenses:

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

Based on our review and understanding of the RFQ for the LADOTD Dam Inspection IDIQ, no specific certifications or licenses are identified as being required for submission under this solicitation. Accordingly, none are listed at this time. Should the Louisiana Department of Transportation and Development (DOTD) require any certifications or licenses not expressly included in the advertisement, we are prepared to provide the requested information promptly upon request.

Secretary of State Registration- Michael Baker International, Inc.

Name	Type	City	Status
MICHAEL BAKER INTERNATIONAL, INC.	Business Corporation (Non-Louisiana)	PITTSBURGH	Active

Previous Names

MICHAEL BAKER, JR., INC. (Changed: 7/6/2015)

Business: MICHAEL BAKER INTERNATIONAL, INC.

Charter Number: 30035020F

Registration Date: 12/29/1972

Secretary of State Registration- Eustis Engineering, L.L.C.

Name	Type	City	Status
EUSTIS ENGINEERING L.L.C.	Limited Liability Company	METAIRIE	Active

Previous Names

EUSTIS ENGINEERING SERVICES, L.L.C. (Changed: 3/31/2016)

Business: EUSTIS ENGINEERING L.L.C.

Charter Number: 36251453K

Registration Date: 8/17/2006

Secretary of State Registration- Forte and Tablada

Name	Type	City	Status
FORTE AND TABLADA, INC.	Business Corporation	BATON ROUGE	Active

Previous Names

Business: FORTE AND TABLADA, INC.

Charter Number: 25306090D

Registration Date: 2/8/1961

SECTIONS 21-23

QA/QC PLAN | SUB-CONSULTANT INFORMATION | LOCATION



21. QA/QC Plan

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

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 (Name must match <u>exactly</u> as registered with Louisiana's Secretary of State (SOS): <u>including punctuation</u>, <u>include screenshot(s) from SOS at the end of Section 20</u>)	Address	Point of Contact and email address	Phone Number
Forte and Tablada, Inc.	9107 Interline Avenue Baton Rouge, LA 70809	Bradley S. Holleman, PLS, PE bholleman@forteandtablada.com	225-927-9321
Eustis Engineering L.L.C.	3011 28th Street Metairie, Louisiana 70002	Gwendolyn P. Sanders, PE	504-834-0157

23. Location:

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