110 James Drive West
Suite 135
St. Rose, LA 70087

PELICAN MARINE DESIGN
Naval Architects & Marine Engineers

February 8, 2024

Louisiana Department of Transportation and Development
Consultant Contracts Services
Electronic Submission to: DOTDConsultantAds80@la.gov

RE: Contract No. 4400028122 NEW FERRY BOAT - PLAQUEMINES, STATEWIDE

Dear Selection Committee Members:

Pelican Marine Design, LLC (PMD) is pleased to submit our qualifications to LADOTD to provide Naval Architecture and Marine Engineering Services for the design for a new ferry for the Belle Chase \ Scarsdale Ferry Crossing in Plaquemines Parish. From our long time extensive support of local repair yards, we are familiar with several of the existing vessels like the POINTE-A-LA-HACHE, PLAQUEMINES PRIDE and BELLE CHASSE II and welcome the opportunity to develop a new design. Brown water vessels such as pushboats, barges and ferries are our core business and we feel that our unique and considerable experience with the design and construction of these vessels, particularly at shipyards in south Louisiana, makes PMD an ideal choice for this project.

We have assembled an experienced, capable team with the capacity to handle this project. PMD co-owner William D. “Bill” Scherer, P.E., will be the Project Manager for this project. He brings 30 years of experience in all phases of ship and boat design and production. He will be supported by PMD co-owner Brandon Taravella, PhD, P.E., who has been heavily involved with LADOTD ferries for the last 11 years. Bill and Brandon will be supported by a group of six individuals that will each contribute to the ferry design with their respective expertise.

We appreciate your consideration of this proposal and appreciate the opportunity to work with LADOTD on this design. Please feel free to contact me at 504-975-2466 or at bill@pelicanmd.com if you need clarification or additional information about our qualifications.

Sincerely,

Pelican Marine Design, LLC

Bill Scherer, P.E.
Project Manager & Point of Contact

DOTD FORM: 24-102

(Revised January 1, 2023)

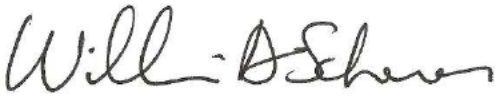
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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	New Ferry Boat - Plaquemines
2. Contract Number(s) as shown in the advertisement	Contract N. 4400028122 Federal Aid Project No. H015425
3. State Project Number(s), if shown in the advertisement	State Project No. H.015425.5
4. Prime consultant name **(name must match as registered with the Louisiana Secretary of State where such registration is required by law)**	Pelican Marine Design, LLC
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0003914
6. Prime consultant mailing address	110 James Drive West, Suite 135 St. Rose, LA 70087
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	110 James Drive West, Suite 135 St. Rose, LA 70087
8. Name, title, phone number, and email address of prime consultant's contract point of contact	William D. Scherer, P.E., Managing Partner 504-975-2466 bill@pelicanmd.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	William D. Scherer, P.E., Managing Partner 504-975-2466 bill@pelicanmd.com

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

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	 Signature above shall be the same person listed in Section 9: Date: February 8, 2024

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): **N/A**	Firm(s)' %: **N/A**

12. <u>Past Performance Evaluation Discipline Table:</u>

As indicated in the advertisement, insert a completed table here. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract.

The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify).

Past Performance Evaluation Discipline(s)	% of Overall Contract	Pelican Marine Design, LLC	Firm B	Firm C	Firm D	Firm E	Each Discipline must total to 100%
Other (Naval Architecture & Marine Engineering)	100%	100%					**100%**
							100%
							100%
Identify the percentage of work for the **<u>overall contract</u>** to be performed by the prime consultant and each sub-consultant.							
Percent of Contract	**100%**	**100%**					**100%**

13. Firm Size:

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (please specify)" and include the classification title inside the parentheses.

