

**SAN FRANCISCO BAY AREA WATER EMERGENCY TRANSPORTATION AUTHORITY**

**REQUEST FOR PROPOSALS FOR TIER 4 MAIN ENGINE CONVERSION GEMINI  
CLASS SERVICES  
RFP #21-009**

**ISSUED: June 4, 2021**

**PART A: INSTRUCTIONS**

**1. BACKGROUND**

WETA, a local agency with multi-county jurisdiction, was established by the California Legislature to expand regional ferry service and coordinate waterborne emergency response activities on San Francisco Bay. WETA’s vision is to develop, operate and manage an expanded and enhanced region-wide ferry system that provides a reliable, state-of-the-art and attractive transportation option for the Bay Area, and to play a critical role in coordinating and providing water transportation to serve emergency response and economic recovery needs.

WETA is seeking Tier 4 Main Engine Conversion Gemini Class services from qualified individuals or firms (Proposers). The Gemini class vessels (Gemini, Pisces, Scorpio & Taurus) are 112’ high speed aluminum catamarans. The first in class vessel was launched in 2008 and the last vessel was launched in 2010. The vessels are currently powered with EPA Tier 2 MTU 16v2000M70 main engines with Aftermarket SCR systems. WETA recently was awarded two grants to repower the Gemini class vessels with EPA Tier 4 MAN D28620LE489 engines. The two engines are very close in power levels at the same rated RPM. The MAN engine is much smaller however and will be configured to adapt to the existing gearboxes and engine beds with minimal modifications. Each of the vessel’s systems will need to be adapted to the new engines. For detailed information regarding the required Services, please refer to Part B, Technical Specifications. The individual or firm selected pursuant to this RFP (Selected Proposer) will be expected to provide any and all Services in compliance with applicable local, state and federal laws, rules and regulations.

**2. SOLICITATION TIMELINE**

Listed below is the anticipated schedule that outlines pertinent dates of which Proposers should be aware—all dates are subject to revision at WETA's sole discretion:

6/4/2021	Issuance of RFP
6/11/21	Pre-Proposal Conference @ 2:00PM (Virtual, Zoom)
6/18/2021	Written requests for clarifications are due
6/24/2021	Response to requests for clarifications
7/21/2021	Proposals due @ 2:00PM
Week of 7/26/2021	Proposer interviews, if held
9/2/2021	Possible Board Meeting for award

### **3. PRE-PROPOSAL CONFERENCE**

WETA will conduct a Pre-Proposal Conference. Attendance is not mandatory, but participation is strongly encouraged. The Pre-Proposal Conference will take place via Zoom online conference call according to the schedule in the Solicitation Timeline, Table 2.

The purpose of the Pre-Proposal Conference will be to answer questions about the RFP. All statements and interpretations provided by WETA representatives at the Pre-Proposal Conference are non-binding unless contained in a subsequent written Addendum.

### **4. REQUESTS FOR CLARIFICATION OF RFP; ADDENDA**

All requests for clarification regarding the meaning or interpretation of any part of this RFP should be in writing and sent to Tim Hanners at [Hanners@watertransit.org](mailto:Hanners@watertransit.org).

Should WETA determine that a clarification of the RFP is in order, WETA will issue a written addendum clarifying the matter, which will be posted on WETA's website (<https://weta.sanfranciscobayferry.com>). Each Proposer has an on-going responsibility to check WETA's website for addenda. WETA has no obligation to provide any other notice of addenda being issued. WETA's failure to respond to a request for clarification or modification will be deemed to be a rejection of such request. Any WETA determination on any Proposer request will be final. Addenda issued for this RFP, if any, must be expressly acknowledged in Proposer's cover letter.

### **5. EX PARTE COMMUNICATIONS**

Proposers and Proposers' representatives may not communicate orally with an officer, director, employee, or agent of WETA, outside the procedures set forth in this RFP, until after a final agreement between the Selected Proposer and WETA has been executed. Proposers and their representatives are not prohibited, however, from making oral statements or presentations in public to one or more representatives of WETA during a public meeting. Any written communication regarding the RFP between a Proposer (or the Proposer's representative) and WETA's Executive Director, Board Member, officer, employee or consultant, regardless of who initiates the communication, other than as part of the procurement process set forth in this RFP, before WETA issues a Notice to Proceed, will be available for disclosure to the general public.

### **6. CONFIDENTIALITY**

The California Public Records Act (CPRA) (Government Code Sections 6250 et seq.) mandates public access to public records not exempt from disclosure under the CPRA. Therefore, unless the information is exempt from disclosure by law, the content of the proposal, as well as any other written communication between WETA and a Proposer, is a public record that must be made available to the public upon request.

**A. Confidentiality Index and Waiver of Claims**

If the Proposer believes its proposal, any other communications with WETA, or any documents or materials of any kind provided to WETA to supplement or explain its proposal, or in response to any WETA inquiry or request in connection with this RFP ("supplemental materials"), contains information exempt from disclosure under the CPRA, including trade secrets or other proprietary information that the Proposer believes would cause substantial injury to the Proposer's competitive position if disclosed, the Proposer must request that WETA withhold from disclosure the exempt information by submitting:

- (1) An unredacted copy of the proposal, communication and/or supplemental materials marking each page containing such exempt information as confidential; and
- (2) A redacted copy of the proposal, communication and/or supplemental materials that redacts the purportedly exempt information; and
- (3) A "confidentiality index" that complies with the following requirements:
  - i. For proposals, the confidentiality index must include: (i) the section and page number of the proposal where the information except from disclosure is located; and (ii) an explanation of why the information is exempt from disclosure under the CPRA.
  - ii. For communications and supplemental materials, the confidentiality index must include: (i) the section and page number of the communication or supplemental document where the information except from disclosure is located, as appropriate; and (ii) an explanation of why the information is exempt from disclosure under the CPRA.
- (4) A signed letter with the following statement: "By submitting this [proposal/communication/supplemental material], Proposer agrees to indemnify, defend, and hold harmless WETA, its directors, officers, employees and agents, from any and against all damages (including but not limited to attorneys' fees that may be awarded to the party requesting the Proposer information), and pay any and all cost and expenses, including attorneys' fees, related to the withholding of the information included in the confidentiality index. If Proposer fails to accept a tender of a defense, WETA reserves the right to resolve all claims at its sole discretion, without limiting any rights stated herein."

By submitting a proposal, communication, or supplemental material, Proposer:

- (1) Consents to the release of the redacted version of the proposal, communication, or supplemental material; and
- (2) Consents to the release of any portion of its proposal, communication, or supplemental material not included in the confidentiality index; and
- (3) Waives all claims against WETA, its directors, officers, employees and agents, for the disclosure of such information.

If the Proposer does not include an unredacted copy, redacted copy, confidentiality index and signed indemnification statement, with its proposal, communication, or supplemental material in accordance with the requirements of this section, WETA will have no obligation to withhold any information in the proposal, communication, or supplemental material from disclosure and may release the proposal, communication, or supplemental material without liability to WETA.

A Proposer may not designate its entire proposal or major portions of its Proposal as confidential. A Proposer may not designate WETA forms as confidential. WETA will not honor such designations, and will disclose submittals so designated to the public.

**B. Review of Confidentiality Index**

Upon receipt of a request pursuant to the CPRA seeking a proposal, communication or supplemental material relating to this RFP, WETA may provide the redacted version of the requested record or may withhold information designated in the confidentiality index that is exempt from disclosure. If WETA determines that information in the confidentiality index is not exempt from disclosure, WETA will give reasonable notice to the Proposer prior to releasing any material listed in the confidentiality index.

In the event of a conflict between the redacted version of a record, the confidentiality index, and confidentiality designations in the body of the record, the redacted version of the record prevails.

**C. Confidentiality Indemnity**

Proposers agree to indemnify, defend, and hold harmless WETA, its directors, officers, employees and agents, from any and against all damages (including but not limited to attorneys' fees that may be awarded to the party requesting the Proposer information), and pay any and all cost and expenses, including attorneys' fees, related to the withholding of the information included in a confidentiality index. If Proposer fails to accept a tender of a defense, WETA reserves the right to resolve all claims at its sole discretion, without limiting any rights stated herein.

**7. LEVINE ACT**

The Levine Act (Government Code 84308) is part of the Political Reform Act of 1974 and applies to elected officials who serve on appointed boards such as the WETA Board of Directors (Board). The Levine Act prohibits any Board Member from participating in or influencing the decision on awarding a contract with WETA to anyone who has contributed \$250.00 or more to the Board Member within the previous twelve months. The Levine Act also requires a member of the Board who has received such a contribution to disclose the contribution on the record of the proceeding. In addition, Board Members are prohibited from soliciting or accepting a contribution from a party applying for a contract while the matter of awarding the contract is pending before WETA or for three months following the date a final decision concerning the contract has been made.

Proposers must disclose on the record any contribution of \$250.00 or more that they have made to a WETA Board Member within the twelve-month period preceding submission of their response to this RFP. This duty applies to the Proposer, any member of Proposer's team, any agents for the Proposer other team members, and to the major shareholders of any closed corporation that is part of the Proposer's team.

Proposers must indicate in the cover letter submitted with their proposal whether any contribution(s) must be disclosed pursuant to the Levine Act. If the Proposer has made a contribution that needs to be disclosed, the Proposer must include with its proposal a separate written document stating the date, amount, and receipt of the contribution(s).

## **8. CONFLICTS OF INTEREST**

WETA currently has long-term contracts with consulting firms that are assisting in areas related to the services that are the subject of this RFP. These Consultants are Aurora Marine Design, Admiralty Diesel Services, & Blue & Gold Fleet. These firms, as well as subcontractors supporting the firms on WETA projects, are not eligible to submit proposals in response to this RFP or provide services as a subconsultant to any Proposer.

By submitting a proposal, the Proposer represents and warrants that no director, officer or employee of WETA is in any manner interested directly or indirectly in the proposal or in the Agreement which may be made under it or in any expected profits to arise there from, as set forth in Article 4, Division 4, Title I (commencing with Sec. 1090) of the Government Code of the State of California.

The Proposer warrants and represents that it presently has no interest and agrees that it will not acquire any interest which would present a conflict of interest under California Government Code Sections 1090 et seq. or Sections 87100 et seq. during the performance of services under this Agreement. The Proposer further covenants that it will not knowingly employ any person having such an interest in the performance of this Agreement. Violation of this provision may result in this Agreement being deemed void and unenforceable.

Depending on the nature of the work performed, the Proposer may be required to publicly disclose financial interests under WETA's Conflict of Interest Code. The Proposer agrees to promptly submit a Statement of Economic Interest on the form provided by WETA upon receipt. No person previously in the position of director, officer, employee or agent of WETA may act as an agent or attorney for, or otherwise represent, the Proposer by making any formal or informal appearance, or any oral or written communication, before WETA, or any officer or employee of WETA, for a period of twelve (12) months after leaving office or employment with WETA if the appearance or communication is made for the purpose of influencing any action involving the issuance, amendment, awards or revocation of a permit, license, grant or contract.

The Proposer warrants that it has no organizational conflicts of interest at this time. Alternatively, the Proposer must disclose all known organizational conflicts of interest. An organizational conflict of interest occurs when, due to other activities, relationships, or contracts, a firm or person is unable, or potentially unable, to render impartial assistance or advice to WETA; a firm or person's objectivity in performing the contract work is or might be impaired; or a firm or person has an unfair competitive advantage in proposing for award of a contract as a result of information gained in performance of this or some other agreement.

See the Sample Agreement in Part C of the RFP for additional conflict of interest provisions that will be in effect during the contract term.

## **9. NON-COLLUSION**

By submitting a proposal in response to this RFP, each Proposer certifies that its proposal is genuine and not a sham or collusive or made in the interest of or on behalf of any person not named therein; that the Proposer has not, directly or indirectly, induced or solicited any other person to submit a sham proposal or any other person to refrain from responding to this RFP; and that the Proposer has not in any manner sought collusion to secure any improper advantage over any other person submitting a response to this RFP.

## **10. SAMPLE AGREEMENT; EXCEPTIONS**

The Selected Proposer will be required to execute a contract with WETA, a sample of which is included in Part C of this RFP. Proposers must review all of the terms and conditions set forth in the Sample Agreement. Submittal of a proposal will be deemed acceptance of all of the terms set forth in this RFP and the Sample Agreement unless the Proposer includes any modifications requested to the Sample Agreement in its cover letter, or in an attachment thereto. All requests for exceptions must be in writing, separately identified, and delineated for each section of the Sample Agreement. WETA reserves the right to request further clarification of any requested exception during negotiations and to exclude unacceptable exception(s). No exceptions may be requested after the deadline for the submittal of proposals.

## **11. PERFORMANCE BOND**

The Selected Proposer must furnish at its own expense a Performance Bond at the times and in the amounts as follows:

- Prior to payment of any contract invoice a Performance Guarantee (Performance Bond, Irrevocable Standby Letter of Credit or Certified Check) in the Amount of 25% of the total Contract value.

The bond must be with a California-admitted corporate surety or with two (2) or more sufficient sureties to be approved by WETA. As an alternative to furnishing a bond, the Selected Proposer may guarantee faithful performance of the contract by depositing with WETA a certified check or cashier's check from a solvent bank for the prescribed amount. An irrevocable standby letter of credit issued in a form approved by WETA may also be an acceptable substitute to a Performance Bond. The Performance Bond will guarantee the Selected Proposer's faithful performance of and compliance with all terms, conditions and requirements of the Agreement. The Performance Bond must remain in full force and effect until the expiration of all warranties and settlement of all outstanding warranty claims. The Bond must be submitted using the form included in Part D.

For purposes of Proposer's Cost Proposal, set forth in Part D, Proposers must include bonding costs to satisfy the requirements set forth above.

## **12. FEDERAL REQUIREMENTS**

NOT APPLICABLE

## **13. DIVERSITY PROGRAM FOR CONTRACTS**

NOT APPLICABLE

## **14. PROPOSAL CONTENT AND FORMAT**

Each proposal submitted in response to this RFP must respond fully to the requirements of this RFP and include the following elements in the sequence listed below. It is expected that proposals submitted to WETA be of professional caliber in context and appearance; however, expensive binders are neither required nor desired. All descriptions and materials should be clear, concise, and provide sufficient information to minimize questions and assumptions.

Proposals should be limited to 25 pages, excluding cover letter, table of contents, resumes, required forms, and the cost proposal. Proposers are encouraged to print double-sided pages to conserve resources.

WETA, at its option, may require a Proposer to provide additional information and/or clarify submitted information.

**A. Cover Letter**

The cover letter must be on company letterhead, be signed by an individual who is legally authorized to bind the firm to the proposal (including the cost proposal) and must include all of the following information:

- Proposer's name, including all firms involved in a joint venture and any subcontractors.
- If the Proposer is a joint venture: (1) provide an executed copy of the Joint Venture contract with the proposal; and (2) outline the specific areas of responsibility (including administrative, technical, and financial) for each member of the Joint Venture.
- Proposer's business address, telephone numbers, and e-mail address.
- Introduce the firm and summarize its qualifications.
- Name(s) of authorized principals with authority to negotiate and contractually bind the firm.
- A statement that binds the Proposer to its proposal and Cost Proposal Form for 90 calendar days.
- Include an express acknowledgement of the receipt of a complete set of RFP documents and all Addenda issued for this RFP, if any.
- If Proposer submits a confidentiality index, the statement required in Part A, Section 6.A of this RFP. Alternatively, if the Proposer does not submit a confidentiality index in accordance with Part A, Section 6.A, a statement confirming that the Proposal does not contain any confidential information and may be released, in its entirety, by WETA in response to a request made pursuant to the California Public Records Act.
- Indicate whether there are any required disclosures pursuant to the Levine Act. See Part A, Section 7. Include any such disclosure in a separate document as per Part A, Section 7.
- Indicate whether there are any conflicts of interest that would limit the Proposer's ability to provide the requested services. See Part A, Section 8.
- Requests for exceptions to the Sample Agreement must be stated in the cover letter, or in an attachment thereto. All requests for exceptions to the Sample Agreement must be in writing, separately identified, and delineated for each section of the Sample Agreement. See Part A, Section 10 and Part C of this RFP.

**B. Project Understanding and Approach**

- A discussion demonstrating the Proposer's understanding of the Services and their familiarity Carl Moyer funded repower projects.
- Proposer's proposed approach to providing the Services, including identification of all subconsultants or subcontractors the Proposer intends to use for this Project.

- A discussion on potential impacts to cost, scope and schedule based on lessons learned performing work similar to the Services, including Proposer's recommendations to lower and/or control costs, if applicable.
- Identification of additional tasks, if any, not identified in this RFP that may be required to successfully meet the stated objectives of this RFP.
- Proposer's approach to working with WETA staff.
- An organization chart that clearly identifies the proposed team composition.
- A staffing plan by task listed in the Technical Specifications in Part B. Discuss workload for all Key Personnel, indicating their expected availability, the percentage of their time that will be devoted to this Project and any other assurances as to their ability to provide the Services in a responsive and timely manner.
- Address how unanticipated staffing shortfalls will be handled.
- Explain how Key Personnel and subcontractors will be managed.
- If the work is to be shared among firms and offices at different locations, indicate where each office is located and what work is to be performed in each office.
- Provide a Preliminary Schedule, identifying each major element of and proposed timeline for the completion of key events. The date of completion for all four (4) vessels must be no later than **January 2<sup>nd</sup>, 2023** at which point the vessel(s) will be ready for service with all work complete.
- Describe systems used to organize, allocate resources and schedule design, construction, and testing activities.
- Describe how work is monitored and how adjustments in the Project schedule are made, in particular to address any schedule slippage.
- Describe the Proposer's quality control, quality assurance and internal testing programs.
- Describe how the USCG inspection and testing program will be structured and managed.
- Describe how the Proposer intends to interface with WETA during final engineering, design, construction and post-construction phases, and how the review process will be structured and managed with WETA.
- Describe: (i) the facilities that will be utilized including locations; (ii) areas used for materials handling and storage; (iii) crane capacity and capability; (iv) how the vessel will be docked and launched; (v) where the vessel will be moored and worked on once launched.

### **C. Proposer's Qualifications and Experience**

In this section, the Proposer must provide information about its company so that WETA can evaluate Proposer's stability and ability to support the commitments in their proposal.

- Description of Proposer's qualifications to perform the Services, specifically including: Dry Docking, aluminum, stainless steel and copper nickel welding and fabrication, mechanical systems, electrical system, machinery alignment (including methods and equipment), Interior Joinery and finish work, painting and USCG engineering submissions, inspections and certifications.
- Identify and describe the Proposer's aluminum vessel construction/repair experience. List experience of Proposer on not less than three (3) similar projects over the last five (5) years. The projects should demonstrate the

Proposer's capability and expertise with similar vessel construction/repair.  
Provide contact information for at least three of the listed similar projects.

