

RESPONSE TO REQUEST FOR QUALIFICATIONS FOR WASHINGTON STATE FERRIES (WSF) FLEET-WIDE EMERGENCY RESPONSE SUPPORT

PART A

PREPARED BY GLOSTEN 21 NOVEMBER 2023

More than **DESIGN**.

Table of Contents

Criter	ia 1. Qualifications/Expertise of Firms on Team	1
A.	Firm Introduction	1
C	Glosten Introduction	1
C	Organizational Chart	2
A	Areas of Expertise	2
C	General Services	3
B.	Firm Location and Staff	5
C.	Experience with Subconsultants	5
D.	Key Staff Availability	5
E.	Relevant Past Projects	6
Criter	ia 2. Qualifications of Proposed Project Manager	7
A.	Prior Experience	7
B.	Familiarity with State and Federal Regulations	7
C.	Project Management Capabilities	7
D.	Professional Accreditations	8
Criter	ia 3. Key Team Members Qualifications	9
A.	Key Team Roles and Qualifications	9
Criter	ia 4. Firm's Project Management System	14
A.	Glosten's Project Management Approach	14
C	Glosten Quality Management System	14
F	Firm Workload and Resource Management	14
N	Maintaining Task Schedules	14
N	Maintaining Budget	15
I	nteracting the Project Team and Stakeholders	15
Criter	ia 5. Project Delivery Approach	17
A.	Project Management Approach	17
B.	Mitigating Project Issues	17
C.	Assumptions for Work Breakdown Structure	17
D.	Key Issues and/or Milestones	17

Criteria 1. Qualifications/Expertise of Firms on Team

A. Firm Introduction

Glosten Introduction

Glosten, located in Seattle, Washington and Providence, Rhode Island, is a full-service consulting firm of naval architects and marine, electrical, production, and ocean engineers. Consulting and design services include hull, structural, mechanical, and electrical systems design, as well as construction management. In business for 65 years, our design experience includes tugs, barges, research vessels, special-purpose platforms, and passenger/car ferries.



Figure 1 Glosten staff by discipline across all locations

Glosten offers specialized expertise in hydrodynamic analysis, climatology, risk analysis, and consulting to civil engineers and marine construction contractors for floating and coastal structures. For these projects, we draw on our expertise in wave mechanics and fluid-structure interaction to define the hydrodynamic loads from waves, current and wind.

Supporting clients in complex marine operations is a Glosten specialty. We work with clients in areas such as loading and unloading of large and valuable cargoes, seafastening design, and reducing overall risks of challenging marine operations.



Figure 2 Out of 129, 91 associates are based in Washington

Glosten staff of 129 includes technical personnel who are thoroughly familiar with marine vessel construction including prior shipyard and contract management experience, lending our team critical insight into the operations of marine vessels and structures. Many of our engineers also have had seagoing experience and have assisted and directed transportation, emplacement, and salvage operations. The combined breadth of our analysis capability and in-field experience allows us to provide our clients with practical marine engineering solutions.

Organizational Chart

As demonstrated in the figure below, we propose an all-Glosten team with no subconsultants necessary to fulfill the project scope.

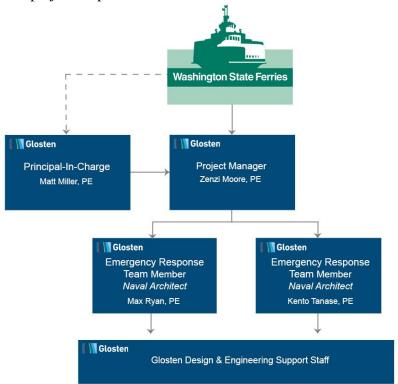


Figure 3 Organizational chart of key team

Areas of Expertise

Salvage Engineering and On-site Response Services

Glosten regularly provides salvage engineering services to commercial marine salvors and has worked with salvors to develop and receive United States Coast Guard (USCG) approval on numerous salvage plans. Their team has a firm grasp of emergency response protocol, documentation, and interfacing with a Unified Command structure.