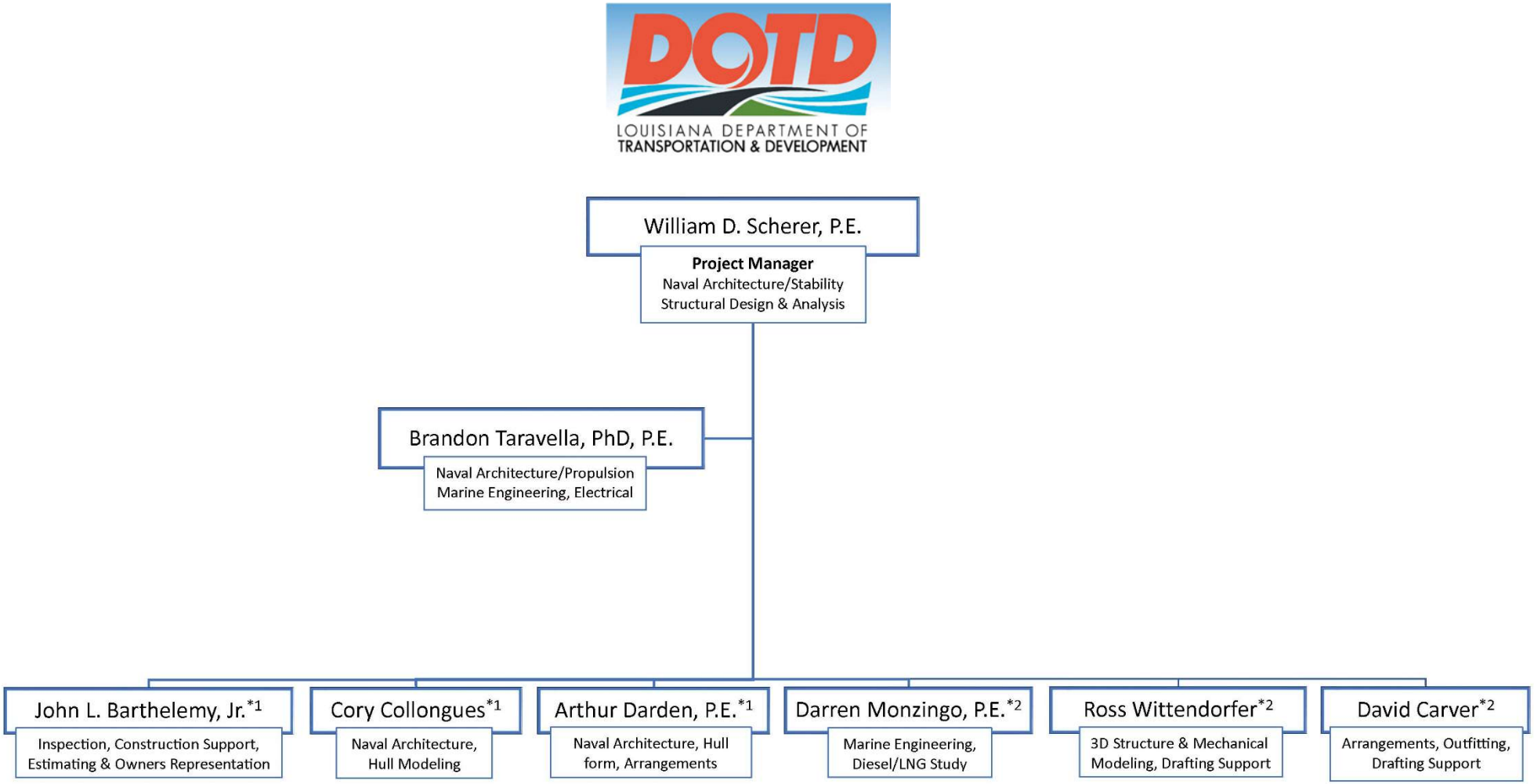
The DOTD Job Classification(s) to be used can be found at the following link:

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Pelican Marine Design, LLC	Supervisor - Eng	3	3
	Designer	2	2
	Engineer – Other	1	1
	Engineer - Intern	1	1
	Inspector	1	1

14. <u>Organizational Chart</u>:

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



*1 denotes part time

*2 denotes contract

15. Minimum Personnel Requirements:

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

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	William D. Scherer, P.E.	Pelican Marine Design, LLC	PE #30117 – NA&ME	LA	09/30/24
2	William D. Scherer, P.E.	Pelican Marine Design, LLC	PE #30117 – NA&ME	LA	09/30/24
3	Brandon Taravella, PhD, P.E.	Pelican Marine Design, LLC	PE #32494 – NA&ME	LA	09/30/24
4	Brandon Taravella, PhD, P.E.	Pelican Marine Design, LLC	PE #32494 – NA&ME	LA	09/30/24
4	Arthur Darden, P.E.	Pelican Marine Design, LLC	PE #40214 – NA&ME	LA	03/31/24
4	Darren Monzingo, P.E.	Pelican Marine Design, LLC	PE #147357 – Mech	TX	12/31/24

16. Staff Experience:

Firm employed by	Pelican Marine Design, LLC			
Name	**William D. Scherer, PE**		Years of relevant experience with this employer	11
Title	Managing Partner		Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization			B.S. / 1993 / Naval Architecture & Marine Engineering	
Active registration number / state / expiration date			Professional Engineer #30117 / LA / 9/30/2024	
Year registered	2002	Discipline	Naval Architecture & Marine Engineering	
Contract role(s) / brief description of responsibilities			**Naval Architect, Project Manager: vessel structural analysis, naval architectural calculations, design and drafting. Meets MPR 1 & 2.**	