**D. Proposer's Business and Financial Qualifications**

In this section, Proposers must provide pertinent information to allow the WETA to reasonably formulate a determination about the financial stability and strength of the Proposer such as financial references, financial statements, or other relevant documentation. Describe any administrative proceedings, claims lawsuits, settlements, or other exposures pending against the Proposer.

**E. Qualifications and Experience of Key Personnel**

"Key Personnel" are those individuals who are essential to the successful completion and execution of the Services. Key Personnel must be available for the duration of the engagement and may not be substituted by the Selected Proposer without WETA's prior written approval. Substitution of Key Personnel without WETA's prior written approval will constitute a breach of the Agreement awarded pursuant to this RFP. WETA reserves the right to direct the removal of any individual, including Key Personnel. In this section, Proposers must provide the following for all Key Personnel:

- Name and title
- A description of their qualifications and experience relevant to performing the Services
- Number of years of experience performing work similar to or related to the Services
- A resume

**F. References**

Proposers must provide at least three references of client for whom, within the past five years, the Proposer has provided the same or similar services as those called for in this. For each reference include:

- Entity name
- Contact name, email address and phone number
- A brief description of the project and the roles of the respective team members in successfully completing the project.

**G. All Required Forms**

Proposers must submit all the required forms listed in Part D of the RFP, including the Cost Proposal Form pursuant to the instructions in Section 15 below. Failure to execute and submit all the required forms and provide all the requested information may result in the Proposal being rejected as nonresponsive.

**15. COST PROPOSAL FORM**

Submit a completed Attachment A, "Cost Proposal Form." Costs must include, but not be limited to, labor, materials, supplies, taxes, overhead, insurance and profit.

In addition to completing the Cost Proposal Form, please submit a proposed Milestone Payment Schedule showing percentage milestone payments associated with completion and WETA approval of key phases of the Work on each Vessel. The proposed Milestone Payment

Schedule may not include any advance payments but may include a reasonable first Milestone for mobilization and any initial costs. WETA will not score the proposed Milestone Payment Schedule, but will negotiate with the highest ranked proposer on the schedule, provided that under no circumstances will WETA modify the Total Contract Price as a result of any negotiations over the Milestone Payment Schedule. Depending on the agreed-upon Milestone Payment Schedule, WETA may, in its sole discretion, retain up to 5% of each Milestone until satisfactory completion of the warranty period of each Vessel WETA's determination on the allowability, allocability, and reasonableness of the proposed costs shall be final and conclusive.

## **16. PROPOSAL SUBMISSION INSTRUCTIONS**

Submit One (1) digital copy on USB drive of Proposal and all required forms in PDF format to Tim Hanners at [Hanners@watertransit.org](mailto:Hanners@watertransit.org) Proposals must be titled RFP: 21-009 Tier 4 Main Engine Conversion Gemini Class and include the name of the Proposer.

Proposals received after the date and time specified in Section 2 will be considered late and will not be accepted.

## **17. WAIVER**

Proposers are solely responsible for examining, with appropriate care and diligence, all parts of this RFP and fully informing themselves of all relevant aspects of Technical Specifications. By submitting a proposal, the Proposer represents and warrants that the Proposer has: sufficiently examined and is familiar with each part of this RFP and with all matters affecting the performance of the Technical Specifications; checked its proposal for errors and omissions; confirmed that the prices stated in its proposal are correct for performing the Technical Specifications and as intended by it. The Proposer waives any claim against WETA for costs incurred in preparing a proposal and responding to this RFP.

## **18. WITHDRAWAL OF PROPOSAL**

Submission of a Proposal shall constitute a firm offer to WETA for 90 calendar days from the submission deadline for proposals stated in Section 2 of this RFP.

A Proposer may withdraw its proposal any time before the date and time when proposals are due, without prejudice, by submitting an email request for its withdrawal to the name and email address stated below. A telephone request is not acceptable.

San Francisco Bay Area Water Emergency Transportation Authority  
ATTENTION: Tim Hanners  
EMAIL: [Hanners@watertransit.org](mailto:Hanners@watertransit.org)

## **19. EVALUATION PROCESS**

### **A. WETA Evaluation Committee**

WETA will establish an evaluation committee appointed by the Executive Director with responsibility for (1) reviewing all proposals and (2) conducting the evaluation and interviews, if any, described in this RFP. WETA reserves the right to reject or accept any and all proposals, to waive any minor irregularities in proposals or procedures, and to request additional information from Proposers at any stage of the evaluation.

**B. Preliminary Evaluation of Proposals**

The Evaluation Committee will conduct a preliminary responsiveness check to confirm that each proposal contains all the required documentation and information necessary to be deemed responsive to the RFP. WETA may reject as non-responsive any proposal that does not include the documents and information required by the RFP. However, WETA reserves the right to request additional information and clarifications during the evaluation and selection process from any or all Proposers regarding their proposals.

**C. Evaluation Criteria**

WETA intends to award a contract to the most qualified, responsible firm submitting a responsive proposal. Ranking of Proposers will be based on a maximum of 1000 points, allocated as indicated below. To determine the number of points a Proposer will receive in each category, the Evaluation Committee will consider the proposal material submitted, interviews (if applicable), additional information requested by WETA, client references and any other relevant information about a given Proposer.

The following criteria, as well as any sub-criteria that are logically and reasonably related to the criteria, will be used by the WETA's Evaluation Committee in the evaluation of the proposals:

<b>Evaluation Criteria</b>	<b>Maximum Points</b>
<p><b>Project Understanding and Approach</b></p> <ul style="list-style-type: none"> <li>• Proposer's understanding of the Services.</li> <li>• Proposer's proposed approach to providing the Services and working with WETA staff.</li> <li>• Organization chart of proposed team.</li> <li>• Staffing plan for the Project.</li> </ul>	200
<p><b>Proposer's Qualifications and Experience</b></p> <ul style="list-style-type: none"> <li>• Proposer's qualifications to perform the Services, specifically including its demonstrated ability to satisfy the requirements of Part A, Section 14.C.</li> <li>• Proposer's relevant experience performing work that is the same or similar to the Services, including the scope and dollar value of prior projects completed and Proposer's references.</li> <li>• Sufficiency of Proposer's financial strength, resources and capabilities to perform the Services, as measured by information provided in response to Part A, Section 14.D.</li> </ul>	100
<p><b>Qualifications and Experience of Key Personnel</b></p> <ul style="list-style-type: none"> <li>• Key Personnel's qualifications to perform the Services.</li> <li>• Key Personnel's relevant experience performing work that is the same or similar to the Services.</li> </ul>	100
<p><b>Project Schedule</b></p> <ul style="list-style-type: none"> <li>• Schedule logic, flow and completeness (planning, engineering, procurement, production, inspections &amp; delivery)</li> <li>• Schedule completion date prior to grant deadlines</li> <li>• Proposers methodology to control schedule slip</li> </ul>	200

<b>Cost Proposal</b>	400
<ul style="list-style-type: none"> <li>• Reasonableness of price based on WETA's cost or price analysis</li> <li>• Reasonableness of billing rates and markups</li> </ul>	
<b>Total Possible Points</b>	1000

**D. Revised Proposals, Interviews and Negotiations**

After completing the preliminary evaluation, the Evaluation Committee may conduct further discussion or interviews with firms whose proposals the Evaluation Committee considers sufficiently viable to allow for further consideration ("the competitive range"). The Evaluation Committee may also reject any proposals it deems not within the competitive range. The Evaluation Committee may require that some or all Proposers attend an interview (may be in person or conducted via telephone per WETA's request) in order to seek clarification regarding the various proposals. WETA also reserves the right to request additional information and/or revised proposals from any or all Proposers and to require any such information in writing. The evaluation committee may also contact any reference listed in the proposal or otherwise seek input about Proposers. WETA reserves the right to complete the evaluation process without any interviews or additional information, so Proposers are encouraged to submit their best Proposal with their initial submission.

Upon completion of the final evaluation process, WETA will rank each firm based on the evaluation criteria above, considering all information, including written submissions and any additional information the Evaluation Committee received during the final evaluation process. WETA may accept the highest-ranked proposal or negotiate terms and conditions of the Agreement with the highest-ranked firm. If negotiations are unsuccessful, WETA will terminate the negotiations with that firm and may open negotiations with the next highest-ranked firm. If negotiations with this firm are also not successful, WETA may repeat the negotiations process with the next-highest-ranked firms, or, at its sole discretion, WETA may reject all remaining proposals.

**F. Notice of Intent to Award**

If WETA determines to award a contract pursuant to this RFP, Proposers will be notified of WETA's intent to award the contract at least 72 hours before the contract is awarded by WETA's Executive Director or the WETA Board of Directors.

**20. WETA'S RIGHTS; WAIVER OF COSTS**

This RFP does not commit WETA to entering into a contract nor does it obligate WETA to pay for any costs incurred in preparation and submission of proposals submitted in response to this RFP. WETA will not reimburse any firm for costs incurred as a result of preparing or submitting a proposal, including negotiating with WETA on any matter related to this RFP. WETA reserves the right to:

- Remedy errors in the RFP process
- Reject any and all proposals
- Waive formalities and irregularities in proposals
- Modify or rescind any part of or the entire RFP
- Negotiate with any, all or none of the Proposers

- Issue subsequent RFPs for the Services
- Accept a proposal that does not offer the lowest price

In the event the Selected Proposer defaults or fails to execute a contract with WETA, WETA may enter a contract with another proposer.

## **21. PROTEST PROCEDURES**

Chapter 5, Article XII, of WETA's Administrative Code provides that specific protest procedures set forth in an RFP prevail over those that may be included in WETA's Administrative Code. The following procedures therefore apply.

### **A. Protests Based Upon the RFP**

Protests based upon restrictive requirements or alleged improprieties in the RFP procedure which are apparent or reasonably should have been discovered prior to the proposal due date, must be filed in writing at least five (5) calendar days prior to the proposal due date. The protest must clearly specify in writing the grounds and evidence on which the protest is based and the relief sought. Protesters must first have availed themselves of the procedures for requesting modifications or clarifications of the RFP prior to submitting any protest. Protests that are received outside of the above time period will be rejected.

For timely protests based upon restrictive requirements or alleged improprieties in the RFP procedures, the Executive Director will respond with a written determination prior to the proposal due date. If the Executive Director's determination could affect proposal submission, an appropriate extension of the proposal due date may be granted by WETA via a written addendum. The decision of the Executive Director is final.

### **B. Protests Based Upon the Notification of Intent to Award a Contract**

Protests based upon WETA's notification of intent to award the Contract must be submitted in writing within forty-eight (48) hours of receipt of notice intent to award. The protest must clearly specify in writing the grounds and evidence on which the protest is based and the relief sought. For timely protests based upon the notice of intent to award, the Executive Director will make efforts to notify other Proposers of the protest. The Executive Director will rule on the protest and will respond with a written determination. The decision of the Executive Director is final.

### **C. Submission of Protests**

All Protests should be submitted in writing to WETA's Executive Director at [Murphy@watertransit.org](mailto:Murphy@watertransit.org). Protests that are received outside of the above time periods specified in this section will be rejected. No protests will be considered after contract award, except for compelling reasons whereby the lateness is due to WETA's untimely handling of the protest submission. In no event will WETA consider protests filed after contract award due to the neglect of the protestor. Failure to comply with the time periods for filing protests as set forth in this section will be a basis for rejection of the protest.

## **22. CONTRACT AWARD AND EXECUTION**

WETA reserves the right to not award any contract as a result of this procurement and may terminate the procurement and commence a new procurement for part or all of the Services at

any time. Formal contract award will only occur as and when, if at all, the WETA Board takes such action.

If the WETA Board acts to award the Agreement, the Selected Proposer must execute and deliver execution copies of the Agreement within ten (10) working days of receipt, together with all required documents, including but not limited to, the insurance certificates. If the Proposer is an individual, the Agreement must be executed by the individual personally. If the Proposer is a co-partnership, it is desirable that the Agreement be executed by all of the partners, but it may be executed by one (1) of them. If the Proposer is a corporation, this Agreement must be executed by two corporate officers, consisting of: (1) the president, vice president or chair of the board; and (2) the secretary, assistant secretary, chief financial officer or assistant treasurer. In the alternative, this Agreement may be executed by a single officer or a person other than an officer provided that evidence satisfactory to WETA is provided demonstrating that such individual is authorized to bind the corporation (e.g. a copy of a certified resolution from the corporation's board or a copy of the corporation's bylaws). If the Proposer is a joint venture, the Agreement must be executed on behalf of each participating firm by officers or other authorized individuals. If the Proposer is an LLC, the Agreement must be executed by an officer or member who is authorized to bind the LLC.

REQUEST FOR PROPOSALS #21-009

SAN FRANCISCO WATER EMERGENCY TRANSPORTATION AUTHORITY

PART B TECHNICAL SPECIFICATIONS

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## 000 GENERAL REQUIREMENTS

### 010 BACKGROUND

The San Francisco Bay Area Water Emergency Transportation Authority ("OWNER"), a local agency with multi-county jurisdiction, was established by the California State Legislature to expand regional ferry service and coordinate waterborne emergency response activities on San Francisco Bay. The OWNER's comprehensive plan to establish ferry service on seven new routes was approved by the Legislature in 2003. The OWNER's goal is to design, build and operate a seamless transit system that responds to the region's congestion management needs, serves in an emergency response capacity, develops innovative environmental solutions for ferry vessels, contributes to economic viability, and improves quality of life.

### 020 PURPOSE

These Technical Specifications serve (i) to help define and establish a scope of Work for the conversion of the subject Vessel, (ii) to establish WETA's requirements for certain items, equipment, materials, furnishings, and machinery, and (iii) to establish and invoke certain requirements, regulations, rules, and standards that pertain to the Work to be carried out by the CONTR.

### 030 OWNER'S REQUIREMENTS VS. OWNER'S PREFERENCES

Certain performance requirements and technical aspects of the design are considered critical and absolute, as opposed to preferences. These shall be referred to as the **OWNER'S REQUIREMENTS**. These requirements are of the highest priority to the OWNER and shall be met to the fullest extent possible, without compromise.

Maintaining commonality across the Vessels in the OWNER's fleet is very desirable as it streamlines fleet operations and standardizes maintenance and spare parts inventories while minimizing downtime. These common features, equipment and configurations are referred to as the **OWNER'S PREFERENCES**. While not absolute requirements, the desired features described in this document are being provided to assist the CONTR with proposing a Vessel that will integrate with the existing fleet.

For the purpose of this document, OWNERs Requirements are generally preceded by the word "shall" or presented in tabular form. Wherever an equipment manufacturer and/or model number is provided, it shall be deemed an OWNER Preference.

This specification calls out several OWNER required Condition Found Reports (CFR) these reports are used to identify and mitigate problems which may be present on the vessel. It is the responsibility of the CONTR to provide the required reports in a timely manner to the OWNER for review. The CONTR shall be responsible for providing the required written reports within five (5) days of the inspection of the specified area.

### 040 OVERVIEW

The Gemini Class ferry vessels M/V Gemini (Gemini), M/V Pisces (Pisces), M/V Scorpio (Scorpio) and M/V Taurus (Taurus), collectively referred as the "Gemini class" were built for WETA, by Kvichak Marine Industries and Nichols Brothers Boat Builders between 2008-2010. The Gemini class has been in service for over 10 years and are ready for a main engine conversion from EPA Tier 2 engines with aftermarket emissions control systems to EPA Tier 4 engines with manufacturer supplied EPA certified emissions control systems. This engine conversion project is required to

comply with pending future California Air Resources Board (CARB) emissions regulations and is necessary to support operation of this vessel in revenue service for its full 25-year life expectancy.

These Technical Specifications and the accompanying Contract Documents provide for the Tier 4 main engine conversion of the Gemini class vessels. The work will often be referenced in an activity that may appear to apply to one engine or one vessel. In all cases, unless only one vessel in specific is mentioned, items in the technical specifications refer to all engines on all vessels and the described scope of work will apply to all of them.

The Work shall generally comprise;

- Removal of the existing MTU 16V2000M70 engines and ZF3050 gearboxes from the vessel.
- Shipping the ZF3050 gearboxes to ZF in Mukilteo Washington for repairs and adaptation to the smaller MAN bell housing.
- Modifications to the vessels for adaptation of the Sea Water cooling systems, Hydraulic Steering systems (engine Driven Pump), fuel supply systems, exhaust and aftertreatment systems, DEF systems and Electrical Systems.
- Engine bed modifications and installation of the new MAN engines coupled to the existing ZF gearbox as assembled by RDI of Seattle Washington.
- Removal of all of the existing Study/DDEC engine controls (hardware and wiring) and installation of the new MAN engine control systems.
- Additional items that relate to routine USCG COI Dry Docking inspections and routine maintenance
- The work shall be completed to at least the same standard, fit and finish as the original construction.

The CONTR shall include the specifications as called out in these Technical Specifications as well as the Appendices attached as part of their response to this contract.

The CONTR shall be responsible for developing the design solutions and details consistent with the Technical Specifications and other requirements of the contract, including but not limited to, the identification, provision and installation of all necessary materials and obtaining ALL regulatory approvals and certifications.

Where no particular preference is stated, the CONTR should propose its best standard equipment and installation when considering regulatory requirements, good marine practice, past experience and quality.

## 050 PRINCIPAL CHARACTERISTICS

Principal characteristics of the Vessel are outlined below:

Characteristic	Detail	SWBS
<b>Hull form</b>	Catamaran	-
<b>Hull Material</b>	Aluminum	101
<b>Regulatory Tonnage</b>	Less than 100 GRT	090
<b>Official Number</b>	1213097(Gemini), 1213095(Pisces), 1215086(Scorpio), 1215087(Taurus)	-
<b>Regulatory</b>	United States Coast Guard – Subchapter K	091
<b>Length Over All</b>	112.3'	-

<b>Beam</b>	28'	-
<b>Draft Max</b>	6'	-
<b>Freeboard</b>	7'-13/16"	-
<b>Decks</b>	2	601
<b>Main Engines</b>	MTU 16V 2000	233
<b>Propellers</b>	CX-500 D 46" P50" LH Rotation	245
<b>Reduction Gear</b>	ZF Marine ZF3050	241
<b>Generators</b>	Northern Lights M1064T2	311
<b>Passengers</b>	225	-
<b>Interior Seats (all types)</b>	177	-
<b>Exterior Seats</b>	57	-
<b>Crew</b>	4	-
<b>Fuel Capacity</b>	2400 Gallons	126

## 070 VESSEL REGULATORY REQUIREMENTS

The Vessel was constructed in accordance with the regulatory requirements summarized in Section 070.1 and invoked throughout this specification. This specification also contains additional requirements that augment and/or exceed those of the regulatory agencies but shall in no case supersede or compromise the regulatory requirements.

### 070.1 REGULATORY

The Vessel is inspected and certificated by the United States Coast Guard (USCG) according to 46 CFR, Subchapter K, small passenger vessels.