Ten of our associates have experience providing salvage engineering in response to casualties, all with their EIT certification or PE license, primarily in the State of Washington. These salvage engineers have been providing services to our clients in time of emergency with experience ranging from eight to 25 years.

All Glosten salvage engineers have a foundation with AutoCAD with most engineers using Rhino for extensive 3D modeling. Vessel hull models are built and hydrostatics are evaluated using GHS with all salvage engineering staff members having advanced, custom training in GHS.

Glosten can also supplement our salvage engineers with ocean engineers, naval architects, and marine engineers in order to help our client resolve any marine casualty. We are routinely called on to solve challenges faced by other engineering firms, vessel owners, and equipment providers. Our approach is to combine the experience of our clients, breadth of our analysis capability, and in-field experience to develop practical solutions in many areas.

We currently staff two salvage response phones on a 24/7 basis for Washington State Ferry (WSF) and Resolve Marine Group.

Many of our staff reside throughout Puget Sound and can provide fast on-site response to WSF as needed.

Passenger Vessel Expertise

We regularly work with public passenger vessel clients— whether it be in support of newbuilds, vessel modification work, Owner services, or fleet planning. This experience, combined with our depth of bench, breadth of services, and regional presence, positions us well to support on-call contracts of this nature. We are a trusted ally of the passenger vessel community, with active relationships with several major public US ferry systems, including Staten Island Ferries in New York, the Alaska Marine Highway System (AMHS) in Ketchikan, in addition to smaller local systems in Puget Sound such as Skagit County Public Works and Kitsap Transit. Glosten is also deeply familiar with the composition of the WSF fleet. In addition to the current Jumbo Mark II conversions and the Hybrid-Electric Olympic-Class project, Glosten has provided on-call engineering and design services to WSF under six consecutive five-year on-call contracts. Work under these agreements includes a broad spectrum of naval architecture and marine engineering work, from small work items such as a propulsion study or stability test (inclining) to major capital improvements such as vessel repowering and new vessel design.

General Services

Our general services include:

Vessel Acquisition

Glosten has experience with various vessel acquisition approaches including:

- Design/Bid/Build and the associated variations
- Design/Build with variations including non-binding design solutions
- Detail Design by Owner

We support Owners in the consideration of technical (design) risk, cost, and schedule while conforming to any unique process and/or competition requirements.

Construction Support

Glosten engineers and technical personnel are thoroughly familiar with vessel construction. Many of our engineers offer prior shipyard and contract management experience. We routinely support Owners on-site to ensure contract compliance and technical suitability. We provide complete on-site program management assistance including provision of qualified program managers and teams for construction inspection, commissioning, and troubleshooting. Past examples of this include serving as owner's representative for a new passenger only ferry for the Trust for Governors Island, new passenger/vehicle ferry for Alaska, and a new oceanographic research vessel. We have also provided construction support services for major vessel modifications, including several repowering projects, habitation upgrades, and propulsion replacements.

Project Management

We provide technical and management expertise in the following areas:

- Source Selection Planning
- Shipyard evaluation and scoring documents
- Bid period support and proposal conferences
- Technical and price proposal evaluations
- Shipyard contract development

3

- On-site technical program management and construction inspection services
- Detail drawing review
- Change order management
- Schedule progressing and earned value payment management
- Test program development and implementation
- Systems and equipment test validation
- Sea trials and warranty support

Marine Engineering

Our marine engineering services range from concept design evaluation through detail design, testing, and operations. Many of our marine engineers have shipyard experience and several have seagoing experience. This gives our team the ability to develop marine engineering systems that consider both initial installation costs as well as ease of operation, maintenance and repair accessibility, and long-term maintenance costs.

We have design experience across a broad range of propulsion systems including Voith propulsion, Z-drive propulsion, controllable/reversible pitch propulsion, geared diesel, and both AC/AC and AC/DC diesel electric propulsion systems. In recent years Glosten has been a leader in the design of hybrid, and battery electric vessels, from small passenger vessels to large 2,500 passenger/vehicle ferries.