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).
02/13 - Present	**Managing Partner & Principal Naval Architect** Developed proposals and cost estimates for numerous repair and modifications projects of riverine and offshore vessels. Provided on-site support at facilities, shipyards and onboard vessels with travel primarily in Louisiana, Florida, Texas, Washington & California. Inspected barges, ferries, pushboats, tugs and offshore supply vessels. Attended client meetings and provided guidance and advice on project scope and path. Routinely liaised with ABS, USCG and other classification societies to obtain drawing and stability approvals and requisite certificates. Performed inclining experiments and deadweight surveys on river ferries, barges and offshore supply vessels. Performed intact and damage stability analyses on river ferries, barges and offshore supply vessels. Developed engineering drawings including: general arrangements, lines plans, piping diagrams, structural arrangements, etc. to meet the requirements of the US Code of Federal Regulations, ABS and other classification societies. Developed weight estimates and material take-off lists. Designed and analyzed extensive structural modifications to deck and tank barges for mission systems. Designed installations of deck outfitting items like bitts, chocks, kevels and winches. Performed equipment sizing, selection and specification. Interacted with equipment vendors for proper selection & installation. Performed structural analysis of wheel loading on several deck barges.
09/13 – 12/13	**M/V Pointe-A-La-Hache | Harvey, LA | Plaquemines Parish** **Managing Partner** that provided necessary submittals to the USCG Marine Safety Center for the modifications performed by the shipyard on the M/V POINTE A LA HACHE (150'x60'x10' ferry owned by Plaquemines Parish, LA). Pelican was retained to complete necessary submittals to the USCG Marine Safety Center so that an updated stability letter could be obtained. The vessel had minimal drawings and documentation so Pelican generated various drawings so that the submittal could be completed. He worked with the local USCG representative to take measurements of the hull. These measurements were used to create a hull lines plan, outboard profile and tank arrangement drawing. Pelican performed an inclining experiment to the satisfaction of the USCG and later performed the intact and damaged stability analysis. Pelican also created the stability test procedures, stability test report and intact and damaged stability analysis for submittal to USCG Marine Safety Center.
10/93 – 09/07	**Northrop Grumman Ship Systems – Avondale Shipyard, New Orleans** **Ship Design Manager** department manager and naval architect, managed design development of complex and large commercial and military vessels. Performed standard 'design spiral' evolutions in ship designs from initial concept to preliminary, then continued into contract then detail design and carried all the way to delivery and sea trials. Managed a department of 25 personnel, responsible for technical content of deliverables as well as schedule and manhours.
10/07 – 08/11	**Elliott Bay Design Group, New Orleans** **Project Manager & Sr. Naval Architect** Routinely interacted with shipyards, vessel operators and vendors to execute vessel projects up to $1.6M in engineering fees. Responsible for schedule and budget on assigned projects. Project manager and lead naval architect for sponsoning project for the 400 ft deck barge Julie B. (ex. 455-2). Managed structural and stability calculations and drawing generation and submittals for American Bureau of Shipping (ABS) review on behalf of the USCG. Also managed lofting and

	modeling of steel parts to be cut and assembled by shipyard. Interacted with client, ABS and shipyard. Approximate project cost $250k in engineering fees. Also inspected several inland deck barges being used for British Petroleum (BP) well remediation efforts in the Atchafalaya Basin. Executed structural and stability checks for same barges.
08/11 – 02/13	**Resolve Engineering Group, New Orleans** **Project Manager & Sr. Naval Architect** Routinely interacted with shipyards, vessel operators and vendors to execute inland and ocean-going vessel projects. Responsible for schedule and budget on assigned projects. Executed structural & stability calculations for several inland deck barges, passenger vessels and offshore supply vessels.

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC		
Name	**Brandon Taravella, PE**	Years of relevant experience with this employer	16
Title	Managing Partner	Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		Ph.D., / 2009 /Engineering & Appl Sci (NA&ME) M. S. / 2005/ Engineering (NA&ME) B.S. / 2003 /Naval Architecture & Marine Engineering (NA&ME)	
Active registration number / state / expiration date		Professional Engineer #32494 | Louisiana | 9/30/2024	
Year registered	2006	Discipline	Naval Architecture & Marine Engineering
Contract role(s) / brief description of responsibilities		**Project manager, cognizant engineer, naval architectural calculations (stability, structural), machinery and piping arrangements, basic electrical, drafting**	

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).
03/08-Present	**Pelican Marine Design | St. Rose** **Managing Partner & Principal Naval Architect** Represented Bollinger Quick Repair for multiple State of LA and Plaquemines Parish ferry modifications. Reviewed engineering drawings and calculations for the USCG Marine Safety Center. Performed inclining experiments and deadweight surveys on river ferries and inland pushboats. Worked with local US Coast Guard representatives to obtain Certificates of Inspection for inland river ferries. Performed intact and/or damage stability analyses on river ferries, passenger vessels (other than ferries) and inland pushboats. Provided structural calculations, docking drawings and pumping plans necessary to dry dock various vessel types including inland barges and pushboats. Created engineering drawings including: general arrangements, lines plans, piping diagrams, electrical diagrams, safety diagrams, etc. to meet requirements of the US Code of Federal Regulations. Completed steering system calculations including sizing hydraulic system components and rudder structural components for ferries and inland pushboats. Performed structural calculations to ABS standards for inland river ferries, inland pushboats and barges Designed structural modifications to existing engine/gear foundations to accept new engines/gears for vessel repower (ferries and pushboats). Executed design of several small inland deck barges built in LA and FL.
09/13 – 12/13	**M/V Pointe-A-La-Hache | Harvey, LA | Plaquemines Parish** **Managing Partner** that provided necessary submittals to the USCG Marine Safety Center for the modifications performed by the shipyard on the M/V POINTE A LA HACHE (150'x60'x10' ferry owned by Plaquemines Parish, LA). Pelican was retained to complete necessary submittals to the USCG Marine Safety Center so that an updated stability letter could be obtained. The vessel had minimal drawings and documentation so Pelican generated various drawings so that the submittal could be completed. He worked with the local USCG representative to take measurements of the hull. These measurements were used to create a hull lines plan, outboard profile and tank arrangement drawing. Pelican performed an inclining experiment to the satisfaction of the USCG and later performed the intact and damaged stability analysis. Pelican also created the stability test procedures, stability test report and intact and damaged stability analysis for submittal to USCG Marine Safety Center.