The CONTR shall insure that all work performed during this project complies with USCG requirements for 46 CFR Sub Chapter K. The CONTR complete the BWE (Section 833) and submit documentation to the USCG for a lightship change determination. Preliminary weight estimates are predicting approximately 4% weight reduction that will require a new lightship survey and new stability calculations. The CONTR is responsible for all costs associated with regulatory compliance requirements.

The CONTR shall contact the USCG to arrange for the credit dry dock. The CONTR shall be responsible for filling out USCG Form 3752 Application for Inspection of U.S. Vessel. The CONTR shall perform all work associated with a credit dry dock. The CONTR shall notify the OWNER 14 days in advance of the inspection.

The USCG requirements invoked by that document have precedence over other regulatory requirements, and these contract Documents, where conflict exists. Where rule interpretations vary between USCG districts, the CONTR shall ensure that the Vessel certificates shall be valid in San Francisco Bay Area under USCG Sector San Francisco.

### 070.2 ACCOMMODATIONS FOR PASSENGERS WITH DISABILITIES

The CONTR shall, in general, follow the guidelines of the Passenger Vessel Access Advisory Committee's report of November 13, 2000 as submitted to the Federal Architectural and Transportation Barriers Compliance Board, regarding passengers with disabilities. The contemplated scope of work of this project is not intended to effect items related to ADA compliance. These regulations are referenced in case any portion of this work scope intentionally, or unintentionally, has ADA compliance implications that require the CONTR to reference and adhere to said guidelines.

The CONTR shall comply with all of the applicable sections of The Americans with Disabilities Act, ADA PL101-336 and Proposed Accessibility Guidelines for the construction and alteration of passenger vessels covered by the Americans with Disabilities Act (ADA) published in the Federal Register on Tuesday, June 25, 2013. While this law has not been thoroughly interpreted for applicability to passenger ferries at this time, certain aspects of the law are clearly established. Among these are, entrance and egress for wheelchairs that does not exceed the allowable slope (1:12)

### 073 NOISE AND VIBRATION

Noise and vibration criteria apply to calm water operation of the Vessel in Trial Condition from light load through full load with the propulsion prime movers operating through all power levels (minimum to maximum), with concurrent operation of one generator and normally operating support systems (such as heating and ventilation).

The CONTR shall perform a pre-construction and post construction noise and vibration analysis for benchmark purposes, this benchmark shall be used to assure that no additional vibration levels were added during the construction phase. Readings shall be within an agreed upon range of normal deviation.

A third-party firm or firms specializing in marine acoustics, vibration analysis and sound measurements aboard marine Vessels shall be employed during pre and post construction builder's trials to take measurements in all areas defined by the criteria below. The selected firm shall utilize measurement and reporting requirements from ISO 2923-1996 Acoustics - Measurement of noise onboard Vessels. They shall furnish a final report with all measured raw data, averaging calculations, final reportable results and recommendations for each area measured. This final report shall be made available in duplicate to the OWNER.

The CONTR shall be responsible to locate and correct unsatisfactory vibration conditions arising during tests and/or trials that were not present in the pre-construction survey, or subsequently during the warranty period. Drive train alignments shall be performed in accordance with these specifications. CONTR shall perform alignment, with written acceptance from propulsion equipment manufacturer's representative. CONTR shall not exceed the following overall frequency weighted RMS value standards.

#### Noise Criteria

The Vessel shall not exceed post construction noise levels by more than two ( $\leq 2$ ) dBA higher than values recorded pre-construction. Readings shall be taken in the following areas:

NOISE LEVEL <sup>1</sup>			
DECK	ZONE	Requirement (dBA)	Preference (dBA)
PILOTHOUSE	PILOTHOUSE	65	55
2ND DECK	FORWARD INTERIOR	68	62
	FORWARD INTERIOR	70	65
	AFT INTERIOR	75	70

#### Notes:

1 – Underway conditions – Measurements shall be performed at the vessel's primary operating speeds of 10 knots (idling speed) and 27 knots (full speed), one SSDG online, full HVAC at normal settings, Engine Room supply/exhaust fans on automatic. Measurements will be taken on runup to full speed to determine if any additional readings need be taken at intermediate RPM settings.

Vibration Criteria

Engine alignments shall be performed in accordance with these specifications. CONTR shall perform alignment, with written acceptance from propulsion equipment manufacturer's representative. The final alignment report shall be generated from a laser-based alignment system, Easy-Laser type or equal.

CONTR shall not exceed the following overall frequency weighted RMS value standards taken near the locations indicated in all three axis:

Interior Vibration Limits, mm/sec peak, single frequency components (1 Hz bandwidth) between 2 and 80 Hz	
Test Condition	U/W @ 27kts
Pilothouse	0.5
Upper Deck Interior	1.5
Main Cabin Forward	1.0
Main Cabin Bar	1.5
Main Deck Aft Exterior	6.5

Machinery Vibration Limits, mm/sec peak, single frequency components (1 Hz bandwidth) between 2 and 100 Hz	
Test Condition	U/W @ 27kts
Engine Foundations	6.5
Generator Foundations	6.5
Transom	8.5
Rudder Stock	3.0
Frame 4	3.0

Under all service conditions, the entire propulsion system shall be free of harmful vibrations (30mm/sec) throughout the entire operating range. Harmful vibration is defined as vibration capable of damaging primary or connected ancillary equipment and as specified by the equipment manufacturers or the aforementioned ABS limit whichever is lower. In addition, the CONTR shall enlist a third-party firm to measure and report vibration utilizing ISO 4867 Code for the measurement and reporting of shipboard vibration data.

Harmful vibrations in any part of the system shall be corrected by the CONTR at no cost to the OWNER. It is currently known that there are structural vibrations issues with this class of the vessel in the aft deck/transom area. These levels have been documented by WETA and the CONTR will not be held accountable for levels in these documented areas. The final solution for this area is still under review and will move to completion after this contract scope of work has been completed. The final solution will not be part of this Contract scope of work as the will be integrated with the vessel planned midlife overhaul scope of work.

**074 WELDING AND FITTING**

All welding shall conform to the requirements of the USCG, the selected classification society, and the special requirements of this specification. In addition, all welding shall be performed by USCG and classification society certified aluminum welders with current certification.

Welder qualification certificates shall be provided to the OWNER's Representative prior to a welder performing welding on the Vessel.

Special attention shall be provided to joint design and welding practice in high stress areas in recognition of the high life cycle service which this Vessel will experience.

All lap welds and fillet welds shall be continuous with ends wrapped around snipes, edges, limber holes, et cetera. All crater cracks shall be repaired in process.

Skip welding is permitted where, and only where, allowed by USCG and classification society rules. Special attention shall be paid to the length of both the weld and the interval, and the uniformity of the weld.

The CONTR shall submit a plan for the non-destructive testing of structural welds. The plan shall designate the inspection plan, the acceptance criteria, and the inspection expansion plan in the event that defective welds are discovered. The CONTR shall provide the plan to the OWNER for review.

The CONTR shall provide a written welding procedure for the isolation and protection of sensitive equipment when welding occurs onboard.

#### **078 MATERIALS AND WORKMANSHIP**

Unless otherwise noted, all hardware and fasteners used in the construction of the Vessel shall be 316 stainless steel. Unless otherwise stated in this Specification, the CONTR shall supply the necessary labor, material, skill and equipment required to complete the main engine conversion and testing of the vessel. All materials shall be new, unless specific approval to the contrary is obtained from WETA in writing.

Materials used, and the workmanship thereon, shall be of the best description and quality throughout and of adequate sizes to accomplish the purpose intended. The work, in every respect, shall be made under the supervision and to the complete satisfaction of WETA in accordance with good marine practice.

Defects appearing at any stage of the work shall cause for rejection even though the piece in question may have previously been passed as satisfactory.

#### **080 TEMPORARY SERVICES**

Provide gangway(s) that satisfy the requirements of OSHA for safe and efficient vessel access for personnel, equipment, and materials. In addition, the CONTR shall provide all other services required to maintain the vessel and support the work in safe and effective matter (Fire Water, Shore Power, Security, Fire Watches and other services)

#### **084 EQUIPMENT STORAGE**

All equipment temporarily removed from the vessel or purchased by the CONTR for use in the main engine conversion of this vessel or OWNER-furnished shall be securely warehoused by the CONTR and segregated from the other projects' equipment. The equipment shall be kept in a covered, clean, dry environment and relatively constant temperature. Equipment requiring special handling by its manufacturer shall be stored in the accordance with manufacturer's requirements.

The OWNER's Representative shall be provided with access to stored equipment at any time upon his/her request.

The CONTR shall adequately protect all equipment from overspray of solvents, paints, impact damage, and weld or cutting materials contact while in storage and on board. Temporary fire-resistant covers or enclosures shall be placed over all equipment where overhead or adjacent hot work is being performed. Scaffolding or work platforms shall be placed over equipment where overhead work is being performed. In no case shall the CONTR use the installed equipment to stand or walk across for access overhead or beyond. The CONTR shall immediately comply with all directives, as may be provided from the OWNER's Representative, to protect or improve the protection of installed equipment and components from physical damage.

## **087 CARE OF VESSEL DURING PROJECT**

### **087.1 FIRE PROTECTION**

During construction, flammable material shall not be stored on board the vessel in such a manner as to create a fire hazard. The CONTR shall exercise special care to prevent the possible outbreak of fire. A pressurized fire hose shall be available and maintained at the site of the vessel construction at all times.

Where hot work is being carried out in the vicinity of combustible material a fire watch, whose sole purpose shall be to watch for fires and keep firefighting equipment on hand, shall be constantly on duty. Fire watch personnel shall remain on duty in the same space where hot work is performed for a period of at least 30 minutes after cessation of the hot work.

Spent or partially spent portable fire extinguishers shall be immediately replaced with fully charged extinguishers. The CONTR shall ensure that there are no open fires on or within 50 feet of the vessel at all times when it is at the shipyard.

### **087.2 HULL PROTECTION**

The CONTR shall maintain rigid control of welding and grounding for the protection of the hull, its systems and appendages during the entire time the vessel is in the custody of the CONTR. Particular attention shall be paid to the placement of ground connections, especially when the vessel is afloat.

## **091 SHIP-INSPECTIONS**

The CONTR shall perform pre-main engine conversion ship inspection (ship check) while the vessel is in normal service prior to delivery at their facility. The purpose of this ship inspection is to witness the operability of ship services under normal operating conditions prior to dry-docking.

The ship inspection shall include:

- Pilothouse Navigation Electronics
- Bilge System
- Fire System
- Potable/Fresh Water System
- Sanitary System
- Main Engine Operation
- Auxiliary Engine Operation
- Reduction Gear Operation
- General Deck Condition

- Steering Systems
- Lighting Systems
- Public Address Systems
- SCR system

The CONTR and the OWNER representative shall sign off on the operation of the above systems prior to delivery of the vessel to the CONTR'S facility. Prior to acceptance of the vessel from the CONTR, ALL of the vessel's systems shall be inspected. Any discrepancies between the two ship inspections shall be discussed between the CONTR and the OWNER as to responsibility for repairs to any deficient systems.

#### **091.1 INSPECTION**

During construction, and any time prior to the delivery and acceptance, WETA inspectors and representatives, and inspectors of regulatory bodies, shall be given free access to the CONTR's facility for the purpose of inspecting work and materials. The inspectors and representatives will have the authority to reject any material or workmanship that does not conform to the requirements of this Specification.

## 100 STRUCTURE

No major structural modifications are anticipated. Miscellaneous structural work may be required to accomplish the Work as described in these Technical Specifications and or the Specifications as called out in Appendices. In all such cases structural modifications shall match the existing structure in terms of material, procedures, fit up, and weld quality. All structural work performed shall be finished to preclude sharp edges or corners, and shall not present any hazard to crew or passengers. Any welding shall meet all requirements as set forth by the USCG, including certification of welders.

All welding, welding materials, and welding methods shall be subject to the review and approval of the OWNER and the USCG.

All painted surfaces that are disturbed or modified shall be prepared and repainted to match existing and surrounding structure.

The assembly and isolation of dissimilar metals throughout the Vessel shall be in accordance with all regulatory requirements. Corrosion and Coatings Prevention in the Rules for Building and Classing Aluminum Vessels of the ABS shall be followed without exception. Steel and other non-aluminum metal fittings shall be isolated from the aluminum structure at their mounting surfaces by means of 10 mil PVC tape, Micarta or other approved methods.

## 101 STRUCTURAL MATERIALS

All materials shall be new. Aluminum alloys used in the Vessel shall be as per Table 101.1 unless otherwise noted. Reference the SWBS sections of this specification for any overriding material requirements.

Table 101.1 Structural Aluminum Material Schedule	
Component(s)	Material(s)
Plate $\geq \frac{1}{8}$ "	ASTM B928 5083, 5086, 5456-H116 or H321
Plate $< \frac{1}{8}$ "	ASTM B928 5083, 5086, 5456-H116 or H321, or 5052 of SAE AMS-QQ-A-250/8
Extrusions	ASTM B221 6061-T6, 5086, 5083, 5456-H111 or H112

Non-structural items of trim and outfit such as window and doorframes, castings, and hardware items may be alloy 6063 or alloy 6061 of ASTM B221 or alloy 356.1, 356.2 or A356.2 of ASTM B179. Alloy 6061-T6 of ASTM B241 may be used for pipes as structural components. If so used, allowable stresses shall be based on the zero-temper condition.

Brasses and bronzes shall be mixtures of virgin material of proper proportion for the purpose intended and shall be clean, smooth castings, uniform in texture and finish. Galvanizing shall be done by the "hot dip" process. Electro-galvanizing will not be accepted. Non-welded fasteners, pipe, tube, sheet metal, or plates and shapes of stainless steel will be grade 316. Where stainless steel is welded, grade 316L will be used unless otherwise specified. In areas of extreme corrosion concern the use of duplex stainless-steel grade SAF 2205 or SAF 2507 shall be used. If the CONTR proposes the use of any specialty materials (Inconel, Duplex stainless steel, Titanium) they shall obtain approval in writing from the OWNER for the application and welding procedures.

**110 PADEYES**

The CONTR shall add pad eyes, as required, to remove and install the new exhaust system emissions control equipment. Each pad eye shall be rated for no less than 500lbs SWL and permanently marked as such. The pad eyes shall be designed with a safety factor of 5. The CONTR shall provide all engineering and calculations for review and approval by the OWNER prior to the start of work. All details for integration of pad eye structure shall limit to the greatest extent possible hard spots and provide for proper structural detailing.

**126 TANKS**

The vessel is currently fitted with tanks of capacities as noted in Table 126-1.

<b>Table 126-1 Tanks</b>		
<b>Quantity</b>	<b>Service</b>	<b>Tank</b>
2	Fuel Oil Storage	1200 gallons per side
1	Potable and Fresh Water Storage	500-gallon tank – starboard hull (See section 533)
1	Sewage	500-gallon tank – port hull
2	DEF	80-gallon tank Located under each stairwell (See section 290)
2	Lube Oil	15-gallon tank located under each stairwell

**163 SEACHESTS**

The CONTR shall remove and clean all marine growth from the interior of the sea chests and piping. The CONTR shall remove and replace sea chest anodes in kind as per section 633.2. The CONTR shall repair all sea chest coatings as per section 631.

## 200 MACHINERY - PROPULSION AND SHIP SERVICE

Main propulsion power for this Vessel is provided by propellers, each driven by a diesel engine through a reversing marine reduction gear.

Prior to redelivery, the CONTR shall clean and remove ALL debris from the engine room bilges.

### 233 MAIN ENGINES

The CONTR shall provide all labor, equipment and materials to convert the main engines from the existing MTU 16V2000's to the new MAN D2826LE489 main engines. This scope of work will require the CONTR to remove all of the soft patches, interferences, equipment and provide all of the rigging as required to safely complete the existing engine removals. The CONTR shall coordinate with RDI Marine (RDI) of Seattle, Washington for the commissioning of the new EPA Tier 4 main engines. RDI will be Contracted by WETA for the purchase of the main engines and engine controls. The RDI Contract will include the services outlined in the quote (can be provided for reference) and the shipping of the engines to the shipyard (schedule provided by shipyard), dock and sea trials in addition to the integration of the marine reduction gears. The CONTR shall be responsible for all coordination with RDI with adequate time for RDI to schedule.

The CONTR shall remove all of the equipment interferences on the path of engine and soft patch removal. All items removed or disconnected shall be labeled. The labeling shall be semi-permanent such that normal wear from movement and work taking place will not remove the writing from label. Where electrical wires are disconnected both sides shall be labeled with corresponding terminology such that anyone can reconnect the wires by matching the corresponding labels. This shall include but is not limited to the following equipment:

- HVAC Chiller Stbd side
- Air compressor Port side
- Various electrical
- Engine start battery and chargers
- Shaft log sea water supply piping
- Main engine exhaust piping and emission control equipment
- Engine room Ladders, brackets, foundations and misc.
- IBA's IWO crane access

The CONTR shall trim the forward portion of the centerline engine removal rail aft of bulkhead 5 on the port side only, approximately 2". The trimming of the lower forward 2" will allow the removal of the bulkhead 5 soft patch with the main deck soft patch still in place. This is not done on the starboard side as the main deck soft patch will have to be removed first to remove the HVAC chiller regardless. The OWNER will detail the amount to be trimmed at the time the work takes place.

The bulkhead 5 soft patch shall be removed and placed in the after portion of the lazarette clear of the working area. The air compressor can be removed and stored for WETA's determination on its disposition. All insulation and cladding that is removed as part of the soft patch removal shall be repaired or replaced so that after final installation it is free from holes or tears in the vapor barrier. At the completion the structural fire protection insulation has to be complete to maintain the fire boundary as required by USCG, it is the CONTR responsibility to restore it to that level.

The main engines shall be moved aft with the installed engine removal rail provided in the reference drawing S154 1121-02 - Engine Removal Rails. The detailed plan for removal shall be reviewed with the OWNER prior to the work

taking place to review all of the details required for movement of the engines. Once the engines have been located under the main deck soft patch, they will be set down on the framing installed for engine removal. The main deck soft patch shall be removed and then the crane will have access to lift the engine out. The final details of rigging shall be proposed by the CONTR and reviewed and approved by the OWNER prior to the work taking place.

### MARINE GEARS

Once the existing MTU 16V2000 main engines have been removed from the vessel the shipyard will remove the ZF3050 marine gears from the engines. The removal shall follow all manufacturers recommendations and processes. Any damage to the marine gears as a part of the separation process will be repaired by ZF and paid for by the CONTR. The CONTR shall pay for and arrange shipment of the two ZF3050 marine gears to ZF in Mukilteo, Washington. The CONTR shall pay for and arrange for those gears to be converted to the size bell housing that matches the MAN diesel engines being installed in this scope or work. The CONTR shall have this bell housing interface verified between RDI and ZF prior to executing the scope of work.