Electrical and Control Systems Engineering

Glosten offers decades of marine electrical engineering experience extending from concept through detail design, testing, systems evaluation, construction, and operations. Our electrical and controls engineers understand that all disciplines onboard marine vessels are tightly interconnected. We collaborate closely with structural, mechanical, and naval architectural engineers to provide comprehensive marine vessel designs and retrofits.

Ocean Engineering

Our team of ocean engineers provides seakeeping and vessel motions predictions, ship maneuvering simulation, statistical analysis of wind and wave climatologies, and computational fluid dynamics for hull performance evaluation and optimization. These capabilities are valuable for vessel design and operability assessment.

Green Ship Technologies

We are dedicated to supporting our ferry clients as they navigate technological advancements and regulations that are changing propulsion systems in response to environmental concerns. Glosten has expertise in alternative propulsion including electric, hybrid, and zero-emissions vessel design.

Our team offers broad experience with hybrid and electric propulsion systems, particularly in the passenger transportation sector. We have led the industry in the design of hybrid and all-electric vessels in the US. Beyond the major ferry projects such as conversion of the Gee's Bend ferry to all-electric for the Alabama Department of Transportation, the design of a hybrid-electric ferry for Kitsap Transit, and our continued support to Skagit County for their all-electric ferry, we are called on regularly to support decarbonization projects of all types.

Noise & Vibration

Glosten offers noise and vibration measurement and control for marine applications through our subsidiary, Noise Control Engineering (NCE). In their 32-year history, they have been involved in hundreds of ship programs, having designed some of the quietest vessels in existence for US



and foreign operators including public ferry operators. Their team has developed low noise and vibration designs for several ferries and they have also worked with shipyards, naval architects, and owners to identify effective and efficient mitigation strategies to acoustic problems.

Marine Transportation

Glosten is experienced with the full range of heavy-lift cargo handling methods and with the associated engineering problems. Services include detailed design of cargo securing devices, and liaison with marine surveyors and regulatory authorities for approval of unusual stowages.

The firm has worked closely with transportation contractors in the planning of complex marine operations, so that operator skills and engineering expertise are combined to best advantage. Their experience in salvage engineering can also be applied to effective contingency plan development.

Glosten ensures ultimate client satisfaction by using seakeeping analysis and marine climatology to support sea fastening design projects for the commercial marine community.

B. Firm Location and Staff

In 1958, Glosten was founded in Seattle, which remains the location of our headquarters and where the majority of our associates work. While we have continued to operate from the Seattle waterfront for 65 years, in 2018



Glosten also opened an east coast branch office to accommodate east coast talent and better serve clients in more time zones. Our branch office provides the same full-service consulting for the same sectors of the marine industry as our Seattle office.

C. Experience with Subconsultants

We are not utilizing any subconsultants for this contract.

D. Key Staff Availability

We are committed to having the resources required to deliver cost-effective, quality work to WSF. We understand this on-call agreement requires Glosten to have experienced personnel ready when needed, on a moment's notice. Our standard resource planning includes a 15% allocation of unanticipated work to allow for the on-demand needs of Glosten's on-call contracts and repeat clients; we can quickly assemble an experienced team when requested.

As demonstrated in the following table, our key project staff currently show adequate availability to support this contract. Table 2 displays estimated availability for key staff for 2024-2028 based on known commitments and likely prospects.

Our proposed Emergency Response Team will be ready to travel at a moment's notice. With our home office in Seattle and many staff residing in the Puget Sound, we are a short drive from all WSF routes.

Table 1 Team availability by available hours per month

Team Member	Role	A	Availability per month (hrs)			
		2024	2025	2026	2027	2028
Matthew Miller	Principal-in-Charge	32	32	40	40	40
Zenzi Moore	Project Manager/Salvage Engineer	16	16	24	24	40
Max Ryan	Naval Architect/Salvage Engineer	24	32	40	40	40
Kento Tanase	Naval Architect/Salvage Engineer	16	16	32	32	40

E. Relevant Past Projects

The following are three Glosten projects completed within the last three years that demonstrate similar expertise as is needed for this contract:

- 1. WSF M/V Walla Walla Response, 2023 The M/V Walla Walla lost propulsion and ran aground on 15 April 2023. Glosten was notified of the casualty and developed stability calculations to model the casualty scenario. The vessel condition and subsequent condition with the rising tide was shared with WSF personnel. We provided feedback and guidance to WSF regarding the condition and likely time to expect the vessel to float free. We also provided an experienced salvage engineer to be present during the dive survey and assessment. Approximately \$6,500 was billed to the project for this support effort.
- 2. **Fish Processor Fire Response**, 2023 A fish processor caught fire at the Trident Seafoods Tacoma terminal and Glosten was hired by Resolve Marine Group to provide salvage engineering services. We assisted with on-site fire control measures, provided guidance on methods to dewater the vessel and ensure adequate stability was maintained, monitored vessel conditions throughout the casualty response, developed a plan to safety remove the fuel from the vessel, and created a final stability report. Glosten billed \$63,500 for this effort.
- 3. Crane Barge Salvage, 2020 A derrick barge suffered structural failure and water ingress caused the vessel to capsize at a heel angle of approximately 100 degrees. Glosten was hired to serve as the salvage engineer to support the salvage company. Completed tasks included developing a mooring plan to secure the barge, develop a parbuckle/righting plan to move the barge to a safe location, and then analyze the cutup/removal plan to remediate the vessel. Glosten billed \$52,500 for providing salvage engineering services.

Criteria 2. Qualifications of Proposed Project Manager

A. Prior Experience

Our proposed project manager for this job is Zenzile (Zenzi) Moore. Zenzi joined Glosten in 2013 and is now an engineer in the Marine Construction discipline group. She has been serving on the WSF Emergency Response team since January 2022 and is familiar with the program. The following are project examples demonstrating her experience as a project manager.

AMHS Fleetwide Passenger Amenities Upgrade, 2020 – Glosten was selected to develop design, engineering, and construction documents for the upgrade and refurbishment of passenger amenities across the Alaska Marine Highway System fleet. As the project manager, Zenzi finalized the Design Study Report, which described the condition of the amenities across seven ferries, and recommended refurbishment options. Zenzi continued to lead Glosten's effort during the ongoing construction phase. Glosten invoiced \$106,000 for these engineering services.

WSF M/V Walla Walla Response, 2023 – Matt Miller had the duty phone at the time of the incident and put out a call to the team for support. While Matt handled communications with WSF and provided feedback and recommendations for the response, Zenzi developed the GHS calculations to model the incident. This modeling included entering the tide data to evaluate the impact of the rising tide on the grounded condition and subsequent floating condition of the vessel. Approximately \$6,500 was billed to the project for this support effort.

Tetra Tech Inner Harbor Navigation Canal (IHNC) Floating Guidewall Naval Architecture Support, 2020 – A new canal lock was being designed and built to help provide protection in the New Orleans area. Glosten was hired by Tetra Tech to perform the intact and damage stability analysis for two design variations for the concrete pontoon guidewall. Zenzi served as the project manager and lead naval architect for this effort that included GHS modeling, stability analysis, and reporting of the results. As the project manager she also participated in design review meetings and coordination calls with the client. Glosten billed \$62,000 for engineering services on this job.

B. Familiarity with State and Federal Regulations

Zenzi earned her professional engineering license in the State of Washington and is familiar with the Washington State rules and regulations regarding licensure. She has also worked on projects for county and state clients in Washington as well as federally funded projects. Zenzi is familiar with the relevant regulations and procedures to carry out this role as project manager.

C. Project Management Capabilities

Zenzi completed an AEC Project Management Boot Camp course and is a project manager who participates in our quarterly PM training workshops. She has served as the project manager on a large number of jobs. Zenzi works with potential clients to scope out the efforts, define budgets, and develop schedules. She leads Glosten's tug performance projects and has developed a master service agreement with a client in order to facilitate the proposal and execution process.

Zenzi has full access to our Vantagepoint software that provides PMs with the ability to run project status reports as needed. As the PM, Zenzi will report the monthly status of the project, ensuring our efforts are within budget and scope.

At times, situations may arise where a client requests out of scope work and Zenzi will work with WSF to define the scope and develop a budget for review and approval. Glosten assigns a



principal-in-charge to every project to serve as a resource for the PM and we also have an operations group that provides project management training and guidance.