04/18 – 04/18	**Landing Barge 304-004 Modifications | Harvey, LA | State of Louisiana** **Managing Partner** for the modifications performed by the shipyard on ferry Landing Barge 304-004 (owned by the State of Louisiana). Provided engineering calculations and drawings for the structural and electrical modifications.
03/13 – 03/13	**M/V Belle Chasse II | Harvey, LA | Plaquemines Parish** Managing Partner for the intact and damaged stability analysis required for the modifications to the M/V Belle Chasse II ferry (144'x55'x8' ferry owned by Plaquemines Parish, LA). These modifications included the addition of two potable water tanks. Pelican Marine Design, LLC was contracted to perform an intact and damaged stability analysis and submit the stability report to the USCG Marine Safety Center so that a Stability Letter could be obtained. Pelican Marine Design, LLC performed the analysis and submitted the report.
05/01 – 03/08	**Northrop Grumman Ship Systems – Avondale Shipyard, New Orleans** **Naval Architecture Supervisor** supervised design development of complex and large commercial and military vessels. Performed standard 'design spiral' evolutions in ship designs from initial concept to preliminary, then continued into contract then detail design and carried all the way to delivery and sea trials. Supervised a group of 12 personnel, responsible for stability calculations, weight estimating and structural calculations.

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC			
Name	**John L. Barthelemy, Jr.**		Years of relevant experience with this employer	3
Title	Project Manager/Inspector		Years of relevant experience with other employer(s)	46
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			**Vessel construction project management, inspection, on-site construction support & owner's representation, estimating, created repair specifications**	

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).
01/96-10/99	**Elmwood Marine Services, Inc. (Belle Chasse, LA)**: **Shipyard project manager & estimator.** Estimated & managed jobs for the Fabrication Shop, Repair Yard & Machine Shop for tugs, pushboats and various types of barges. Developed quotes for boat & barge repairs from field surveys. Prepared work specifications for repair yard & machine shops.
10/99-08/05	**Bollinger Quick Repair (Harvey, LA)**: **Shipyard project coordinator & estimator.** Estimated & coordinated jobs on various vessel types including: small brown water vessels, river tugs, line haul pushboats, offshore supply vessels, vehicle & passenger ferries and all types of barges. Ferry projects included the following vessels: Col. Frank X Armiger, Capt. Neville Levy, Thomas Jefferson and Gen. Alvin T Stumpf. Project costs ranged from $250k to $1.5M Repairs and modifications to the above ferries consisted of: • Drydocking • Removing and repairing all underwater gear, such as propellers, propeller shafts, rudders, rudder shafts & Z-Drives. • Conversion of the existing main engine & generator engine cooling systems to grid coolers. • Renewal of wasted steel and piping. • Miscellaneous steel repairs to hull and topside, handrails and car ramp hydraulic repairs. • Sandblasting and painting of hull & topside deck. • Repairs and/or refurbishment of passenger areas.
08/05-09/10	**AEP River Operations (Belle Chasse, LA formerly Elmwood Marine Services)**: **Shipyard project manager & estimator.** Estimated & managed jobs for the Fabrication Shop, Repair Yard & Machine Shop for tugs, pushboats and various types of barges. Developed quotes for boat & barge repairs from field surveys. Prepared work specifications for repair yard & machine shops.
09/10-03/17	**FMT Shipyard & Repair (Harvey, LA)**: As **Senior Estimator & Project Manager** handled all major projects and quotes. Vessels primarily included various barge types and pushboats of varying sizes. Managed all Aluminum and Machine Shop estimating Managed all third party & new construction projects

01/18 – 04/23	**FMT Shipyard & Repair (Harvey, LA):** Managing Machine Shop work for new construction and estimator for all major projects as a part time contractor.

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC			
Name	**Cory Collongues**		Years of relevant experience with this employer	4
Title	Naval architect		Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization			B.S., Univ. of New Orleans, 2015, NA&ME	
Active registration number / state / expiration date			33158, Louisiana, 9/30/24	
Year registered	2017	Discipline	Engineer Intern	
Contract role(s) / brief description of responsibilities			**Rhino 3D modeling, drafting support, stability model generation**	

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).
05/15 – 08/19	**Bollinger Shipyards, Lockport**: Performed engineering calculations according to industry regulations and developed 2-D/3-D CAD models to support scantling development, vessel stability, spatial arrangements and equipment functionality, speed, range, and fuel consumption. Performed electrical load analysis, loading condition development and weight control calculations. New Orleans RTA catamaran passenger ferry: provided CAD support by producing 2D drawings, 3D models, and conceptual renderings of the vessel to exhibit adequate operational capacities and passenger flow
09/19 – Present	**Pelican Marine Design**: Completed multiple 3D hull models of various vessel types