Additionally, the CONTR shall pay for and arrange to make some modifications to the marine gears to support the installation of the new engines. An A pad PTO shall be added to the ZF3050 gears in the rear input location. The ZF order number for this option is 3101-680-039, code number N128 set up for a 9 tooth -5/8" splined shaft. The PTO will be installed by ZF and the hydraulic pump (Section 560) will be installed by RDI when they mate the engines and gears together. The CONTR shall be required to remove the existing hydraulic pumps from the accessory drive location on the MTU 2000 series engines and ship them to RDI in Seattle for mounting.

The CONTR will pay for ZF to move the oil cooler to the MAN standard configuration that ZF has for these gears. The scope of work to move the oil coolers will include ZF's standard brackets, plumbing and fittings needed to relocate the cooler to the MAN configuration location. The CONTR shall also pay for and arrange for ZF to ship the gears to RDI in Seattle, Washington after their scope of work has been completed.

The CONTR shall pay for RDI to provide the interface harness between the ZF gearboxes and the MAN engines. The harness connected the gearboxes to the MAN engines will allow of the oil temperature and pressure readings to monitored and displayed on the MAN control system.

On the M.V. Pisces WETA will pay to have ZF rebuild the gearboxes that the CONTR will be shipping to ZF. WETA will be paying for rebuilding expenses only, the CONTR's scope of work is the same for each vessel. However, the CONTR will have to budget more time in the schedule for the rebuilding process that is assumed to take 6 weeks from date of delivery of the gears to ZF to date of shipment to RDI for mating to the engines.

The engine installation shall follow the reverse path of removal. Installation details shall be as per the reference drawings and reviewed prior to installation to the satisfaction of the OWNER. All items removed or relocated as part of the engine removal shall be replaced and reinstalled to the highest marine standards. All piping isolation shall be renewed and all electrical supports and chaffing gear shall be installed to the satisfaction of the OWNER.

The new engine/gear combination (engines) shall be installed as per the provided reference engine installation drawings. The new engines shall be mounted on the existing engine girders. The existing chock fast, damns, stops and mounting holes from the MTU16V2000 engines shall be removed. The extraneous mounted holes shall be weld filled and ground to a flush smooth uniform finish.

The new engines shall be mounted on RDI supplied engine mounts on base plates as per the reference drawings. The CONTR shall install jacking screws to move the engines in all three axis to obtain a new alignment. The final location of the engines shall provide for alignment with the existing propeller shaft as per the section below and still allowing sufficient space for a quality chock fast pour.

The installed engines shall be realigned by the CONTR and verified by a third-party alignment specialist. The alignment shall be verified by a laser alignment system. The laser alignment shall be conducted by a third party specializing in marine laser alignments. This shall be Industry Uptime Inc. of Meadow Vista, California. Contact Information for Industry Uptime is as follows;

*George Dierssen*  
*gdierssen@industryuptime.com*  
*530-878-4855*

The laser alignment system shall provide a report detailing the exact alignment of the main engine to the propeller shaft. The report will include a detail on the final wet alignment of the propeller shaft to the gearbox. The final wet alignment shall be done utilizing the laser alignment system. A smooth-running vessel is of paramount concern at the completion of this project. As such the goal shall be to have the final wet alignment within half the normal tolerance at 0.0005" per inch of coupling face, normal rule of thumb being 0.001" per inch of coupling face. As an example, a 15" diameter gear input flange would normally dictate a maximum deviation of 0.015" from any of the measurement in a complete sweep. For this Contract half of that limit will be allowed unless specifically approved by the OWNER in writing.

The CONTR and the alignment specialist shall provide all equipment and specialized tooling required to take these alignment measurements (receivers, dummy spud shafts, etc...). The CONTR shall provide the OWNER with an alignment plan prior to installation of the new propulsion engines and gears. The plan shall be approved by the OWNER prior to the start of installations. All alignment reports shall be provided to the OWNER for review and approval prior to any chock fastening of engine mounts. A final wet alignment report shall be delivered to the OWNER for use in comparison with future dry dockings. If movement of the engine and or gear is required for final wet alignments all costs associated with equipment movement and piping modifications shall be borne by the CONTR.

#### **243 SHAFTING**

The CONTR shall take alignment readings prior to removing the old propulsion engines. The CONTR shall provide a Condition Found Report (CFR) to the OWNER recording the alignment readings. The CONTR shall be responsible for providing the required written report within five (5) days of the inspection. The CONTR shall also install supports, targets or other devices needed to preserve the input flange location to the propeller shaft for the alignment of the new engines.

#### **244 PROPULSION SHAFT BEARINGS**

The CONTR shall take feeler gauge readings on all stern tube and strut bearings. Reference Appendix B Drawing #S153 6021-07- Propeller Shaft & Stern Tube Assembly. The CONTR shall provide the readings to the OWNER in a CFR for their review. The CONTR shall be responsible for providing the required written report within five (5) days of the inspection.

## 245 PROPELLERS

The CONTR shall clean the propellers shall of all fouling and dye penetrant tested with the OWNER in attendance. The CONTR shall perform pitch and balance inspections of the refurbished propellers and provide the results via a CFR.



(Standard Gemini Class Propellers and Rudders)

The CONTR shall plan for making a pitch adjustment to the propellers to provide for the desired 85%MRC load on the engines at full RPM. The current propellers are designed for 85% load on 1405bhp engines at 2100RPM. The new engines are 1450bhp at 2100RPM so the changes in pitch are not expected to be large. Each vessel **will be trialed prior to delivery** to determine loading and if propeller pitch changes are required. The repitched propellers shall be blue fit to the propulsion shafts to the OWNERS satisfaction. The results of the blue fit shall be provided to the OWNER. The OWNER does not require the propeller nuts to be welded. The CONTR shall renew the cotter pins in kind.

## 252 PROPULSION CONTROL SYSTEM

The CONTR shall remove the existing DDEC/Sturdy propulsion control system and replace it with an OWNER furnished MAN I-Sea control system. The new MAN controls will replace the engine room control box, pilot house engine displays and control heads at all three stations. The CONTR shall remove all existing control harnesses and control hardware including but not limited to the ERIM located in the vessels lazarettes, the ETIM's in the engine rooms, the backup controls in the pilot house and engines room and other hardware items rendered redundant by the change in the controls. The vessels existing start/stop and E-stop switches in the pilot house shall be re-used with the new system. The existing analog tachometers at the wing stations shall be removed and replaced with new CAN bus tachometers as per MAN requirements. The tachometers are not part of the OWNERS scope of supply and the 4 units required shall be furnished by the CONTR. The tachometers shall be VDO OceanLink, 85mm, 0-3000RPM, Black Bezel units. The final units purchased shall be reviewed and approved by RDI for integration with system.

The new control system shall require removal of all obsolete wiring, harnesses and supports. The CONTR shall provide all cables, hardware and other items not provided by the OWNER that are required to complete the installation of the new MAN engines and propulsion control system. The CONTR shall be in close communication with RDI Marine so that they know exactly what they need to supply. All main engine and propulsion control cables, wires, harnesses and electrical components shall not be routed, mounted or run with high power AC power cables and components. All wiring shall be routed to run as far as possible from the existing AC cables installed while still residing within the vessels existing main wireways. The new installation of the main engines and control systems shall require new sub wireways to be installed by the CONTR. All wireway routing and new installations shall be reviewed and approved by the OWNER prior to installation.

The CONTR shall provide the final integration required for the installation of the new control system and provide the OWNER with AS-BUILT drawings of the final configuration of all wiring, harnesses and terminations. The AS-BUILT drawing shall provide a Bill of Materials for all components purchased by the shipyard, such as the tachometers in addition to materials schedules for consumable items like wire, pins, wiring terminals and other items used to complete the system. The intention of the drawing is that maintenance personal can accurately trouble shoot the system, wiring, terminals, plug pin outs and repair and replace wiring with the similar material.

The CONTR shall be required to support all activities and testing by the USCG, RDI Marine and MAN factory for the new engines and control systems. This shall include, but is not limited to the Qualitative Failure Analysis (QFA) and Design Verification Test Procedure (DVTP) or any other name assigned to the documentation required by the USCG to verify the new engines and controls meet the USCG requirements for a microprocessor based control system. These tests take place at Dock Trials and on Sea Trials in the presence of the USCG inspector and the manufacturer's representative. The CONTR shall ensure that all parties involved in these sorts of tests have signed the testing documents at the completion of the testing to verify they witnessed the testing. The CONTR shall submit the testing documentation to the USCG Marine Safety Center (MSC) on the same day that the testing is completed with scanned copies of the signed test documents. These submissions will CC: the OWNER, local USCG Inspectors, Sector San Francisco Domestic Inspections and the Manufacturer's representatives that were present.

## 256 SEAWATER COOLING

All seawater piping rework shall use materials as defined in Table 256-1.

<b>Table 256-1 Seawater Systems</b>	
Piping, sea chest to isolation valve & overboard hull penetrations	ASTM B221 5086, 5083,5456-H111 or H112 Schedule 80 pipe and flanges
Piping, all other	ASTM B466 90/10 CuNi class 200 w/ CuNi ANSI B16.5 150# flanges, Viega MegaPress CuNi where USCG approved
Valves	Lug body butterfly valve, epoxy-coated cast iron body and highly corrosion resistant stem and disc Monel or equal
Seawater strainers	Fabricated 90/10 CuNi
Flexible Connections	Hose USCG approved J1942, Trident #321 Ocean- Flex or approved equal, <30" length
Hose connections	Barbed or weld bead on pipe
Clamps, 316SST	ZSI-Foster Brand Alpha, Omega or Beta Style

All piping work shall be done in accordance with the general piping requirements of Section 505.

### 256.1 SEA VALVES

The CONTR shall remove and reinstall all sea valves from the vessel and provide for USCG and OWNER inspection as part of a dry dock credit. All flange faces shall be cleaned and prepped for re-installation. All gaskets and isolation kits shall be renewed in kind. All isolations shall be checked with a multimeter in the presence of the OWNER. All gasket surfaces in contact with aluminum shall be installed with a marine Sealant approved by the OWNER. A condition found report for all valves shall be provided to the OWNER. The CONTR shall be responsible for providing the required written report within five (5) days of the inspection.

While the sea valves are removed the CONTR shall repair the Blue Seal coating system on the inlet pipes and flanges as per the requirements of section 631. The coating system shall be applied up and over the flange faces to protect the aluminum flanges from corroding/eroding. If the CONTR is concerned about valve sealing they are encouraged to build up the Blue Seal system with their reinforcement coat to build up thickness and then sand flat prior to applying the top coat. It is of principal importance that the coating system extends across the full sealing surface of the flange face.

The sea valves are as indicated in Table 256-2.

<b>Table 256-2 Sea Valves</b>	
Main engine intake	2 @ 5" butterfly
Main engine discharge	2 @ 5" butterfly
Generator sea chest	2 @ 2" butterfly
Generator salt water discharge	2 @ 2 ½" butterfly
Fire main	1 @ 2 ½" butterfly
HVAC sea chest	1 @ 3" butterfly
HVAC overboard	1 @ 4" butterfly
Bilge system	4 @ 2" check valve

## **256.2 SEA WATER SUPPLY AND DISCHARGE PIPING MODIFICATION**

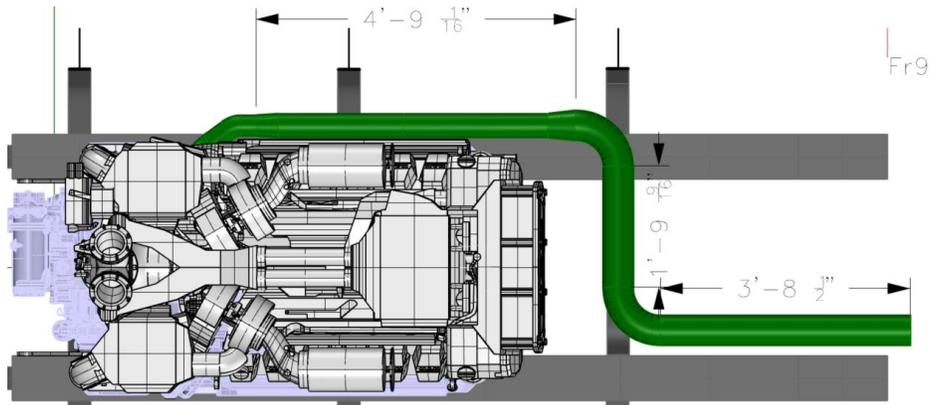
The CONTR shall make all modifications required to the supply and discharge piping to integrate the new MAN engines into the vessel. The reference drawings show the changes outlined in the system schematic.

### **256.2.1 Main Engine Suction Piping**

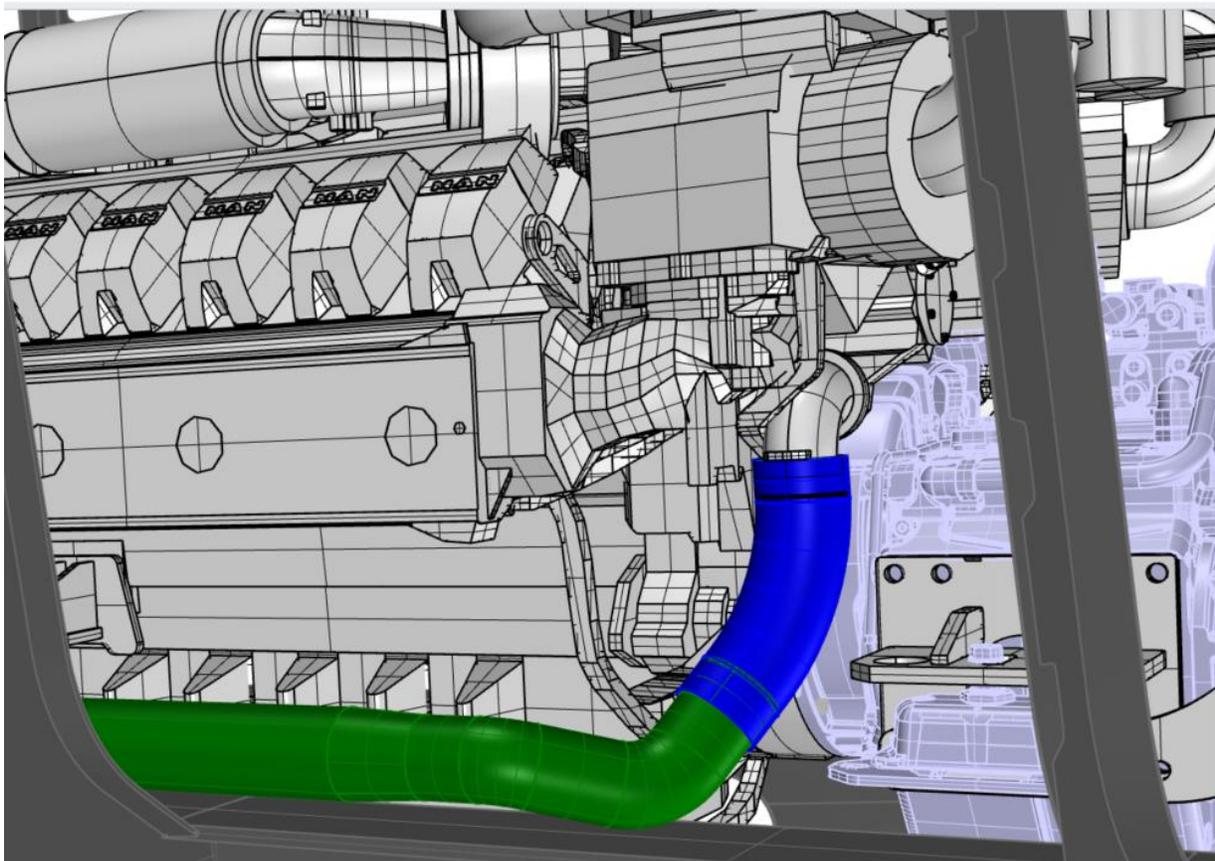
The vessels existing 5" suction piping shall be removed up to the 5" flange on the outlet of the sea water strainer, approximately at frame 9. The existing MTU engines take suction from the forward right-hand side of engines (as seen from aft looking forward) and the new MAN engine take suction on the aft left-hand side of the engine. As such the piping will have to be routed to a totally new location.

The new piping shall connect to the strainer outlet in 5" piping and transit aft and across the vessel to run down the left-hand side of the engine just inboard/outboard (depending on which engine room) of the engine girders down low supported off of the frames. As the pipe turns 90° and runs aft alongside the engine it shall transition to 4" pipe. At the rear face of the block the piping shall transition to 3.5" pipe and terminate in a 4" hose barb.

The picture below is from a rough 3D model of what the pipe could look like. The piping shown represents the STBD engine room configuration. The PORT engine room is similar with the run starting closer to centerline. The routing shown is for estimating purposes and the final pipe routing will be reviewed and approved by the OWNER once all of the interferences and final support brackets have been incorporated into the pipe routing. The final piping design will be as built by the CONTR using the vessels original drawings in CAD and updated to the same level of detail.



The piping geometry at the hose connection is very important to ensure there is flexibility of the rigid USCG approved hose to account for engine movement. The hose shall have a slight sweep to allow for flexing and the piping and a USCG compliant hose shall connect the piping to the 4" hose bard on the engine's sea water pump. The hose section shall be shorter than 30" and be routed to stay within the manufacturers hose bend radius and free from all sharp edges and other items than can cause mechanical damage. The CONTR shall install the piping so that the hose installation is long enough to provide for engine movement, easy for hose replacement and routed without having to induce undue stress on the hose. All hose connections shall be barbed and clamped with two t-bolt style hose clamps 180° offset from each other. All piping shall be supported with approved clamps every 4'.

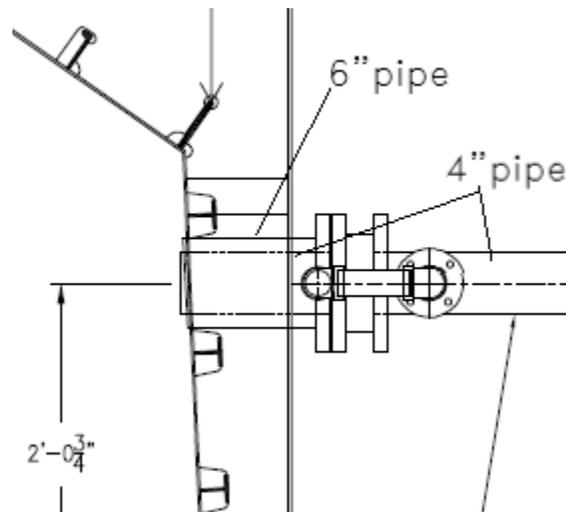


### 256.2.2 Main Engine Discharge Piping

The vessels existing 4" discharge piping shall be removed up to the 5" flange on the overboard valve connection at the inboard side shell. The mating flange for the 5" overboard valve shall be re-used as it is a custom plate flange for 4" pipe connecting to a 5" valve. The existing MTU engines discharges from the forward right-hand side of engines (as seen from aft looking forward) facing inboard on the STBD side and up on the PORT side and the new MAN engine discharges from the forward right-hand side of engines straight down. As such the piping will have to be routed to a totally new location to work with the new MAN cooling water connection.