D. Professional Accreditations

All of the engineers that will be on the WSF emergency response team are based out of the Seattle office and have professional engineer licenses in naval architecture from Washington State.

Criteria 3. Key Team Members Qualifications

A. Key Team Roles and Qualifications

Glosten has assembled a team of highly skilled naval architects with the technical capabilities and management expertise to successfully deliver the engineering services required for this contract. Each team member was selected for their expertise in vessel incident response, salvage, and onsite support, and their strong understanding of WSDOT and other public agency regulations and procedures. All personnel below have supported WSF in the previous Emergency Response contract which began in 2017. They are very familiar with current notification process and have participated in two lessons learned exercises where Glosten has developed recommendations for improving processes associated with the emergency response services.

Both Matt and Zenzi have worked within the Incident Command Systems (ICS) on numerous maritime casualties and have a full understanding of the command structure, how decisions are made, and what information is required when responding to a marine casualty. They will lead the Emergency Response Team and train other supporting team members on the ICS. Glosten has other engineers with decades of salvage experience that can be called on for consulting in the event of a marine casualty.

Zenzile (Zenzi) Moore, PhD, PE

Project Manager



Experience 6 years

Professional License Washington, Naval Architecture & Marine

Engineering, 2020

Familiar with WSDOT Procedures/Regulations

Role

Glosten Naval Architect Zenzi Moore will be the Project Manager and will have the overall responsibility of managing and maintaining the vessel incident response files, as well as overseeing the 24/7 emergency response protocol in the event of an emergency.

Project Experience

WSF Emergency Response, 2022-2023 – Zenzi served as an on-call naval architect under the previous WSF contract where she carried out the duties of the salvage engineer on a weekly basis. Zenzi also participated in the M/V *Walla Walla* incident by performing calculations with GHS during the response phase of the casualty.

Kitsap Transit Hybrid-Electric Passenger Ferry Design, 2014-2019 – Glosten was contracted to design a 150 passenger, 70-foot aluminum vessel M/V *Waterman*. Following the contract design, Zenzi conducted a Buy America pre-award audit where she analyzed the pre-award bid package, evaluated the domestic content of 34 bid components, and authored a memo detailing the results. Following the vessel's construction, Zenzi conducted a post-delivery audit.

AMHS Fleetwide Passenger Amenities Upgrade, 2017 – Glosten was selected to develop design, engineering, and construction documents for the upgrade and refurbishment of passenger amenities across the AMHS fleet. As the project manager, Zenzi finalized the Design Study Report, which described the condition of the amenities across seven ferries, and recommended refurbishment options. Zenzi continued to lead Glosten's effort during the ongoing construction phase.

Matthew (Matt) Miller, PE

Principal In Charge



Experience 30 years

Professional License Washington, Naval Architecture & Marine

Engineering, 2002

Familiar with WSDOT Procedures/Regulations

Role

Glosten Principal, Naval Architect Matt Miller will serve as Principal-in-Charge for this twoyear incident response contract. Matt has extensive experience providing incident response training and services. While an officer in the United States Coast Guard, he worked at the USCG Marine Safety Center for over four years as the assistant salvage team leader. As Principal-in-Charge, he will serve as the client and project advocate to ensure that the project has the resources needed for the duration of the contract. He is responsible for quality assurance and contract conformance.

Project Experience

WSF Emergency Response, 2017-2023 – Matt served for several years as the Principal-in-Charge and Project Manager under the previous WSF contract where he supported tasks including carrying the duty salvage engineer phone on a weekly basis, facilitating a drill, and providing support for a vessel casualty.

Resolve Marine Group *Kodiak Enterprise* **Fire**, **2023** - Glosten was notified of a fire onboard a fishing vessel in Tacoma and on-site support was requested. Matt immediately responded and reported to the Tacoma pier to support the casualty response. He helped direct the dewatering effort as shoreside municipal firefighters fought the fire. Maintaining positive stability was vital to the success of the firefighting so Matt helped monitor the status of the vessel, provided guidance to local USCG, State, and city responders, reviewed stability calculations, and reported results to the client.