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC			
Name	**Arthur D. Darden, Jr.**		Years of relevant experience with this employer	1
Title	Naval architect/Consultant		Years of relevant experience with other employer(s)	54
Degree(s) / Years / Specialization			B.S., Univ. of Michigan, 1969, NA&ME	
Active registration number / state / expiration date			Professional Engineer #40214 | Louisiana | 3/31/2024	
Year registered	2015	Discipline	Naval Architecture & Marine Engineering	
Contract role(s) / brief description of responsibilities			**Naval architect: general arrangements, hull form, bridge design**	

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).
01/73 – 06/23	**Arthur D. Darden, Inc.** Responsible for the supervision and technical direction of all engineering projects undertaken by the firm. Major projects have included: Preparation of contract specifications and drawings, and acting as the Project Engineer/Owner's Representative for all dry docking, repairs and modifications to the 19 ferry vessels owned by the State of Louisiana Designed and served as the Owner's Representative for the construction of the 210 foot long vehicle and passenger ferry PLAQUEMINES PRIDE. Performed all marine structural and stability analyses for seven (7) barge mounted casinos in the State of Mississippi; Owner's Representative for the construction of the paddle wheel gaming vessels BOOMTOWN BELLE and CRESCENT CITY QUEEN; Design of 14 luxury staterooms for the paddle wheel steamboat MISSISSIPPI QUEEN and Owner's Representative during the shipyard fabrication and installation Created numerous Trim and Stability Books and performed numerous Inclining Experiments and Intact and Damage Stability Calculations

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC			
Name	**Darren Monzingo**		Years of relevant experience with this employer	1
Title	Marine Engineer		Years of relevant experience with other employer(s)	24
Degree(s) / Years / Specialization			B.S., U.S. Merchant Marine Academy, 2000, Marine Engineering Systems	
Active registration number / state / expiration date			Professional Engineer #147357 / Texas / 12/31/2024	
Year registered	2023	Discipline	Mechanical	
Contract role(s) / brief description of responsibilities			**Marine engineer, systems design, diesel-electric/LNG tradeoff study**	

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).
01/14-05/14	**M/V WOODS HOLE** Contract Design for a newbuild fifty-five (55) vehicle Subchapter H single-ended ferry for the Nantucket-Woods Hole Steamship Authority (SSA). Lead systems engineer responsible for coordinating the design efforts of all shipboard mechanical and automation systems. Execution of preliminary propulsion system trade-off study and propulsion machinery selection.
06/13-11/13	**Ollis Class Ferries** Concept design efforts for a series of three (3) newbuild 320' Subchapter H double-ended ferries for New York City Dept of Transportation (NYCDOT). Preliminary regulatory compliance study, evaluating the customer's existing ferryboat designs against updated class and regulatory requirements. Passenger traffic flow and terminal interface studies. Preliminary maneuvering studies evaluating the use of cycloidal propellers versus conventional screw propellers w/ high lift rudders. Execution of full-scale maneuvering trials utilizing field instrumentation and real-time data acquisition.
04/06 – 06/13	**Alaska Class Ferries** Concept and Contract Design efforts for a series of newbuild 280' Subchapter H single-ended ferries for Alaska Marine Highway System (AMHS). Execution of preliminary studies which included examination of routes/schedules, manning requirements, vehicular traffic management, terminal interface, and propulsion system composition. Subsequent efforts as lead systems engineer during Contract Design stage.
09/10 – 10/10	**Kwa-Di Tabil Class Ferries** Concept Design efforts for a series of newbuild sixty-four (64) vehicle Subchapter H double-ended ferries for Washington State Ferries (WSF). Responsible for preliminary propulsion system studies examining different prime-mover/propulsor combinations.
02/07 – 05/07	**M/V MICHAEL W. BEHRENS and M/V CHARLES W. HEALD** Contract Design efforts for a pair of newbuild twenty-eight (28) vehicle double-ended ferries for Texas Department of Transportation (TXDOT). Execution of propulsion system evaluation study which examined the relative merits of conventional vs. electric drive trains and conventional vs. cycloidal propellers.
04/04 – 08/04	**M/V ISLAND HOME** Contract Design efforts for a newbuild 255' Subchapter H double-ended ferry for the Nantucket-Woods Hole Steamship Authority (SSA). Performance of full-scale tractor trailer maneuvering test to validate preliminary vehicle deck arrangements. Provided engineering for auxiliary engine room and habitability systems.

11/03 – 05/06	**M/V STEILACOOM II** Contract Design for 216' Subchapter K double-ended passenger ferry for Pierce County Public Works. Project engineer charged with developing structural and mechanical system designs, managing regulatory submittals and review comments, and providing support as Owner's Representative during construction.
01/17 – 03/22	**SeaOne Holdings** Ship Design Manager, responsible for overseeing design efforts and developing the procurement strategy for a series of four (4) first-in-class 2 billion cubic foot (2BCF) capacity gas carriers. Efforts included preliminary evaluation of fleet fueling options including distillate and gaseous fuels. Execution of detailed studies examining available prime mover technologies, bunkering infrastructure, lifecycle costs, and 'well-to-wake' greenhouse gas (GHG) emissions.
04/22 – 07/22	**PIC Americas** Preliminary fleet composition studies and concept designs associated with gaseous fuel transportation for power gen and bunkering operations in the Americas. Project scope included feasibility and cost evaluations for small-scale liquefaction facilities and bunkering vessels.
09/11 – 12/11	**TOTE Maritime** Preliminary feasibility study for the conversion of two (2) existing Orca Class RO/RO vessels to operate on gaseous fuel. Project scope included: i) technical evaluation of impacts stability, structures, and machinery, ii) formal presentation and discussions with class and flag state agencies to reach consensus on the path toward regulatory approval, and iii) commercial discussions with fuel service providers related to the development of bunkering infrastructure that did not yet exist.