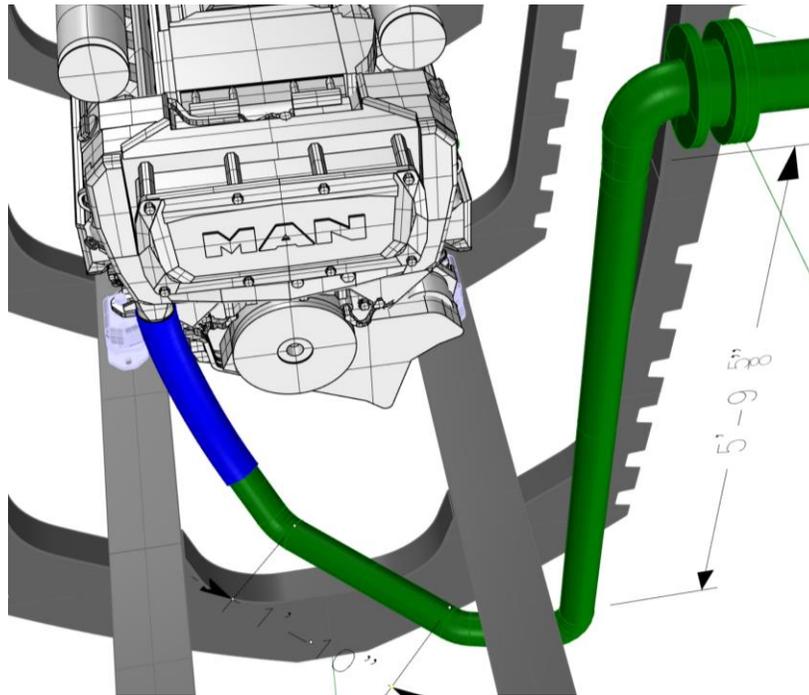
The CONTR shall connect to the new MAN engine with a 4" hose connection with barbed ends. The hose section shall be shorter than 30" and be routed to stay within the manufacturers hose bend radius and free from all sharp edges and other items than can cause mechanical damage. The CONTR shall install the piping so that the hose installation is long enough to provide for engine movement, easy for hose replacement and routed without having to induce undue stress on the hose. All hose connections shall be clamped with two t-bolt style hose clamps 180° offset from each other.

The new piping shall connect to the existing 5" overboard valve connections on the inboard side shells forward of frame 8 up high near the haunch. The existing thru-hull is a 4" CuNi piping that fits inside of a 6" aluminum overboard pipe, see reference drawings and below for details. The existing aluminum overboard pipe and the CuNi 4" pipe that fits inside of it will need to be shorted to fit the new piping run tighter to the side shell. The CONTR shall estimate that the 6" aluminum flange will be carefully removed from the 6" overboard pipe, the 6" overboard pipe shorted by 3-6" depending on final pipe routing and the 6" flange re-welded to the new shorted overboard pipe. The final length of the internal 4" CuNi pipe shall be determined after installation such that it protrudes an inch or two beyond the aluminum.



**Existing Overboard Detail**

The piping shall start with a 4" hose barb and be piped down, forward and inboard in 3.5" pipe (4" O.D.). The example pipe routing screen shot is shown for estimating purposes and all dimensions are approximate. If interferences allow the piping to be routed above the engine girder tops that would be preferable. The screen shot shows the piping routed through an existing lightening hole in the engine girder. Sea Water suction piping not shown for clarity. Just before the overboard the piping will flare from 3.5" to 4" pipe with a short radius elbow and tie into the custom 4" pipe 5" flange on the overboard as shorted in the previous paragraph. The Stbd side is shown, Port side would be similar but much shorter as the engine outlet and the overboard flange are on the same side. All piping shall be supported with approved clamps every 4'.



### 256.2.3 Gearbox Cooler Discharge Piping

The vessels existing gearbox cooler discharge piping ties into the gearbox cooler outlet, the main engine 4" sea water overboard and the shaft seal and the stern tube. This pipe shall be retained but modified to remove the long run forward to the main engine 4" sea water overboard as it is no longer required. The connection at the 4" overboard will have been removed as part of the main engine sea water overboard piping modifications. The modifications to the piping at the gearbox shall remove the existing tee fitting that connects the for

The as modified piping shall be supplied from the outlet of the new gear cooler location hose connection and feed the shaft seal and the stern tube as it is currently plumbed. Modifications shall be limited to removal of the forward portion of the piping run as described and making the changes to tie into the new gear cooler location. The existing gear cooler location is fore and aft on the gear with the outlet facing aft. The new location will be transverse with the outlet facing to the left-hand side of the engine, see reference drawings. The Port side will require additional 1.5" piping as the new gear cooler location will have the outlet of the gear cooler facing outboard while the existing piping is located on the inboard side shell. The final pipe routing and piping modifications shall be reviewed and approved by the OWNER.

The hose section shall be shorter than 30" and be routed to stay within the manufacturers hose bend radius and free from all sharp edges and other items than can cause mechanical damage. The CONTR shall install the piping so that the hose installation is long enough to provide for engine movement, easy for hose replacement and routed without having to induce undue stress on the hose. All hose connections shall clamped with two t-bolt style hose clamps 180° offset from each other. All piping shall be supported with approved clamps every 4'.

## 259 ENGINE EXHAUST LAGGING

The CONTR shall replace all main engine exhaust lagging from the engine room turbos to the top of the exhaust stack in the modified portions of the exhaust piping. The CONTR shall submit to the owner any sections of the existing exhaust lagging that can be re-used for approval. Re-use of the existing lagging shall be limited to the lagging applied

to an existing portion of piping that is being re-used without modification. An example of this would be the muffler as there are no modifications or changes required therefore the existing lagging can be re-used. In no circumstance shall portions of the existing lagging be repurposed to try and fit the new piping. The exhaust lagging shall be as described in section 635 using a lagging system by:

SOS Marine  
1320 E. St. Andrews Place Ste. A  
Santa Ana, CA 92705

### 259.1 DEF SYSTEM

The definition of this section is currently on hold pending feedback from the Marine Safety Center on design issues with the system. Until such time as the USCG provides the feedback required to complete the system design the CONTR shall account for a \$10,000 reserve budget for each vessel for the integration of the DEF system to the emissions control equipment.

### 261 FUEL OIL SYSTEM

All fuel system materials shall be as per Table 261-1.

<b>Table 261-1 Fuel System</b>	
Fittings Tube, CRES	A269 Grade 316 SS, SWAGELOK or equal
Aluminum Pipe, fittings and flanges	ASTM B241 6061-T6 schedule 80
Pipe, fittings and flanges CRES welded	ASTM A 778 316L pipe, 316L fittings
Hoses	Parker 221FR, SAE J1942 –F for fuel & lube oil
Hose End Fittings	JIC SAE J1475 316 SS
Valves	Ball Type Full Port, 316 SS

The CONTR shall remove the main engine fuel piping system up to the 1" tube inlet just before the existing RACOR 75/1000MAX fuel filters. The 1" tube supply to the existing filters shall be modified to allow for a hose connection to the new MAN supplied Mann & Hummel fuel filters. All fittings attached to the existing tube run shall be SWAGELOK as per table 261-1. The CONTR shall install new 1" ball valves on the inlet and outlet connections to the vessels hard piping before and after the fuel filter hose connections. The new MAN supplied filter will be mounted in the same location as the existing RACOR 75/1000MAX filter. The final location of the filter and the details of the adaptation to the existing bracket design shall be reviewed and approved by the OWNER prior to installation.

The removed RACOR filters shall be drained, capped and returned to the OWNER for use elsewhere in the fleet. The removal shall include all of the 1" tube run to the MTU main engines from the filters, fittings, Racor Fuel Filters and associated piping, clamps, supports and anything else that is rendered unneeded by the removal of the indicated portions of the fuel piping system.

The CONTR shall install new hose connections to and from the new fuel filters in addition to the supply and return to the new MAN main engines. All hoses shall be the same 1" size no longer than 30" and routed clear of any possible sharp edges or mechanical damage. Where contact between hoses and anything is possible the hoses shall be fitting with chafe protection EPHA Brand, Orange size and length to suited to adequately protect the hose. All hose routing, length and protection shall be reviewed and approved by the OWNER.

The CONTR shall install new supply piping from the outlet hose connection from the new MAN fuel filters to the new MAN engines. The new piping shall be run in 1" sch40 CRES piping utilizing pipe bends versus fittings as much as possible. At the ends of the pipe or where absolutely needed, connections shall be welded, no direct threading of the pipe is allowed. As an example, at the connections to the new 1" sch40 pipe for the hoses the CONTR shall weld couplings on either end to connect the valve and hoses to. After the welded coupling threaded fittings are allowed but are to be kept to the minimum required to attached the isolation valve and hose on the fuel filter outlet and the hoses on the engine supply line.

The new piping shall be run down the right-hand side of the engine (as viewed from aft looking forward) in a location that does not affect maintenance access to the engine. In general, the new supply and return piping runs should be routed low, supported every 2' alongside the engine and every 4' elsewhere at a minimum. The piping shall be supported off of the engine girder without effecting the installation of the engine feet on the girder. The supports and piping will not affect the movement of the engine for maintenance or removal,  $\pm 2'$ . All threaded connections are to be made with high quality thread sealants designed for diesel fuel, bio-diesel and renewable diesel applications in a high vibration environment Whitlam Blue Magic or Rector Seal Tru-Blu. All pipe routing, support, camps, brackets and additional details of installation shall be reviewed and approved by the OWNER prior to installation. All clamp and support bolted connections shall be made with nylock nuts or Loctite Blue 242 to inhibit accidental loosening of the mounting bolts.

The CONTR shall install a new return fuel circuit from the outlet of the engine to the vessels existing fuel tank. Currently there is no fuel return circuit installed for the main engines. The piping run shall be plumbed in  $\frac{1}{2}$ " sch40 CRES piping utilizing pipe bends versus fittings as much as possible. At the ends of the pipe or where absolutely needed, connections shall be welded, no direct threading of the pipe is allowed. As an example, at the connections to the return hose from the engine and the check valve at the tank shall be welded coupling connections. After the welded coupling threaded fittings are allowed but are to be kept to the minimum required to attached the hose on the engine return line and the check valve and flange at the tank.

The new piping shall be run down the right-hand side of the engine (as viewed from aft looking forward) in a location that does not affect maintenance access to the engine. In general, the new supply and return piping runs should be routed low, supported every 2' alongside the engine and every 4' elsewhere at a minimum. The piping shall be supported off of the engine girder without effecting the installation of the engine feet on the girder. The supports and piping will not affect the movement of the engine for maintenance or removal,  $\pm 2'$ . All pipe threaded connections are to be made with high quality thread sealants designed for diesel fuel, bio-diesel and renewable diesel applications in a high vibration environment Whitlam Blue Magic or Rector Seal Tru-Blu. All clamp and support bolted connections shall be made with nylock nuts or Loctite Blue 242 to inhibit accidental loosening of the mounting bolts.

The new connection to the fuel tank for the new return circuit shall be similar to the existing generator return fittings. However, the CONTR is required to gusset and support the welded aluminum pipe and flange. The connection shall be made with a  $\frac{1}{2}$ " insert plate beveled to match the existing tank plating with four (4) gussets between the insert plate the and flange to support the piping. The insert plate shall be a 6" diameter at a minimum. All details of the welded connection to the fuel tank shall be reviewed and approved by the OWNER prior to installation.

Any damaged to the SFP and the sheathing in the engine rooms from these removal and installation activities shall be repaired by the CONTR with like materials as part of their bid price.

## 290 SELECTIVE CATALYTIC REDUCTION SYSTEM

The vessels existing system Selective Catalytic Reduction System (SCR) was designed by Engine, Fuel & Emissions Engineering Inc. (EFEE) of Sacramento, CA (GEMINI) or HUG Engineering USA of Columbus, IN (PISCES, SCORPIO & TAURUS). All old wiring and components not used in the new MAN system shall be removed by the CONTR from the vessel in their entirety. Those components shall be grouped together and provided to the OWNER for disposition. Those components include but are not limited to the following items:

- SCR Mixing / injection tube
- SCR reactor
- SCR Catalyst Modules
- SCR Control System (Delivery control)
- Plc based injection system mounted in cabinet
- Reactant supply unit
- Reactant injector
- Sensors:
  - a. Inlet and outlet NOx sensors
  - b. Inlet and outlet temperature sensors
  - c. Engine Room Display

All extraneous ports from the old SCR systems that will not be used by the new SCR systems shall be capped. All new lagging shall allow access to all capped ports for inspection and testing. MAN and the EPA will require test ports in the exhaust system. It is likely that the existing ports in the system can be utilized for these testing purposes. The CONTR shall verify with MAN/RDI that the final installed piping has the testing ports required installed. The reference drawings in the system installed show the ports that exist. It is the CONTR responsibility to review these ports with MAN/RDI and add any additional test ports required if need be. All added ports shall be of the same materials as the existing exhaust system piping. It is the intent of the OWNER to reuse the existing DEF/UREA piping to the maximum extent possible. Reference the 259.1 section for details on DEF/UREA piping.

## 298 OPERATING FLUIDS

Upon completion of all work defined in this contract, ALL operational fluids (including fuel **refilled to match arrival condition**) in all equipment shall be topped up with OWNER approved fluids. The Vessel shall be trialed and delivered with 100% of all equipment ready to operate according to manufacturers' recommendations. **All engine fluids shall be provided by RDI as a part of the engine purchase contract for the initial fill. Any subsequent requirements to top up fluids prior to redelivery are the requirement of the shipyard.**

The operational fluids used on the vessel are outlined in Table 298-1.

Table 298-1 Operating Fluids	
Main Engine	Mobile Delvac Multigrade SAE 5W-40 Synthetic
Reduction Gear Oil	Chevron Delo 400 Multigrade SAE 15W-40
Auxiliary Engine Oil	Chevron Delo 400 Multigrade SAE 15W-40
Main Engine and Auxiliary Engine Coolant	Chevron Delo ELC Coolant 50% mixture
Hydraulic System	Chevron Rando HD ISO 46
Selective Catalytic Reduction System	Urea/DEF 30% solution

## 300 ELECTRICAL SYSTEMS

### 305 NAMEPLATES AND LABELS – ELECTRICAL EQUIPMENT

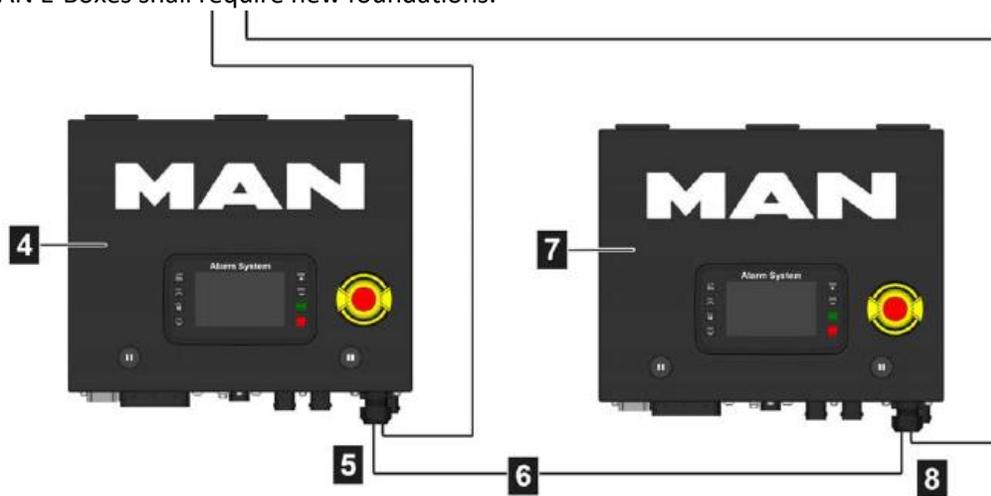
Any new circuits or electrical devices shall be fitted with identifying information. Nameplates shall be fitted on all circuit breakers, distribution panels, shore receptacles, and connection boxes. Nameplates shall show "fed from" and location on all breaker panels. Amperages of breakers shall also be marked.

The CONTR shall update circuit directory cards and panel board cards if any circuits are changed or added.

All nameplates shall be phenolic water proof tags, adhered to the equipment with a permanent marine adhesive, 3M 5200 or approved equal.

### 313 MAIN ENGINE 24VDC SYSTEMS

The CONTR shall remove the existing main engine starting circuits and controls but shall reuse the power feeds. The existing engine starter power supply cables shall be re-routed to the new starts on the MAN engines. The reference drawings provided detail the new configuration of the 24VDC power feeds for starting and engine controls. The CONTR shall be required to remove the existing Local Operating Panels (LOP) that were provided with the original MTU installations. The CONTR shall install the new MAN E-Box local operating panels in a similar location. It is assumed the new MAN E-Boxes shall require new foundations.



- |   |  |
|---|--|
| (1) Drive lever 1   | (6) CAN cross-communication  |
| (2) Drive lever 2   | (7) E-box, starboard   |
| (3) CAN bus terminating resistor                              | (8) Cable conduit for internal drive lever control unit, starboard |
| (4) E-box, port   |  |
| (5) Cable conduit for internal drive lever control unit, port |  |

\*The Gemini class vessels have 3 (three) operating stations

The existing MTU system is supplied power from two surface mounted 50A breakers in each engine room. The remainder of the power distribution is provided for in the MTU LOP's. all of this shall be removed. The new MAN engines and control system internally manage all power distribution from the starting circuit. Reference the MAIN ENGINE CONTROL SYSTEM drawing for details. The OWNER shall measure for all MAN harnesses that are require to be ordered

before the shipyard has taken delivery of the first vessel. The CONTR shall measure all other harnesses required. The CONTR shall provide as built dimensions for harnesses and update the drawing accordingly. The CONTR shall ship check the other vessels in the class to ensure the as built measurements on vessel one are applicable to the rest of the vessels in the class. If there are differences between the vessels the CONTR shall provide an as built harness log for each vessel.

The CONTR shall provide all cables, hardware and other items not provided by the OWNER that are required to complete the installation of the new 24vdc power distribution required by the installation of the new MAN engines and propulsion control system. The CONTR shall be in close communication with RDI Marine so that they know exactly what they need to supply. All main engine and propulsion control cables, wires, harnesses and electrical components shall not be routed, mounted or run with high power AC power cables and components. All wiring shall be routed to run as far as possible from the existing AC cables installed while still residing within the vessels existing main wireways. The new installation of the main engines and control systems shall require new sub wireways to be installed by the CONTR. All wireway routing and new installations shall be reviewed and approved by the OWNER prior to installation.