Resolve Marine Group Grounded ATB Vessel, 2016 - Glosten supported Resolve Marine Group on the salvage of an ATB combination in British Columbia. Matt flew up to the remote site as soon as the request for salvage engineering support was mad. He provided onsite support for the first week of the incident, taking part in daily incident command meetings and modeling the incident so that a salvage plan could be developed to remove the tug and barge while preventing pollution in the environmentally sensitive area.

11

Max Ryan, PE

Emergency Response Team Member



Experience 11 years

Professional License Washington, Naval Architecture & Marine

Engineering, 2019

Familiar with WSDOT Yes **Procedures/Regulations**

Role

Glosten Naval Architect Max Ryan will serve as an on-call naval architect on a weekly duty rotation, prepared to respond immediately in the event emergency services are needed. On duty, he will monitor the WSF response phone number and dedicated email address.

Project Experience

WSF Emergency Response, 2019-2023 – Max served as an on-call naval architect under the previous WSF contract where he was in the rotation to carry the on-call duty engineer phone on a weekly basis. Max also assisted in the M/V Walla Walla response by developing the GHS run file used for the analysis and performing hydrostatic calculations during the response. Max provided input to the lessons learned document after the incident.

Resolve Marine Group, Nana Provider Response, 2019 – The Nana Provider is an AML barge that ran aground near Campbell River, BC while being towed to Alaska. Glosten supported Resolver Marine Group with the salvage response. Max conducted grounding and hydrostatic calculations to help support our engineers on site. He also performed barge strength calculations help avoid further damage to the barge during float off and predicting when the barge would float off the rock pinnacle that had penetrate the hull.

Alaska Maritime Prevention and Response Network Sea Anchor, 2016 – Working as a naval architect for the emergency ship arrest para sea anchor project, Max helped to develop the design for the attachment system by which the sea anchor connects to a disabled vessel. This required determination of proper sizing of the synthetic lines used by the system, a survey of the design vessel, and structural calculations to verify the strength capacity of mooring fittings and the vessel's deck structure.

Kento Tanase, PE Emergency Response Team Member Experience 12 years



Professional License

Washington, Naval Architecture & Marine Engineering, 2019; Washington, Civil Engineering, 2020

 $\begin{array}{ccc} \textbf{Familiar with WSDOT} \\ \textbf{Procedures/Regulations} \end{array} Yes$

Role

Glosten Naval Architect Kento Tanase will serve as an on-call naval architect on a weekly duty rotation, prepared to respond immediately in the event emergency services are needed. On duty, he will monitor the WSF response phone number and dedicated email address.

Project Experience

WSF Emergency Response, 2019-2023 – Kento served as an on-call naval architect under the previous WSF contract where he was in the rotation to carry the on-call duty engineer phone on a weekly basis. Kento assisted in the M/V *Walla Walla* response by reviewing the GHS code and output and acting as the internal quality control. Kento also assembled the chart data into the technical response.

Resolve Marine Group Pacific Paradise Response, 2017 – The Pacific Paradise was a fishing vessel that ran aground right in front of Waikiki Beach, in Honolulu in a highly sensitive area due to close proximity to coral reefs and proximity to the public from shore. Kento was onsite through the entire project duration to provide engineering support for Resolve to float the vessel off the ground without disrupting the reefs, tow the vessel to a designated site offshore, and ultimately sink it at the designated safe site. This called for challenging naval architecture techniques to create buoyancy in a damaged hull, and analysis.

Resolve Marine Group Nathan Stewart Salvage and Wreck Removal, 2016 – Glosten supported Resolve Marine Group on the salvage of an oil barge and the wreck removal of the tug *Nathan Stewart* in the remote location of Bella Bella, British Columbia. Kento supported this challenging project on-site as the chief liaison between Glosten's technical team and the vessel's crew.

Criteria 4. Firm's Project Management System

A. Glosten's Project Management Approach

Glosten utilizes several processes, tools, and systems to manage multiple projects in a timely and cost-efficient manner while maintaining quality in our service and deliverables.