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC			
Name	**Ross Wittendorfer**		Years of relevant experience with this employer	1
Title	Designer		Years of relevant experience with other employer(s)	19
Degree(s) / Years / Specialization			B.S., Auburn University, 2004, Industrial Design	
Active registration number / state / expiration date			N/A	
Year registered	2023	Discipline	N/A	
Contract role(s) / brief description of responsibilities			**3D Structure & mechanical modeling, drafting support**	

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).
01/05 – 08/12	**Austal USA** Draftsman/ Lead Structural Designer for 349' High Speed Passenger Ferry (Hawaii Superferry 1&2) Lead Structural Designer on LCS 1 (378' USN Surface Combatant) Structural & Mechanical Designer 88m Passenger Ferry (Osman Gazi-1) Structural Design Coordinator for US Navy JHSV and LCS projects. Developed ABS Approval drawings and 3-D models/Construction drawings, as well as provided field engineering support.
08/12 - Present	**Sterling Marine, LLC** Perform vessel arrangements, 2-D drafting, 3-D modeling, N.C. Lofting and project management tasks for various projects ranging from 300' Tank Barges to 60' - 114' Towboats

16. Staff Experience:

Firm Employed by	Pelican Marine Design, LLC			
Name	**David Carver**		Years of relevant experience with this employer	2
Title	Designer		Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization			B.S., Univ. of New Orleans, 2011, NA & ME	
Active registration number / state / expiration date			N/A	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			**Arrangements, Outfitting & Drafting Support**	
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).			
03/14 - Present	**Sterling Marine, LLC** Developed structural scantling & isometric assembly drawings for Production use on several projects including a 122 ft car ferry, passenger vessels, towboats, drydocks, fishing vessels, barges, oilfield service vessels & docking/berthing structures Developed 3D models of vessels including 122 ft car ferry, passenger vessels, towboats, yachts, fishing vessels, barges & oilfield service vessels. Developed Production type drawings for mechanical systems (e.g. piping, HVAC, propulsion shafting, steering etc.) including fabrication details in 2D & 3D views, bills of materials and material schedules/specifications			

17. Firm Experience:

Firm name	Pelican Marine Design, LLC		Past Performance Evaluation Discipline(s)*	Other (NA & ME)	
Project name	**M/V BELLE CHASSE II**		Firm responsibility (prime or sub?)	Sub	
Project number	N/A	Owner's name	Bollinger Quick Repair		
Project location	Bollinger Quick Repair, Harvey, LA		Owner's Project Manager	Allen Stein (now Matthew Kuehne, General Mgr)	
Owner's address, phone, email	615 Destrehan Ave., Harvey LA 70058, 504-340-0621, matthewk@bollingershipyards.com				
Services commenced by this firm (mm/yy)	03/13	Total consultant contract cost ($1,000's)		N/A	
Services completed by this firm (mm/yy)	03/13	Cost of consultant services provided by this firm ($1,000's)		$4	

Modifications were performed by the shipyard on the M/V BELLE CHASSE II (144'x55'x8' ferry owned by Plaquemines Parish, LA). These modifications included the addition of two potable water tanks. Pelican Marine Design, LLC was contracted to perform an intact and damaged stability analysis and submit the stability report to the USCG Marine Safety Center so that a Stability Letter could be obtained. **Brandon Taravella, P.E.** performed the analysis and submitted the report. 100% of this work was completed in Louisiana.

17. Firm Experience:

Firm name	Pelican Marine Design, LLC		Past Performance Evaluation Discipline(s)*	Other (NA & ME)	
Project name	**M/V POINTE A LA HACHE**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Bollinger Quick Repair		
Project location	Bollinger Quick Repair, Harvey, LA		Owner's Project Manager	Allen Stein (now Matthew Kuehne, General Mgr)	
Owner's address, phone, email	615 Destrehan Ave., Harvey LA 70058, 504-340-0621, matthewk@bollingershipyards.com				
Services commenced by this firm (mm/yy)	09/13	Total consultant contract cost ($1,000's)			
Services completed by this firm (mm/yy)	12/13	Cost of consultant services provided by this firm ($1,000's)			$9.5

Modifications were performed by the shipyard on the M/V POINTE A LA HACHE (150'x60'x10' ferry owned by Plaquemines Parish, LA). Pelican Marine Design, LLC was retained to complete necessary submittals to the USCG Marine Safety Center so that an updated stability letter could be obtained. The shipyard had minimal drawings and documentation so Pelican Marine Design, LLC had to generate various drawings so the submittal could be completed. **Brandon Taravella, PE** and **William Scherer, PE** worked with the local USCG representative to take various measurements of the hull. These measurements were used to create a hull lines plan, outboard profile and tank arrangement drawing. **Brandon Taravella, PE** and **William Scherer, PE** performed an inclining experiment to the satisfaction of the USCG. **Brandon Taravella, PE** performed the intact and damaged stability analysis and **William Scherer, PE** provided QA of the results & report. **Brandon Taravella, PE** also created the stability test procedures, stability test report and intact and damaged stability analysis for submittal to USCG Marine Safety Center. 100% of this work was performed in Louisiana.