### **321 CABLES & CABLE INSTALLATION**

The CONTR shall supply and install all cables and wiring not included with the OFE from RDI marine as part of the MAN engine and control system package that are required to fully complete the installations to the OWNER's satisfaction. The CONTR shall install all cables and wiring that are provided with the OFE from RDI Marine for the new MAN main engines and propulsion control systems.

Electrical Components shall have their wiring isolated or shielded from other cables to prevent electrical noise problems. Control, sensing and data cables shall be mounted separately from line power cables. Cables shall be IEEE 45 low smoke marine shipboard type manufactured by Tricab except for specialized data cables that Tricab does not manufacture. Cable containing asbestos or polyvinyl chloride shall not be used. Wiring and cabling shall meet the requirements of USCG and be of sufficient size to sustain enough fault current to trip the circuit breaker's instantaneous trip devices. Power distribution cabling shall be sized for a maximum voltage drop of five percent (5%).

### **324 SWITCHBOARDS AND PANELS**

The CONTR shall install, remove and modify the following power circuits as the reference drawings and MAN requirements. The electrical circuits and motor controllers for the existing air compressor shall be removed as per the 551 section. The electrical feed to the engine block heater shall be modified to connect to the new MAN block heaters in their new location. The CONTR shall purchase the block heaters from RDI for all of the main engines. The existing circuit breaker and wire are more than sufficient to power the new MAN block heaters. The CONTR shall run the MAN block heater harness to the existing J-box for the MTU block heater and make the connections to ships power there. There is currently some connection between the MTU block heater J-Box and the MTU LOP, this circuit will be identified by the CONTR and presented to the OWNER to determine if it will be re-used or removed. Any modifications required to reuse this circuit will be addressed in the change order process. If it is decided to remove this circuit it shall be covered under the scope of this bid.

### **332 LIGHTING**

The CONTR shall budget for moving the after two 2' fluorescent light fixtures in the engine rooms IWO the new SCR system installations. It is assumed the movement of the fixtures shall be limited to relocation of the foundations and local wireways to accommodate the new locations clear of the new SCR's. Any change in wire length would be limited to the one wire between the after two fixtures. The after two fixtures are approximately 4-6' apart. All SFP damaged or disturbed by the relocation of the lighting foundations shall be replaced or repaired to the satisfaction of the

OWNER and the USCG. The final locations and details of the movement, if needed, will be reviewed and approved by the OWNER prior to installation. Costs from this section shall be attributed to the 233 Section.

### **390 PROGRAM LOGIC CONTROL (PLC) SYSTEM**

The currently installed Automation and Control System was designed and installed by Axis Engineering Services (AES). The CONTR shall contract with AES for all changes to the vessels installed automation system required by the new engine installations. The changes to the PLC program and HMI shall be limited to those that are tied to items that are changing with the new main engines such as run signals and voltage monitoring. Additionally, AES shall be required to re-wire and re-program the vessels VFD's on the engine room ventilation. The reconfigured system will come onto low speed when the engine room fiddley switch is closed and transition to high speed when the engines are started. The CONTR, AES and RDI Marine will be required to outfit the engines with an engine run signal for use by the VFD's. The current wiring for the engine run signal comes from the MTU LOP's and will have to be connected to the new source of the run signal. RDI Marine will provide the best solution that will be covered under their warranty which is assumed to be an engine mounted oil pressure switch. All interposing relays and wiring that is required to complete these modifications shall be designed by AES with AS-BUILT vessels drawings provided. All other changes to the Automation and Control System shall likewise be AS-BUILT by AES.

#### **Axis Engineering Services.**

Bruce Sommers

[Bruce@axis-ca.com](mailto:Bruce@axis-ca.com)

(619) 757-3600

## 400 COMMAND AND MONITORING

### 410 PILOTHOUSE

The CONTR shall remove all existing MTU electronics, hardware, cables and wiring that are not being reused as part of this repower. The removed items include, but are not limited to the following items:

- 2 each Electronic Display Modules in the centerline helm position
- 3 each throttle and gear control dual function binnacles
- 4 each analog tachometer at the wing stations
- MTU harnesses and cabling under the dash

The existing start, stop and E-stop buttons are being reused and therefore the main MTU terminal strips used for connections will be reused to connect the existing pilot house start, stop and E-Stop wiring to the new MAN E-Boxes in the engine rooms.

Where items are removed from the dash the CONTR shall make adapter plates to adapt to the new electronics installed in their place if they are smaller in any dimension than the existing holes. If any obsolete MTU components are not being replaced the hole in the dash shall be covered with a fabricated cover plate. All cover/adapter plates are to be fabricated from 1/8" minimum thickness aluminum and powder coated with flat black high quality marine grade coating. All cover/adapter plates shall be aesthetically pleasing with shapes that offer alignment (either parallel or perpendicular) with surrounding equipment with equal reveal and gaps. All edge cuts shall be sanded smooth and hard corners radius for a professional appearance. All mounting hardware shall be countersunk allen head CRES hardware.

If any of the installations require cutting new larger holes in the dash face the layout shall be reviewed prior to cutting. Any new holes shall be esthetically pleasing with shapes that offer alignment (either parallel or perpendicular) with surrounding equipment with equal reveal and gaps. All edge cuts shall be sanded smooth and hard corners radius for a professional appearance. All details that have to do with installations, removals and repairs to the pilot house dashes shall be reviewed and approved by the OWNER prior to installation.

## **500 AUXILIARY SYSTEMS**

### **505 GENERAL PIPING REQUIREMENTS**

All piping shall conform to USCG requirements for strength, materials, testing as well as the special requirements of this Section and the specific system details contained in this specification. Piping runs shall be straight, neat, and out of the way of walkways and passageways. Pipe hangers welded to ship structure shall be suitably located to support pipe against stress and vibration. Wherever piping has to be removed for maintenance or replacement of other components, flanges or take-down joints shall be fitted. Piping to rotating machinery shall have flexible connections of components suitable for the pressure and service.

Copper tubing is not permitted in sea water systems, and copper nickel piping shall be isolated from hull fittings. Water systems shall be constructed using the same material for piping and fittings throughout the system.

All piping system fasteners shall be 316-stainless steel.

All valving, fittings, and fasteners shall be high quality marine grade materials. Pot metal or nickel-plated components shall not be used.

All pipe hangers and clamps shall be stainless steel or aluminum with non-conductive bushings around the pipe, ZSI Alpha, Beta or Omega series clamps.

All valves shall be high quality, quarter-turn butterfly or ball style unless required otherwise by regulatory agencies. Valves in seawater systems shall have highly corrosion resistant discs and stems i.e. Monel, Inconel, Hastelloy or equal. All piping shall be 100% isolated from the hull for galvanic protection. Testing to be performed with a multimeter in the presence of the OWNER. The CONTR shall ensure all valves handles rotate in the same direction (e.g. clockwise to close or vice versa).

All check valves shall be 100% 316 stainless steel.

Where contact between hoses and anything is possible the hoses shall be fitting with chafe protection EPHA Brand, Orange size and length to suited to adequately protect the hose. All hose routing, length and protection shall be reviewed and approved by the OWNER.

### **513 MACHINERY SPACE VENTILATION**

The CONTR shall be responsible to investigate and tune the ventilation system operation to ensure it matches the WETA and MAN requirements to pass sea trials. AES has done this on previous vessels. The scope of work includes verify proper high speed and low speed settings, modify switching between high and low speed with engine run signals and switches as described in the 390 section of these specifications.

### **551 COMPRESSED AIR SYSTEMS**

The CONTR shall remove the existing air compressor, all electrical and piping associated with the installed compressed air systems on the boat. The compressed air system on the boat was installed specifically for the older SCR systems and is not required for the new MAN SCR system. The electrical circuits shall be removed from the vessel and the current circuit breaker shall be re-labeled as a "SPARE". The existing Motor controller shall be removed from the switchboard and delivered to WETA as a spare unit

## 555 FIRE EXTINGUISHING SYSTEMS

The CONTR shall adapt the vessels existing fixed fire suppressions system to the new main engines and SCR arrangement in the engine rooms. The system piping currently runs down the centerline of the engine room but is different between the two production runs of vessels. On the GEMINI and PISCES, the FM200 bottles are in the lazarettes and run from aft forward to about frame 9. The piping forward of WTBLKHD 5 will have to be offset to the inboard side IWO the new SCR installations. The final arrangement of the offset piping shall be reviewed and approved by the OWNER prior to any work taking place.

For the purposes of estimating the CONTR should assume the piping will be offset with 2each 45° threaded sch80 galvanized elbows and 2' of straight 1-1/2" sch80 galvanized piping meeting the requirements of the original system drawings. The original section of 1-1/2" piping should be able to be shorted and reused. The CONTR shall be responsible for all piping modifications, foundations movement, piping supports, SFP repairs and recertification by USCG.

As soon as possible after the first vessel, PISCES, enters the shipyard and the actual piping offset can be determined the CONTR shall submit this data to Global Fire and Safety (GFS) to re-run the flow calculations and determine if any orifices need be changed. Any changes to orifice plates or nozzles will be addressed in the change order process. The CONTR shall update the PISCES and GEMINI FM200 system drawings and submit them to the USCG with the updated calculations from GFS for approval. The TAURUS and SCORPIO shall only require the adaptation of the engine shut down circuits, no changes to the FM200 piping are assumed.

The system existing engine shut down circuits will be adapted to provide the USCG required shut down of the main engines, generators and ventilation systems. The CONTR shall contract with GFS for re-certification of the entire engine shut down and fire suppression system after completion of the work but prior to any sea trials.

### Global Fire & Safety

Dave Debardeleben, President  
[sales@globalfireandsafety.com](mailto:sales@globalfireandsafety.com)  
2001 Peralta St. F,  
Oakland, CA 94607  
(510) 834-2323

## 561 STEERING SYSTEMS

The CONTR shall modify the vessels existing hydraulic steering system for the new location of the hydraulic pump drive. The existing pumps are driven off of PTO's on the MTU main engines. As part of the 233 section the CONTR will have the existing ZF3050 gears retrofitted with PTO drives to support the existing hydraulic pumps. The pumps will be moved from forward left hand side of the engine to aft of the gearbox on centerline.

The CONTR will be required to modify the piping runs to account for the new location of the hydraulic pumps with the new engines. The routing of the Suction, Pressure, Case Drain and Load sensing lines shall be reviewed and approved by the OWNER prior to installation. Currently the Load Sensing lines are not shown on the system drawings. Assume the Load Sensing lines are ¼" -4 tubing and fittings for estimating purposes. The routing of the new lines shall be as direct as possible with the fewest elbows while allowing for routing to locations that do not affect equipment access or operability. When possible, pipe or tuning bends shall be used instead of elbow fittings to reduce pressure losses.

All piping details shall be as per the original installation except that all piping and fittings are to be stainless steel, 304 or 316 grade CRES. The original vessel drawings indicate stainless steel piping with steel fittings, the steel fittings were never installed, only CRES components were used in the system. No calculations are required as all of the piping runs are being drastically shortened from their current configuration. All line sizes shall remain the same as they currently are. The only change to the current system design, other than re-routing the lines for the new pump locations, shall be to add an 1/8" needle valve to the pressure line from the pump at or near the manifold on the hydraulic tank. The 1/8" needle valves shall be used for hydraulic oil sampling and shall be labeled as such. The valves shall be Swagelok or equal and shall be capped for safety.

**Before the vessel is removed from the water** the CONTR shall take hydraulic oil samples after the system has been running and the oil is up to temperature. Currently the only location that a sample can be taken from is from the bottom of the hydraulic tank in each engine room. To ensure a clean sample the CONTR shall drain 0.5-1 gallons of oil from the system prior to taking the samples. These samples will be sent to Blue & Gold Fleet so they can be analyzed by their laboratory. Send Samples to:

**Frank Hernandez**  
670 W. Hornet Ave.  
Alameda, CA 94501

The results of these samples will be shared with the shipyard and used to compare with post work/pre-sea trial samples to ensure the system has been cleaned. As part of this scope of work the CONTR shall clean the hydraulic head tanks and clean all new and existing hydraulic system lines prior to refilling the system. The CONTR shall use a foam plug cleaning system or approved equal to ensure the lines have been adequately cleaned. The hydraulic head tanks are located on the aft engine room bulkhead soft patches that are required to be removed to remove the engines. While the tanks are removed and all of the system lines are open, they shall be cleaned. The head tanks shall be made available for inspection by the OWNER prior to reinstallation after they have been cleaned.

Filling of the hydraulic system shall be with the approved oil in the 298 section. All filling equipment, piping and hoses shall be clean and provided to the OWNER for inspection prior to filling. The first 1 gallon of oil shall be pumped into a bucket in the engine room in the presence of the OWNER to ensure the lines are clean and free of debris. Should debris and contamination be present in that first gallon the CONTR shall continue to pump oil into clean buckets until the cleanliness is verified by the OWNER.

Once the system has been filled all lines shall be bled to ensure all air is out of the system. The suction and pump cases have to be flooded with new clean oil prior to starting the new main engines. Standby pressures and working pressures shall be verified on dock trials.

All costs associated with the 561 section shall be attributed to the 233 section in the schedule of values.

## 600 OUTFITTING

### 631 PAINT & COATINGS

The CONTR shall provide the coating services as per these specifications. All coating systems shall be legal in the State of California. All surface preparation and painting shall meet the requirements of the paint system manufacturer, including temperature and humidity requirements, dry film thickness, and curing time between coats.

Paint performance, including but not limited to antifoulant performance, shall be fully warranted by the CONTR.

#### 631.1 EXTERIOR PAINT - KEEL TO BOOT-TOP

The CONTR shall apply a new foul release coating system to the underwater body and boot-top. The foul release coating system shall consist a minimum of two (2) spot coats of anticorrosive epoxy primer, one (1) spot coat of antifouling, overcoated with one (1) full coat of antifouling. All four (4) coats shall be of a contrasting color as per table 631-1. The SSPC-3 preparation requirement shall apply to all areas where coatings are damaged or not tight such that the SSPC-3 power tool cleaning shall prepare those areas to bare metal with an acceptable profile free of all visible dust dirt, oxides, chlorides, loose coatings and other foreign matter to the satisfaction of the OWNER and the paint manufacturer's requirements. All details, products and atmospherics shall be reviewed and approved by the OWNER and the coating system Manufacturer.

Table 631-1 Keel to Boot-Top				
Surfaces to Be Preserved	Surface Preparation	Coating System	DFT (mils)	Color
Hull Underwater Body to Boot-top	High pressure wash 3-4k psi. SSPC-3 with 36grit and SSPC-1 solvent wash post SSPC-3 as per manufacturer's requirements.	1) INTERSHIELD 300V-Spot Coat	5.0-6.0	Bronze
		2) INTERSHIELD 300V-Spot Coat	5.0-6.0	Aluminum
		3) INTERSPEED 5640-Spot Coat	5.0	Red
		4) INTERSPEED 5640-Full Coat	5.0	Black

#### 631.2 EXTERIOR PAINT - BOOT-TOP AND UP

The CONTR shall repair all coatings damaged as part of the engine and exhaust system installations. The four (4) vessels in this class are a mix of vinyl films and paint. The GEMINI, PISCES & TAURUS have 3M Vinyl film coating the areas above the waterline except for the areas that are black, those areas are a mixture of paint and vinyl. If the CONTR wants to know exactly which vessels have their black paint a detailed ship check by the CONTR will be required. The SCOPRIO is 100% painted above and below the waterline. The CONTR shall crop out and repair all coatings that are damaged by welding or other means as per the tables below. The SSPC-3 preparation requirement shall apply to all areas where coatings are damaged or not tight such that the SSPC-3 power tool cleaning shall prepare those areas to bare metal with an acceptable profile free of all visible dust dirt, oxides, chlorides, loose coatings and other foreign matter to the satisfaction of the OWNER and the coating manufacturers requirements. All details, products and atmospherics shall be reviewed and approved by the OWNER and the coating system Manufacturer. The 3M ElectroCut Vinyl film called out may be obsolete, the CONTR shall supply to the OWNER the marine grade vinyl film to be used for review and approval. The submission shall be accompanied by a letter of recommendation from the manufacturer or their representative for that film in this application. All vinyl repairs shall as best possibly overlap to provide the best water proof membrane. The top shall lap over the bottom, the forward side shall lap over the aft side.

<b>Table 631-2 Boot-Top and Up</b>				
Surfaces to Be Preserved	Surface Preparation	Coating System	DFT (mils)	Color
Hull Boot-top and up <b>PAINT</b>	<b>High pressure wash 3-4k psi. SSPC-3 with 36grit and SSPC-1 solvent wash post SSPC-3 as per manufacturer's requirements.</b>	1) INTERSHIELD 300V	5.0	Bronze
		2) INTERSHIELD 300V	5.0	Aluminum
		3) INTERTHANE 990HS, 990W37R/A1gl	5.0	Dark Blue
		Or INTERTHANE 990HS, 990W37U/A1gl	5.0	Light Blue
		Or INTERTHANE 990HS, 99037T/A1gl	5.0	Green
		Or INTERTHANE 990HS, TBD	5.0	White
		Or INTERTHANE 990HS, TBD	5.0	Black
Hull Boot-top and up <b>VINYL</b>	<b>Cut out damaged vinyl film, clean and solvent wiper as per 3M Application Instructions for Watercraft, Instruction Bulletin 5.42.</b>	3M ElectroCut Graphic Film #225-20 3M ElectroCut Graphic Film #225-12 3M ElectroCut Graphic Film #225-57 3M ElectroCut Graphic Film #225-37 3M ElectroCut Graphic Film #220-196	N/A	Gloss White Gloss Black Olympic Blue Sapphire Blue Apple Green

### 631.5 PIPING - THRU-HULLS & SEACHESTS

All inlet pipes, stern tubes and rudder tubes are coated with Blue Seal epoxy coating system and antifoulant as per Table 631-5. The seachests are coated with epoxy AC and AF as per table 631-5. The Blue Seal coating systems shall be applied to the inside of the piping and over the flange faces to protect the aluminum flanges from corroding/eroding. If the CONTR is concerned about valve sealing they are encouraged to build up the Blue Seal system with their reinforcement coat to build up thickness and then sand flat prior to applying the top coat. It is of principal importance that the coating system extends across the full sealing surface of the flange face.

The CONTR shall only be required to repair loose or damaged coatings in these areas with the one full top coat of AF as per the table below. Where damaged or loose coatings exist in the thru-hulls and sea chests they shall be prepared with hand power tools, SSPC-3. The SSPC-3 preparation requirement shall apply to all areas where coatings are damaged or not tight such that the SSPC-3 power tool cleaning shall prepare those areas to bare metal with an acceptable profile free of all visible dust dirt, oxides, chlorides, loose coatings and other foreign matter to the satisfaction of the OWNER and the coating manufacturers requirements. All details, products and atmospherics shall be reviewed and approved by the OWNER and the coating system Manufacturer.