Glosten Quality Management System

Glosten constantly strives to improve our processes and the quality of our work. We maintain ISO 9001 certification for our Quality Management System (QMS) to demonstrate this commitment and uphold these rigorous standards internally.

Our QA/QC procedures are implemented by formal crosschecking methods and through independent reviews of submittals. Using a three-step process, every deliverable is reviewed and/or approved by multiple distinct technical staff. Glosten's QA/QC process ensures the team's use of appropriate technical methodology, technical and regulatory accuracy, and consistency. Our full QMS manual is available upon request.

Firm Workload and Resource Management

Glosten uses Microsoft Project and a Glosten proprietary Operations forecasting tool to effectively manage staff, allowing us to proactively address issues before they affect the critical path. We input all projects into the firm-wide resource schedule to carefully manage our commitments to all clients. All Glosten project managers meet on a weekly basis to forecast workload and allocate staff to projects. A bi-monthly meeting of these same managers is also held to forecast project staffing needs for a six-month period. Glosten's standard resource planning always includes a 15% allocation of unanticipated work to allow for the on-demand needs of our clients.

Maintaining Task Schedules

Our PMs are keenly aware of the importance of tracking and reporting performance compared to schedule. We develop a project schedule in MS Project based on the scope of work and schedule milestones. We then maintain and update the project schedule throughout the project.

Zenzi has expertly honed this process as a Project Manager. For example, Zenzi successfully leveraged MS Project for the AMHS Fleetwide Amenities effort to monitor schedule and budget performance. As a project spanning seven vessels and three years, it was imperative to closely monitor resources. During her time as Project Manager, Zenzi pulled in Glosten's budget from MS Project pulled actuals from Glosten's accounting software, and compared the two to succinctly understand budget and schedule performance each week. This budget and schedule performance informed discussions with the internal Glosten team and the client, and drove resource decisions to provide efficient deliverables that met client needs.

Deviations from the schedule baseline and impact on the overall project are a topic of discussion during regular project meetings. Any schedule changes are agreed upon with our client prior to incorporating into the project. Additionally, the project schedule:

- Includes all deliverables, submittals, milestones, and durations.
- Identifies any constraints and issues and, as appropriate, develops an action plan to take corrective actions.



- Constraints may be limited resources available, requiring transfer of task assignments to prioritize critical-path items.
- Issues may be the non-receipt of required vendor information, requiring delay in detail development or in making qualified assumptions to advance the design until better information is available.

Maintaining Budget

Glosten provides our clients with monthly Project Status Reports. We report on the services provided during the period, work to be performed during the next period, overall progress to date, schedule, and any project issues outstanding. We have utilized this tool for all projects referenced in this proposal.

We manage the progress and budget of each project using various tools, including earned value reporting for all fixed-fee projects. Specific tracking and status requirements will be a discussion topic during project initiation. Should there be any risk of deviation from the budget, our earned value process and other tools allow us to quickly identify potential project risks, providing us with an indicator to course correct our efforts and minimize project impacts.

Glosten monitors progress with our subcontractors and implements our project management processes to ensure budgets are adhered to and work is completed as detailed in the scope of work.

Interacting the Project Team and Stakeholders

One tool, which each Glosten project receives, is a Project Management Plan (PMP). Much of the PMP is general and implements Glosten's best practices, gained through decades of experience and satisfied clients. At the beginning of new projects, the Principal and PM meet to draft a project-specific plan. The PMP documents the project's scope, critical success factors, objectives, budget, project team roles and responsibilities, risk items, mitigation, and more in a singular document so that the project team and client are fully aware of and understand the plan for project success. The PMP is then presented to the client for discussion and revision as needed.

At the start of the project, time is set aside for Glosten and our client to complete a review of the PMP to be sure it reflects the client's individual needs and preferences. Setting clear expectations with our clients and providing transparency into how their projects are managed greatly improves project success outcomes and client satisfaction.

The sections below describe some of our general best practices, which will be included in the PMP and are available for client modification at the start of the project to ensure Glosten provides exceptional service.