17. Firm Experience:

Firm name	Pelican Marine Design, LLC		Past Performance Evaluation Discipline(s)*	Other (NA & ME)	
Project name	**M/V HOS BAYOU**		Firm responsibility (prime or sub?)	Sub	
Project number	N/A	Owner's name	Hornbeck Offshore Services		
Project location	Conrad Deepwater, Amelia, LA		Owner's Project Manager	Paul Lubrano (now Jace Guidry)	
Owner's address, phone, email	103 Northpark Blvd., Covington, LA 70433, 985-624-1203, jace.guidry@hornbeckoffshore.com				
Services commenced by this firm (mm/yy)	12/13	Total consultant contract cost ($1,000's)		N/A	
Services completed by this firm (mm/yy)	12/14	Cost of consultant services provided by this firm ($1,000's)		$85.1	

Hornbeck Offshore Services retained Pelican Marine Design to provide various engineering support services throughout extensive modifications to the HOS BAYOU. HOS BAYOU is a 300 ft Multi-Purpose Service Vessel or MPSV with accommodations for 70 personnel. **William Scherer, PE** designed and analyzed via Finite Element Analysis the internal & external structure for the helideck leg foundations. The helideck vendor's drawings and reports were also reviewed, analyzed and commented upon. **William Scherer, PE** designed and analyzed the foundation for a 13-ton stores crane and modified HOS superstructure drawings to suit. Due to the modifications, the entire stability analysis was required to be revised and **William Scherer, PE** revised the 3D hydrostatic model, Sounding Tables, Longitudinal Strength Calculations, Stability Booklet and generated the Stability Test Procedure. **Brandon Taravella PE** performed the probabilistic damage stability calculations which are similar to IMO passenger vessel probabilistic stability calculations. Then, **William Scherer, PE** along with **Brandon Taravella PE** performed the inclining of the BAYOU and subsequently generated and submitted the inclining report and used that information to revise the Stability Booklet. Just prior to delivery, **William Scherer, PE** provided counterballasting support for pierside testing of the 150 ton crane. Throughout the entire BAYOU effort, additional tasking involved providing on-site support at the shipyard, conducting vessel surveys for minor additions and changes, interacting daily with vendors and clients as well as providing regulatory submittals and liaison with American Bureau of Shipping offices in New Orleans and Houston. 100% of this work was performed in Louisiana.

17. Firm Experience:

Firm name	Pelican Marine Design, LLC		Past Performance Evaluation Discipline(s)*		Other (NA & ME)
Project name	**M/V PLAQUEMINES PRIDE**			Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Bollinger Quick Repair		
Project location	Bollinger Quick Repair, Harvey, LA		Owner's Project Manager	Allen Stein (now Matthew Kuehne, General Mgr)	
Owner's address, phone, email	615 Destrehan Ave., Harvey LA 70058, 504-340-0621, matthewk@bollingershipyards.com				
Services commenced by this firm (mm/yy)	12/14	Total consultant contract cost ($1,000's)			
Services completed by this firm (mm/yy)	02/15	Cost of consultant services provided by this firm ($1,000's)			$5.1

Modifications were performed by the shipyard on the M/V PLAQUEMINES PRIDE (210'x73'x13.5' ferry owned by Plaquemines Parish, LA). These modifications included replacing the existing engines. Pelican Marine Design, LLC was retained to complete necessary submittals to the USCG Marine Safety Center so that an updated stability letter and Certificate of Inspection (COI) could be obtained. **Brandon Taravella, PE** performed rudder shaft and hydraulic calculations, weight change calculations and engine foundation calculations for submittal to the Marine Safety Center. **Brandon Taravella, PE** created the deadweight survey procedure, performed the deadweight survey and performed the deadweight survey calculations. He created the deadweight survey report and submitted it to the Marine Safety Center for approval. 100% of this work was performed in Louisiana.