<b>Table 631-5 Thru-hulls &amp; Seachests</b>				
Surfaces to Be Preserved	Surface Preparation	Coating System	DFT (mils)	Color
Blue Seal Thru-hulls	High pressure wash 3-4k psi. SSPC-3 with 36grit and SSPC-1 solvent wash post SSPC-3 as per manufacturer's requirements.	1) Basecoat-Spot Coat	10.0	Blue
		2) Reinforcement coat -Spot Coat	AR	Gray
		3) Topcoat-Spot Coat	10.0	Blue
		4) INTERSPEED 5640-Spot Coat	5.0	Red
		5) INTERSPEED 5640-Full Coat	5.0	Black

Seachests	High pressure wash 3-4k psi. SSPC-3 with 36grit and SSPC-1 solvent wash post SSPC-3 as per manufacturer's requirements.	1) INTERSHIELD 300HS epoxy-Spot Coat	5.0-6.0	Bronze
		2) INTERSHIELD 300HS epoxy-Spot Coat	5.0-6.0	Aluminum
		3) Antifoulant, Non-Copper-Spot Coat	5.0	Red
		4) Antifoulant, Non-Copper-Full Coat	5.0	Black

### 633 CATHODIC MONITORING SYSTEM

The CONTR shall remove and replace the existing Cathodic Monitoring systems reference cells for the Electro-Guard 125A metering system in each hull. The reinstalled reference cells shall be checked in the presence of the OWNER to ensure they are not grounded to the hull through their mounting hardware.

#### 633.1 ANODES

The CONTR shall provide a Conditions found report to the OWNER on the Anode condition after high pressure water washing. Replacement of the anodes shall be addressed in the change order process if required.

The CONTR shall use nylock 316SS nuts and 316SS bolts to secure the anodes in place. Ensure that all paint is completely removed from the mounting surfaces in order to provide proper conductivity between the anode and the vessel hull. Anodes shall be tested for proper continuity with the vessel hull in the presence of the OWNER prior to undocking.

### 635 INSULATION

The CONTR shall renew the lagging on the portions of the exhaust system run that are new from each main engine to the mufflers. The new sections that require new lagging include but are not limited to the following areas:

- Engine collector flange to SCR's
- The SCR's
- From the SCR's the connection to the existing riser just above the the main deck
- The new Wye pipe that will replace the old SCR on the 02 deck

The lagging shall consist of a multi part system made up of:

- A silicon/fiberglass outer cloth (Alpha Maritex Style #3259-2-SS)
- A two (2) inch temperature mat
- A high temperature inner cloth (Alpha Sil Style 600)
- A knitted stainless-steel wire tubular fabric (Alpha Maritex #91160) which is in direct contact with the pipe wall.

The CONTR shall replace all insulation that is damaged or disturbed by the removal of the old and the installation of the new SCR's and exhaust systems. All insulation that is repaired shall be repaired with matching materials provided in the reference drawings.

## **800 MANAGEMENT AND ENGINEERING**

The CONTR shall supply all necessary labor, materials, services and engineering required to provide all project management and engineering functions contained in Series 800 Technical Specifications and as otherwise required by the RFP. All aspect of the engineering effort that will take place in the detailed design and engineering phase of the project shall be completed by an engineering firm as proposed by the CONTR and approved by the OWNER. The engineering firm proposed by the CONTR shall be required to have recent experience with high speed lightweight aluminum ferry boats of similar size and complexity to the Gemini Class vessels.

### **810 DESIGN & ENGINEERING**

All drawings shall conform to the Ship Work Breakdown Structure (SWBS) numbering system as established in these TECHNICAL SPECIFICATIONS.

The CONTR shall provide all Contract Design, Detail Design and Production level engineering services necessary for the work in accordance with the Specification. Services shall include technical calculations, surveys, material selection, preparation of diagrams, sketches, schedules, and preparation of all production drawings and as-built drawings and all USCG approvals. The production engineering services shall only be provided by qualified engineering resources.

All drawings shall be submitted in electronic formats as Adobe® Acrobat .pdf version of the AutoCAD files as well as .dwg versions. Scanned drawings with hand mark ups submitted, as .pdf files will not be acceptable. The .pdf file format is only to be used for viewing of CAD drawings. Booklets of details and calculations may be on sheets 11 x 17 inches.

All data created from this project shall be provided to and reviewed by the OWNER, including all information provided to USCG. The CONTR shall be responsible for taking progress meeting minutes and emailing a brief synopsis of each meeting including all decisions made and any action items including the party responsible for the item.

Drawings shall include a Bill of Materials (BOM) of all major components defined in the drawing. Raw materials such as plate, extrusions, pipe, pipe fittings, hoses and hose end fittings shall be called out in the drawing or in an attached material schedule. Drawings that include systems with plumbing that is not 100% detailed shall include a material schedule table in the drawing. The material schedule table shall provide the shipyard with all the guidance necessary to procure parts and plumb the system indicated. Drawings shall show enough detail such that the system can be recreated from the drawings. Symbols on drawings shall conform to recognized marine commercial standards. Materials shown on drawings shall have item numbers and be identified in a material list by material specifications, ASTM, ANSI, and NEMA, as appropriate.

The OWNER will review the CONTR's detailed production level drawings to determine compliance with the Specification and Contract. The OWNER's review will not relieve the CONTR of responsibility for deviations from the Specification unless specific written approvals of deviations are received by the CONTR with the final approval of the drawing by the OWNER. Approval of a drawing does not constitute approval of a deviation, mistake, or omission. OWNER approval of a deviation from the Specification will not relieve the CONTR of the responsibility for satisfactory operation of the system or equipment. Work performed by the CONTR prior to the OWNER's review and approval of the CONTR's drawings will be at the CONTR's own risk.

All drawings shall be initialed in the title block by the drafter and the engineer responsible for the production level drawings prior to submittal to the OWNER. They shall be initialed by the engineer and supervising engineer checking the drawing. Each drawing shall be checked and finished before submitting to the OWNER for final review. Concept or

progress reviews of drawings may be more informal but the status of the drawing will be made clear to the OWNER prior to reviewing. Drawings without appropriate signatures and drawings which are not complete will not be reviewed by the OWNER for anything other than concept approval and will be returned to the CONTR for completion. Returned drawing submittals do not count towards fulfilling the CONTR's obligations with regard to scheduling; i.e., all returned drawings must be resubmitted complete within the scheduled time.

The CONTR shall furnish a copy of all written or email correspondence sent to or received from regulatory agencies to the OWNER. When submitting system production level drawings, such as piping diagrams and isometric wiring diagrams, CONTR shall include the calculations by which the system components were sized. The OWNER will not review these drawings without supporting calculations.

### **810.1 AS-BUILT DRAWINGS**

All working drawings are to conform to an "as-built" condition and stamped "AS-BUILT FINAL" in the title block. The final drawings shall reflect systems and arrangements of the Vessel as finally completed and approved. The drawings shall not be stamped "AS-BUILT FINAL" until after the OWNER has verified that the physical configuration of the Vessel matches the drawing being submitted as an as-built. Close attention shall be paid to electrical and piping terminations and equipment data matching the drawing BOM's.

## **820 TECHNICAL DOCUMENTS**

As part of the complete Vessel, the CONTR shall provide the OWNER, upon delivery:

- A complete set of all As-Built drawings for the vessel in .dwg version on USB Flash Drive
- Manufacturer's drawings and schematics – minimum one (1) copy in .dwg version on USB Flash Drive
- Vendor and sub-CONTR drawings – minimum one (1) copies in .dwg version on USB Flash Drive
- Machinery, equipment and parts manuals – minimum two (2) copies of each document.

The manufacturer's standard installation, operation and technical manual documentation which are provided with all the equipment shall be provided. All documentation shall be on hard copy and an identical electronic format as Adobe® Acrobat .pdf version on USB Flash Drive.

### **830.1 MATERIALS**

#### 830.1.1 Control of Materials

The materials used on the work shall meet all requirements of these technical specifications.

Materials to be supplied shall be identified in the CONTR-developed documents such as: specifications, purchase technical specifications, drawing BOMs, drawing equipment lists, or detail drawings. Materials shall be described to the extent required for ordering or reordering from suppliers. Descriptions shall include brand name, model, type, size and other information as applicable to the item.

Where necessary to provide flexibility and competition in the purchasing process, alternative manufacturers may be suggested by CONTR and shall be subject to approval by the OWNER.

No materials shall be ordered until after Notice to Proceed has been authorized by the OWNER. Any materials ordered prior to such notice to proceed shall be at the CONTR's sole risk.

All materials incorporated in the Work covered by this Contract are to be new, of current production, of the specified or most suitable grade of their respective kinds for the purpose and, except where otherwise specifically provided for in the Contract for particular items, currently supported by spare parts in the United States of America and as required by the Contract. All material items used shall be suitable for use in a marine environment and for their intended use.

All materials shall be free from imperfections of manufacture and from defects that adversely affect appearance or serviceability.

Materials banned by the State of California shall not be used under this Contract.

Structural plates, shapes, bars, castings, forgings and all other material used throughout the vessel which are subject to regulatory body approval shall meet the requirements of the regulatory bodies.

#### 830.1.2 Samples

Samples of materials shall be submitted for approval when so directed by the OWNER or indicated in the Contract Documents. The OWNER may order such sampling at its sole discretion. Any work in which untested materials are used after such direction from the OWNER, and which the OWNER has not approved in writing, is subject to removal at the OWNER's direction and at the CONTR's expense.

Material samples may, at the option of the OWNER or regulatory bodies, be subjected to laboratory testing beyond that normally performed by the manufacturer, to verify compliance with quality requirements. The results of the tests may be the basis for acceptance of quality of manufactured lots. Except where such testing is expressly required by the Contract, the costs of laboratory testing that is requested by the OWNER and beyond that normally performed by the manufacturer shall be paid for by the OWNER as Extra Work at the laboratory facility's invoiced price and without CONTR mark-up.

#### 830.1.3 Tests and Inspections at Place of Manufacture, Production or Shipment

In addition to material tests and inspections that occur at the CONTR's facilities, certain items of equipment and other materials shall be inspected and/or tested at the source (place of manufacture, production or shipment) as required by the regulatory bodies and the Contract. During the monthly progress meetings CONTR shall notify the OWNER of anticipated tests that may occur in the following month that the OWNER may desire to witness including propulsion component testing.

Where inspections and tests at the place of manufacture, production or shipment are made, the following conditions shall be met. The conditions in subparagraphs 'A' and 'B' below are requirements of any Contract or agreement between the CONTR and the producer, manufacturer, fabricator or supplier:

- A. The OWNER and regulatory body representatives shall have the cooperation of the CONTR and the producer, manufacturer, fabricator or supplier with whom the CONTR has contracted for the materials.
- B. The OWNER and regulatory body representatives shall have full entry at all times to such parts of the plant as may concern the production, manufacture, assembly, cleaning, painting and packaging of similar materials being furnished.
- C. In the case of plant facilities located within the continental United States, the OWNER shall be advised of the production and/or fabrication schedule a minimum of 4 calendar days prior to beginning work on any similar item requiring test or inspection. In the case of plant facilities located outside the continental United States, the OWNER shall be advised of the production and/or fabrication schedule a minimum of 10 calendar days

prior to beginning work on any similar item requiring test or inspection. Such notifications shall include the recommended dates that the OWNER be on site to witness or perform tests and inspections.

- D. Planning and coordinating the conducting and witnessing of tests and inspections at sources of supply by regulatory body representatives shall be the responsibility of the CONTR.

All materials that are fabricated or installed without having received the required inspections and tests witness thereof by regulatory body representatives, shall be considered unacceptable and may, at the OWNER's discretion, be subject to removal and correction at the CONTR's expense.

The OWNER reserves the right to retest materials that have been tested at the source of supply, after they have been delivered and prior to incorporation into the work where, damage warrants such retest. The OWNER reserves the right to reject all materials which, when retested, do not meet the requirements of the Contract.

#### 830.1.4 Material Certification

Where materials are required by these specifications to conform to certain standards and requirements, such as those of the USCG, ASTM, AISI, ANSI, FCC, USPHS, or UL, the following provisions shall apply:

- A. All items requiring U.S. Coast Guard approval are listed in COMDTINST M16714.3 (old CG-190), "Equipment Lists," or a USCG approval letter or certificate shall be furnished to the OWNER upon request.
- B. Copies of materials certifications, test reports, metal analyses, welding inspections, non-destructive test data, welding procedures and test schedules shall be provided to the OWNER as requested.
- C. The OWNER may permit the use, prior to or without sampling and testing, of certain materials or assemblies when accompanied by the manufacturer's certificate of compliance stating that such materials or assemblies fully comply with the requirements of these specifications. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.
- D. Provision of invoices, certificates of compliance or other documentation contending that furnished materials comply with standards and other requirements applicable to the materials shall not relieve the CONTR of his responsibility to perform inspections, tests, research or other validation work necessary to ensure that the materials do in fact comply with the requirements.
- E. All items requiring classification society approval shall have an approval affidavit furnished to the OWNER prior to installation of the item.

#### 830.1.5 Protection and Storage of Material

The CONTR shall be responsible for the protection from the elements, weather, and abuse, of all material intended for use and installed on board the Vessel until Acceptance of the Vessel by the OWNER.

Due consideration shall be given to the nature of the item during handling and storage. Materials shall be stored out of the weather in a manner that assures the preservation of material quality and fitness for the work.

All finished surfaces shall be protected by appropriate means. Surfaces damaged or marred shall be replaced or repaired by the CONTR to the satisfaction of the OWNER at the CONTR's expense.

The OWNER may reject any material improperly stored or handled.

The OWNER may require that stored materials, even though inspected before storage, be inspected again prior to their use. Stored materials shall be located so as to facilitate their prompt inspection.

830.1.6 OWNER Furnished Equipment (OFE) and Material

The OWNER will be furnishing the new MAN D2862LE489 main engines, their emissions control equipment and MAN's iSea Propulsion control system for all four (4) vessels in the class. Any questions on the exact scope of supply can be answered by RDI Marine of Seattle Washington

**RDI Marine**

Brian Cook

[bcook@manengines.com](mailto:bcook@manengines.com)

(206) 286-1230

2225 West Commodore Way

Seattle, WA 98199

830.1.7 "Or Equal" Material

Where a specific vendor, brand name and/or model is required by the Contract design package the indicated brand name shall be provided unless OWNER approval of an "or equal" is obtained. To request OWNER approval of an "or equal", the CONTR must submit a written request to the OWNER and shall be obligated to include the following in the request:

- A. All relevant data establishing equality or superiority of the product as it relates to:
  - a. performance, reliability, maintainability, durability, size, and weight characteristics
  - b. requisite regulatory body approvals
  - c. availability of parts and service
  - d. service history/records of the proposed item
- B. Identification of any material variations of the proposed "or equal" from the materials provided and these specifications otherwise addressed by item 'A' above.
- C. The warranty of the proposed item.
- D. Drawings and sketches of the proposed item, if available.
- E. Names, addresses and telephone numbers of firms that have the item in similar service.
- F. An analysis of the effect on Vessel's weight, center-of-gravity and stability.
- G. A statement that no increase in the Contract Price or time to complete the Work shall result from use of the "or equal". Written quotes from the "specified" and proposed "or equal" vendors shall be provided.
- H. Other salient technical data necessary for a comparative analysis.

The CONTR shall make arrangements for the OWNER to view the proposed "or equal" item in use at the CONTR's site or deliver a sample to the OWNER if requested.

The OWNER shall provide a written determination regarding the request for use of the "or equal". The OWNER's determination shall be considered final. For use of an "or equal" to be considered approved, it must have the unambiguous written approval of the OWNER. The OWNER's approval of an "or equal" allows the CONTR the option of procuring that item or services. In each case where the request is disapproved by the OWNER, the CONTR shall provide the specified vendor or material at no extra cost to the OWNER.

Use of "or equal" items and material substitution shall not be considered without a written request for same, nor shall it be allowed without the OWNER's written approval.

It shall be the CONTR's responsibility to design, integrate, test and incorporate the "or equal" item in the work. All costs to the CONTR as a result of the use of the "or equal", over and above the cost of the originally specified, shall be at the CONTR's expense. The CONTR shall be entitled to no extension of time associated with the use of an "or equal". The OWNER shall not be responsible for any delay resulting from a substitution request.

### **833 WEIGHT CONTROL**

The CONTR shall minimize weight growth during the contract work. Scantling sizes shall be kept to a reasonable size. All systems shall be designed to balance the weight of the Vessel versus the long-term durability of the Vessel.

The CONTR shall prepare and maintain a Builder's Weight Estimate (BWE). Each revision of the BWE shall be submitted to the OWNER. The weight estimate shall conform to the agreed SWBS system. Throughout the construction period, the CONTR shall monitor the actual weight of equipment and materials against the BWE. The BWE shall be updated and resubmitted monthly. Weight growth or migration shall be brought to the attention of the OWNER. CONTR invoices shall not be paid unless the updated BWE has been submitted for the most current month.

The initial BWE has been submitted to the USCG for a Lightship Change Determination. The BWE shall show the percentage change in the vessel's lightship displacement and centers of gravity. The preliminary weight estimate indicates the vessels will get approximately 4% lighter which will require the CONTR to provide a new lightship survey and updated USCG subchapter K Compliance stability calculations.

### **835 DRYDOCKING**

Following delivery to the WETA facilities in San Francisco Bay, the CONTR must arrange at its expense for the subject vessel to be drydocked in the San Francisco Bay area if the operation, machinery or running gear related vibrations have significantly changed during the delivery of the vessel from outside the San Francisco Bay Area. The drydocking operation shall include having the underwater appendages examined, bottom cleaned, and any damages from delivery repaired. Bottom paint anti-fouling shall be touched up, if damaged during delivery and anodes inspected. Sea chests shall be opened for examination and cleaning if the deficiency is cooling system related. The OWNER shall be notified of the time and place of this drydocking and shall inspect the vessel prior to undocking.

The drydocking shall be witnessed by the USCG for the purposes of fulfilling periodic under water inspection requirements and witnessing the corrective actions to address the faulty conditions that required the dry docking.

All costs associated with this drydocking shall be borne by the CONTR.

### **836 PRELIMINARY ACCEPTANCE, SURVEY & TRIALS**

Prior to Re-Delivery of each vessel, the CONTR shall conduct a Preliminary Acceptance Survey and Preliminary Acceptance Trials for each vessel at or near the CONTR's facilities. The OWNER will issue Preliminary Acceptance when all of the following requirements are fulfilled to the OWNER's satisfaction:

- A. Allowing for a small quantity of minor deficiencies (see below), all physical work is completed, with all requisite regulatory approvals, certifications and letters of compliance obtained, and with the Vessel ready for service in full compliance with the Contract to the satisfaction of the OWNER.
- B. The Vessel shall be thoroughly cleaned in accordance with Section 951 of these provisions to the satisfaction of the OWNER.