Project Manager

At Glosten, we are the experts in our field. It is our duty to guide our clients from their initial idea, issue, or concept to a finished product (as defined by the project scope).

To facilitate efficient project completion, each project is assigned a Project Manager (PM). The PM is there to manage the project in all aspects: budget, schedule, scope, and (most critically) communication, both internal and external.

Communication

Our team thrives on interfacing with clients, subcontractors, and associated stakeholders. We believe in a collaborative design approach emphasizing client advocacy and engagement. Having



clear guidance on how communication is to take place improves the flow of communication between multiple parties.

We have many tools at our disposal. Generally, contact between Glosten, the client, and all stakeholders occurs in person, over the phone, over email, and during MS Teams virtual calls/meetings.

Kick-Off Meeting

A project kick-off meeting is held with the client for every project. Where project schedule and budget allow, Glosten prefers to hold kick-off meetings in person, at either our client's facility or Glosten's offices. During the kick-off meeting, the project scope, schedule, communication plan, and budget are reviewed to improve the team's mutual understanding of the project.

Assigning Tasks

As Project Manager and main point of contact, Zenzi Moore will review and discuss all proposed tasks and will develop a task-specific proposal within four business days of final discussion and receipt of supporting materials. Emergency requests will be developed immediately. Glosten's letter proposal will include, at a minimum, the following elements:

- Description of the work and task to be performed.
- Personnel assigned to the task.
- Definition of task deliverables with a brief description of the scope and content.
- Identification of required regulatory and class submittals.
- Resource-loaded schedule showing the sequence of work, time, and duration for each work item in the task sequence of submittals, and in-process reviews as required by WSF.

If selected for price negotiations, we will prepare a detailed cost estimate. Upon selection, we will update and revise the initial proposal to reflect the negotiated and agreed price. We will incorporate any of WSF's comments with regard to the scope, deliverables, and schedule, and resubmit to WSF.

Criteria 5. Project Delivery Approach

A. Project Management Approach

In order to ensure full 24/7 coverage for the entire performance period, the project manager maintains a scheduling spreadsheet that identifies the primary duty salvage engineer for the week of service for the entire calendar year. There is also another column in the spreadsheet for engineers to note when they are out of town and not available to support a casualty response. In times of an emergency, the duty engineer notifies the rest of the response team in order to provide assistance.

In addition to the dedicated spreadsheet for the team, the duty engineer is identified in the Glosten company six-week operations form. This operations form is available to the entire company so that management and other engineers know who is responsible for answering the call from WSF. This means of communication also supports identification of additional resources that can be called upon for assistance during an emergency.

Glosten also has four principals with salvage engineering expertise who are available on a regular basis for consultation and guidance during a casualty event.

B. Mitigating Project Issues

Over the past few years Glosten participated in one drill and one actual casualty with WSF. After the conclusion of each of these events, we developed a lessons-learned document that identifies areas for improving the casualty response for both Glosten and WSF. These lessons learned reports were discussed internally and submitted to WSF for review and consideration.

Glosten also has communications channels in Microsoft Teams and via text messaging for project team members so in the event of a casualty all team members are notified and made aware of the situation. While all engineers have their professional engineering license and are experienced salvage engineers, discussing various remediation methods and techniques with other engineers provides clients with the best service.

C. Assumptions for Work Breakdown Structure

Glosten will deliver a casualty report/lessons-learned document after a casualty response and also proposes to hold regular drills with WSF to ensure prompt and satisfactory salvage services can be provided. The Glosten team has a full understanding of its responsibilities and processes, but our past drills and casualty response efforts have identified ways to improve the overall response effort from multiple parties. Meeting with WSF staff and discussing this feedback is essential to future success in case of a casualty.

D. Key Issues and/or Milestones

Glosten currently has electronic vessel files for the WSF fleet and will work with WSF to develop new and updated vessel files, as necessary. In our experience, holding table top drills is essential to ensuring communication channels and expectations are clearly identified and tested.

As engineers at Glosten earn their professional engineer license, new team members may be added to the response team. When newly licensed team members join the team, vessel and file familiarization will be completed to ensure the engineer is prepared to respond in the event of notification.