17. Firm Experience:

Firm name	Pelican Marine Design, LLC		Past Performance Evaluation Discipline(s)*	Other (NA & ME)	
Project name	**M/V THOMAS JEFFERSON**		Firm responsibility (prime or sub?)	Sub	
Project number	N/A	Owner's name	Bollinger Quick Repair		
Project location	Bollinger Quick Repair, Harvey, LA		Owner's Project Manager	Allen Stein (now Matthew Kuehne, General Mgr)	
Owner's address, phone, email	615 Destrehan Ave., Harvey LA 70058, 504-340-0621, matthewk@bollingershipyards.com				
Services commenced by this firm (mm/yy)	07/15	Total consultant contract cost ($1,000's)			
Services completed by this firm (mm/yy)	08/15	Cost of consultant services provided by this firm ($1,000's)		$2.3	

Modifications were performed by the shipyard on the M/V THOMAS JEFFERSON (142'x54'x8' ferry owned by the State of Louisiana). Pelican Marine Design, LLC was retained to complete necessary submittals to the USCG Marine Safety Center so that a COI could be obtained. **Brandon Taravella, PE** performed engine girder foundation calculations and drawings, and also created drawings of the steering system modifications. **Brandon Taravella, PE** generated the submittal and worked with the USCG to obtain approvals of fuel system modifications, structural modifications, steering system modifications (both piping and electrical), ventilation modifications and CO2 system modifications. 100% of this work was performed in Louisiana.

17. Firm Experience:

17. Firm Experience:

17. Firm Experience:

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18. Approach and Methodology:

Introduction & Project Understanding

Pelican Marine Design, LLC (PMD) understands from the Advertisement that the basis of the new ferry design will start with the POINTE-A-LA-HACHE (or PAH) ferry design. Existing drawings will be provided for our use and the vessel will be made available for a shipcheck or inspection by our team. The characteristics of the PAH design appear to be on the smaller side versus the characteristics desired for the ferry that were cited in the Advertisement. For example, the desired vehicle capacity is 35 cars minimum whereas the current USCG Stability Letter for the PAH says a maximum of 35 cars are allowed. Therefore, our intent is to design a slightly larger version of the PAH hull with greater vehicle capacity. Below we will discuss the overall design effort and its stages along with a notional schedule.

Concept Design

Concept design precedes Preliminary Design. We will Concept Design begin by determining the basic dimensions and weight of the hull through parametric analysis of the PAH and other ferries if necessary. With this information, we will develop the basic design at this stage and will generate a hull form complete with a 3D model which will provide a visual reference for LADOTD to review and provide comment. It is at this point that PMD will sit down with local USCG District 8 personnel to discuss the project ahead and our scope and intent while also listening to their concerns. With the model generated and revised according to LADOTD comments, we will proceed into Preliminary Design where the Concept Design will be fleshed out.

Preliminary Design

The 3D model developed in Concept Design will serve as the master geometrical model from which drawings and calculations will be based. It will be populated throughout the Preliminary Design effort and will show vessel internal geometry such as decks and bulkheads but will also show mechanical items such as pumps and engines. Initial calculations will be undertaken for hull and deckhouse scantlings, intact & damage stability, propulsion powering, electrical power, the initial weight estimate and an estimate construction cost estimate. In addition, a special study will be conducted concerning reliability & powering using both diesel/electric and liquefied natural gas (LNG) powered options. Preliminary drawings will be generated as follows:

General Arrangement
Outboard Profile
Deck Outfitting
Basic Deck, Bottom Shell and Side Shell Scantlings
Deckhouse Scantlings
Transverse & Longitudinal Sections
Fire Zone Plan
Electrical One-Line Diagram
Machinery Arrangement
Piping Diagrams
Propulsion Arrangement

These drawings will be provided to the Department for review and comment. A full structural model is a very large effort and will require significant detail which is not available yet in the Preliminary Design stage. This will be developed in Final Design.

18. **Approach and Methodology:**

Final Design

With acceptance of the Preliminary Design drawings and calculation reports by the Department, PMD will proceed to develop the full 3D structural model as requested in the Advertisement. Typically, these are created by the shipyard since their specific construction details must be incorporated including such things as unit breaks. However, there is great utility in having a structural model since the vessel weight and steel quantity can be accurately identified. This model also shortens the design time required by the shipyard.

The plans and calculation reports provided during Preliminary Design will be finalized to 90% level. In addition, many other drawings like Handrails, Door & Window Schedule, etc. will be developed to provide greater detail for the shipbuilder. Likewise, draft Specifications and a draft Construction Cost Estimate will be created. All of these items will be submitted for Final review cycle by the Department. Once these approved, PMD will return the final set of plans, Specifications, Construction Cost Estimate and Construction Time Estimate

Schedule

Our estimated schedule is provided below:

Concept Design:	4 weeks
Preliminary Design:	22 weeks
Final Design:	16 weeks

This is not inclusive of LADOTD review time or holiday interruptions.

19. Workload:

For all contracts where a firm on the team is a prime consultant or sub-consultant and where **a)** the consultant selection was made by DOTD, and **b)** a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

1) one of the team's firms is responsible for the performance of the work;
2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;
3) the work has not yet been performed and invoiced; and
4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.
List only the portion of the fees attributable to firms on the team.

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
Pelican Marine Design, LLC	Naval Architecture & Marine Engineering	Contract 4400015312, State Project Number N/A	IDIQ Contract for Naval Architecture and Marine Engineering Services	N/A

DO NOT SUM

* The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify). If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation discipline.

** Round to the nearest dollar. **Do not** round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. NOTE: ALL FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

20. Certifications/Licenses:

Not applicable

21. <u>QA/QC Plan:</u>

Not applicable

22. <u>Sub-consultant information:</u>

Not applicable

23. <u>Location:</u>

Not applicable