- C. All shop and installation tests (MAN) and inspections shall be completed, with results demonstrating compliance with the Contract to the satisfaction of the OWNER.
- D. The Preliminary Acceptance Survey described herein is complete, with the results supporting a conclusion by the OWNER that the Vessel is complete, clean, free of deficiencies, and ready for delivery to the OWNER in compliance with the Contract to the satisfaction of the OWNER.
- E. All Trials and prerequisite tests shall have been completed, with results demonstrating compliance with the Contract, and approved by the OWNER and MAN.
- F. Any prerequisite tests to Preliminary Acceptance Trials and/or Preliminary Acceptance is complete, with results demonstrating compliance with the Contract, and approved by the OWNER.
- G. Correction of all known deficiencies including deficiencies that develop or are identified after Preliminary Acceptance Trials.

The conduct of the Preliminary Acceptance Survey shall be contingent upon receipt by the OWNER of written notice from the CONTR of presumptive completion of all physical work on each vessel, testing and clean-up provided for under the Contract. The Preliminary Acceptance Survey shall precede the Preliminary Acceptance Trial for each Vessel.

The Preliminary Acceptance Survey shall be solely for the purpose of relating WETA's determination that, if the CONTR delivers the Vessel in like condition in material, operation and performance, and corrects deficiencies which shall be authorized in writing by the OWNER to be corrected following Preliminary Acceptance but before each Vessel Delivery (see below), each Vessel with the contract scope of work completed and presented is acceptable to the OWNER.

A Preliminary Acceptance Survey for each Vessel shall be a prerequisite to the Delivery of each Vessel to the OWNER's location.

A Preliminary Acceptance Survey shall be conducted after all physical work, testing and clean-up provided for under the Contract is completed. The intent of the Preliminary Acceptance Survey shall be to affirm that the subject Vessel is complete; the form, fit and function of installed materials are satisfactory, and the subject Vessel is clean and clear of rubbish, excess material, etc., in accordance with Section 951. In conjunction with the survey, the status of the compartment close-outs required by the Contract shall be presented for review, with any remaining close-outs performed prior to completion of the Preliminary Acceptance Survey.

The existence of any uncorrected deficiency affecting the safety, operation, performance or immediate efficient use of the Vessel for its intended service shall be sufficient cause to reject Preliminary Acceptance of the Vessel pending correction of the deficiency by the CONTR. The existence of uncorrected deficiencies shall likewise be a cause for rejection of the Vessel until their number has been reduced to a level acceptable to the OWNER.

Upon completion of the Preliminary Acceptance Survey and Trials for each Vessel, a letter relating WETA's determination regarding Preliminary Acceptance of the Vessel shall be issued by the OWNER. The letter shall provide notice as to the extent of unsatisfactory or incomplete Work which must be corrected or completed prior to the Final Acceptance Trials of the Vessel, and which discrepancies, if any, may be deferred for accomplishment after Final Acceptance Trials, but before Final Acceptance Survey of the Vessel. In connection with this notice, it must be recognized that under the terms of the Contract, the CONTR is required to deliver a complete Vessel that is free of all deficiencies related to the contract scope of work or conditions the CONTR created during the scope or work, and that deferral of corrective Work is not a waiver by the OWNER of its entitlement to a complete Vessel that is free of deficiencies related to the contract scope of work or conditions the CONTR created during the scope or work.

The CONTR shall immediately take appropriate action to correct and complete any work that is determined to be unsatisfactory or incomplete, and shall be responsible for any delay in the Project associated with correcting deficiencies. The cost of such delay shall be at the CONTR's expense.

Any work or operation of the Vessel called for by the OWNER in the course of inspection of previously unsatisfactory or incomplete Work shall be performed at the CONTR's expense in advance of Preliminary Acceptance.

Preliminary Acceptance by the OWNER shall not constitute acceptance by the OWNER of any latent defects or other deficiencies which may develop or be identified subsequent to Preliminary Acceptance, but prior to completion of the warranty period. Such defects and deficiencies shall be the responsibility of the CONTR to correct. In addition, Preliminary Acceptance shall not stop the count of construction time, nor shall such acceptance be the basis for starting the count of time for the warranty/guarantee period.

### **837 FINAL ACCEPTANCE, SURVEY & TRIALS**

Following successful completion of Preliminary Acceptance Survey and Trials for each vessel, issuance of Preliminary Acceptance, and Delivery, the CONTR shall conduct Final Acceptance Trials on each vessel. The OWNER will issue Final Acceptance when the following requirements are fulfilled to the OWNER's satisfaction:

- USCG Sector approval.
- The Final Acceptance Survey described herein is completed, with the results supporting a conclusion by the OWNER that each Vessel is complete, clean, free of deficiencies, and in compliance with the Contract to the satisfaction of the OWNER.
- Final Acceptance Trials are completed.
- Final Acceptance of the fourth (4<sup>th</sup>) vessel will be conditional on the Final Acceptance of all previous vessels.

The CONTR shall immediately take appropriate action to correct and complete any work that is determined to be unsatisfactory or incomplete and shall be responsible for any delay in the Project associated with correcting deficiencies. The cost of such delay shall be at the CONTR's expense.

Any work or operation of the Vessel called for by the OWNER in the course of inspection of previously unsatisfactory or incomplete Work shall be performed at the CONTR's expense in advance of Final Acceptance.

If the Final Acceptance Trials and Final Acceptance Survey reveal only minor defects or deficiencies that WETA determines do not prohibit it from placing the subject Vessel in revenue service, then WETA may at its sole discretion place the Vessel into revenue service prior to Final Acceptance. Alternatively, WETA may at its sole discretion Finally Accept the subject Vessel, in which case OWNER will provide CONTR with written notice of unsatisfactory or incomplete Work which must be corrected or completed prior to Completion of the Warranty Period, Section 952. Correction of discrepancies, if any, may be deferred until after Final Acceptance Trials, but before Completion of the Warranty Period. In connection with this notice, it must be recognized that under the terms of the Contract, the CONTR is required to deliver a completed Vessel that is free of all deficiencies related to the contract scope of work or conditions the CONTR created during the scope or work, and that deferral of corrective Work is not a waiver by the OWNER of its entitlement to a complete Vessel that is free of deficiencies related to the contract scope of work or conditions the CONTR created during the scope or work.

WETA will certify Final Acceptance by issuing Contractor a Certificate of Final Acceptance for each vessel.

Following Final Acceptance, the completed Vessel shall be turned over to WETA's Operator in Vallejo, California. The CONTR shall fill all fuel tanks, top up all fluids, and present a vessel ready and fit for service to WETA.

Final Acceptance Payment for each vessel against the Contract shall be made by the OWNER within 30 calendar days of the OWNER's issuance of a Certificate of Final Acceptance for the subject vessel.

#### **840 TESTING AND QUALITY ASSURANCE (QA)**

The CONTR shall implement a complete and thorough testing and quality assurance program. The purpose of this program is to ensure that all workmanship is satisfactory, all equipment has been properly installed, all systems are functioning properly, and all subcontract work is satisfactory and that all required regulatory inspections have been completed. This program will cover all aspects of construction, including metal work, machinery systems, piping systems, electrical systems, interior and joinery, outfitting and paint.

Measurements of shaft diameter and radial run-out shall be recorded. The CONTR shall align the shafts to reduction gears and main engines.

In the presence of the OWNER, all new piping systems will be flushed as required, and pressure tested in accordance with regulatory requirements and manufacturer's recommendation. The proper installation of all piping systems including routing, materials, equipment installation, labeling, piping support and isolation will be confirmed. Proper functioning of individual components will be confirmed and overall system performance will be verified and recorded.

The installation and calibration of all electrical systems, sensors, alarms, tank levels, and electronics will be inspected, including proper routing, cable size, termination, labeling and testing of individual cables.

The proper operation of the generators, switchboard and power management systems will be verified.

The proper installation and functioning of all navigation, communication and security systems will be confirmed in conjunction with the electronics vendor.

The installation of all insulation, joinery and finished interior will be inspected and reviewed by the OWNER. The CONTR shall manage and approve the installation of the various interior sub-CONTRs and will review and coordinate approval with the OWNER of all interior samples. The CONTR shall also be responsible for verifying proper operation of various equipment and systems including appliances, lighting, and sanitary systems.

Paint preparation and final finish will be confirmed with Paint Supplier representative.

The CONTR will assemble a list of tests to be completed and will coordinate with the OWNER and regulatory inspectors to demonstrate completion of various tests and inspections. Testing shall not be limited to the regulatory requirements, but shall prove all systems to the satisfaction of the OWNER. The OWNER shall be given forty-eight (72) hours' notice on all system testing and will witness the tests unless the option to witness is specifically waived.

The OWNER and an authorized manufacturer's representative shall be present for inspections and shall confirm acceptance of all work completed. All work completed shall be inspected by the CONTR in the presence of the

OWNER and regulatory inspectors as required. The OWNER shall have the right to appoint additional consultants and representatives to witness tests and trials at their discretion.

Upon satisfactory completion of the System Testing and after correction of all defects by the CONTR to the satisfaction of the OWNER, the CONTR shall begin Vessel Testing.

#### **840.1 FACTORY ACCEPTANCE TESTING**

Certain equipment may be factory tested and accepted based on the satisfactory results of factory tests. CONTR shall identify all factory-tested equipment for prior approval by OWNER and shall submit documentation of satisfactory testing to the OWNER.

#### **841 TESTING AND TRIALS REQUIREMENTS**

The CONTR shall develop, in cooperation with the OWNER, a comprehensive testing and trials plan. The plan shall identify all testing milestones, communicate and continually update a testing schedule, define testing procedures and track deficiencies, corrections and acceptance.

The successful CONTR shall provide a Master Test Plan and Index for OWNER's approval before agreement signing. No less than ten (10) days prior to beginning any test, the CONTR shall provide test procedures to the OWNER for approval.

Tests shall be conducted to the requirements and satisfaction of the OWNER, classification society inspector, and USCG Officer in Charge Marine Inspections (OCMI) and shall consist of the following phases:

- Factory Acceptance Testing
- Quality Assurance & Component Testing
- Dock Trials (System Testing), see Section 982.1
- Sea Trials (Vessel Testing), see Section 982.2

Following completion of Sea Trials, any item of CONTR-furnished equipment that shows questionable operating characteristics shall be thoroughly examined and repaired by the CONTR, if necessary. The tightness of all electrical connections, switches, circuit breakers, and buss bars shall be verified to the OWNER's satisfaction. If repairs are necessary or if the performance of any CONTR-furnished equipment does not meet specification requirements, tests of the individual units are to be repeated by the CONTR and corrections made until the equipment meets the specifications.

The CONTR shall provide all instruments for operational tests. The type and quantity shall be such that they shall provide sufficient data to analyze the performance of systems, machinery, and equipment. Electric motor test instruments shall include a voltmeter, ammeter, and watt-meter, either as separate meters or combined in a single analyzer.

Ship's gauges and instruments may be used for tests of the systems they serve provided they have been calibrated. Shipyard test instruments and means of connection shall be provided as necessary for additional readings required to test machinery and systems.

The CONTR shall check test instruments against standards at the beginning and end of the test program. If readings taken during a test appear unreasonable, the OWNER's Representative can require the CONTR to check all the instruments, gauges and thermometers, whether ship or test instruments, used on the test in question.

The CONTR is responsible for all costs associated with all testing and trials. IF for any reason, additional sea trial(s) are required due to CONTR or vendor issues, the CONTR shall be responsible and bill vendor directly.

#### **841.1 TRIALS CONDITION**

90% tankage of fuel, potable water and sewage shall be on board prior to getting underway for the sea trial.

#### **843 STABILITY**

The CONTR shall provide equipment and assistance to the OWNER for the completion of a lightship survey after the completion of all installation activities just prior to dock trials. The lightship survey shall take place early in the morning at the CONTR facility when the weather is clear and there is little to no wind. The CONTR shall provide personnel to assist the OWNER in taking freeboard measurements and documenting the vessels condition for the lightship survey. The CONTR shall provide the OWNER with a small skiff for use in taking freeboard measurements. All personnel will be off the vessel while the lightship survey is taking place. All materials, equipment, tools, lights, extension cords, garbage, dunnage and other items belonging to the shipyard that are not going to be installed on the vessel shall be removed from the vessel prior to the lightship survey. The CONTR shall ensure that the vessels tanks are in the following condition for the lightship survey:

- Fuel Tanks Full
- DEF Tanks Full
- Water Tank Full
- Sewage Tank Empty
- Hydraulic Tanks Full
- Engines full of fluids

#### **860 WARRANTY**

The CONTR shall propose a written warranty procedure acceptable to the OWNER that describes the process to accomplish warranty repairs after the Vessel is delivered.

Neither Final Acceptance or payment, nor any provision in the Contract Documents, nor partial or entire use of the Vessels by the OWNER shall constitute an acceptance of Work not done in accordance with the Contract Documents or relieve the CONTR of liability for faulty materials or Workmanship.

The CONTR shall furnish the OWNER with all warranties, including manufacturer's warranties, specified in this RFP, and submit them to the OWNER prior to Final Acceptance of the Vessel. All warranties shall be provided by and processed through the CONTR. All warranties shall commence after Final Acceptance of the Vessel by the OWNER.

It is understood and agreed that the OWNER does not waive any warranty, either express or implied, in Sections 2312 through 2317, inclusive, of the California Commercial Code, or any liability of the manufacturer or CONTR as may be determined by a decision of the court of the State of California or of the United States

The OWNER shall give notice to CONTR of deficiencies on each of the Vessels. CONTR guarantees and warrants that all equipment and components in each of the Vessels shall conform to the requirements of the Contract.

The CONTR shall also guarantee all material and workmanship entering into the Vessels and furnished by him, or any Subcontractors, suppliers or vendors on his account, against defects in material or workmanship, or latent defects

which may develop within 365 calendar days following the date of Final Acceptance of the Vessel by the OWNER. Any items of material or workmanship found defective, or found not to operate in accordance with the requirements of the Contract, shall be repaired or replaced at CONTR's option by the CONTR at the CONTR's expense. The CONTR shall pass through any optional extended warranties exercised by the OWNER on the entire power train, engines, and gears to the OWNER. The CONTR does not have any additional warranty responsibility after the warranty period expires, except to assist the OWNER with extended warranty issues.

If, in the opinion of the OWNER, immediate repairs or replacements are essential to keep a Vessel on its scheduled operations, these repairs may be made by the OWNER and back-charged to the CONTR. The OWNER shall give prompt notice to the CONTR that the immediate corrective action is being taken and provide clear documentation of the deficiency, the action taken and the cost attributable to the deficiency.

Where the OWNER's action results in the betterment of material, the CONTR shall not be responsible for the reimbursement for the betterment. If immediate repairs are not necessary, the CONTR shall be notified and given fourteen calendar days to examine and provide a written plan of rectification complete with a detailed time schedule, subject to the approval of the OWNER. If the defects are not addressed sufficiently or a detailed rectification plan is not provided by the CONTR and approved by the OWNER within this period, the OWNER may correct the defects and back-charge the correction costs, including labor, to the CONTR.

In determining the cause of the defect, the Contractor must perform such investigations and tests as WETA may require to determine the cause, and to verify that such redesign, repairs, and replacements comply with the requirements of the Technical Specification. All costs associated with such investigation, redesign, repair, replacement and testing, including, but not limited to, the removal, replacement, and reinstallation of equipment and materials necessary to gain access, will be borne by the Contractor. Should the Contractor fail to promptly make the necessary investigation, redesign, repair, replacement, and test, WETA may perform or cause to be performed the same at the Contractor's expense.

Immediately prior to expiration of the Guarantee/Warranty Period set forth in this subsection and prior to Final Acceptance and payment on the Contract, a Guarantee Survey shall be conducted for the purpose of determining remaining deficiencies to be corrected in compliance with the requirements of the guarantee. The Survey shall be made by the OWNER, CONTR's representative(s), and applicable regulatory body representatives. The time and place for the Guarantee Survey shall be at the convenience of the OWNER, having due consideration for the Vessels schedule and commitments. All fees/expenses required by regulatory bodies for their participation shall be borne by the CONTR.

Upon expiration of the 365 calendar day Guarantee/Warranty Period, all remaining product guarantees as originally obtained by the CONTR for materials and equipment from vendors and suppliers shall be assigned or reassigned to the OWNER.

If any materials or equipment from vendors or suppliers fails after the 365 calendar day Guarantee/Warranty Period, but before the expiration of remaining vendor, supplier, or manufacturer product guarantees, CONTR shall cooperate with the OWNER to assist in enforcing the remaining product guarantees from vendors, suppliers, and manufacturers.

In the event that a warranty claim implicates an underwater deficiency, the cause of which cannot be determined without drydocking the Vessel, the Contractor is responsible for the cost of drydocking as part of its obligation to

determine the cause of a failure or defect. Provided, however, that WETA will pay for all drydocking costs associated with regular maintenance pursuant to its normal drydocking schedule.

For determination of underwater deficiencies, the OWNER, at its expense, may drydock the Vessels or carry out an underwater survey, during the Guarantee/Warranty Period. The OWNER shall pay for the haul day, re-float day and any days required to accomplish the Vessels' normal drydocking maintenance; provided, however, that if a warranty deficiency is discovered which requires additional drydocking time, the CONTR, in addition to the cost of the correction of the warranty deficiency, shall pay for each additional drydocking lay day due to correcting the warranty deficiency. If it becomes necessary to drydock the Vessels solely for the correction of a warranty deficiency, the CONTR shall be liable for the entire drydocking charge required for correction of the warranty deficiency as well as the cost of remedying the warranty deficiency.

Should any disagreement arise in connection with warranty deficiencies, the CONTR may dispute any action taken by the OWNER in the manner set forth in, and subject to the terms of the contract.

In addition, CONTR warrants that, for a period of 365 days after the Final Acceptance of the Vessel, the Vessel shall be free from Defects. As used herein "Defect" means (a) a material variance between the Vessel as delivered and the Vessel as required in this Agreement, the Plans and Specifications, modified by mutually approved change orders, (b) an instance in which the CONTR's design of or workmanship in the Vessel is not equal to or better than the general standard of design or workmanship that prevails in the commercial passenger only Vessel industry, or (c) a defect in workmanship or materials under normal use and service provided, however the following are not defects, and the CONTR's warranty does not apply to or include defects, damages or claims to the extent caused by:

- a) failure of OWNER to perform required maintenance and servicing;
- b) normal expected wear and tear during warranty period, also abuse, misuse, accident, vandalism, neglect, and improper operation by OWNER;
- c) repairs or replacements not authorized by CONTR in violation of warranty terms;
- d) any OWNER Furnished Equipment, except that the CONTR warrants its Workmanlike installation of OWNER Furnished Equipment in accordance with the manufacturer's specifications, good shipbuilding practice and approved marine construction practices

The CONTR shall also guarantee all material and Workmanship entering into the Vessels and furnished by him during the warranty period. If a Vessel is not operational due to warranty repairs, replacements or other Work required, by a fault of the CONTR's Workmanship, the warranty period for the CONTR's workmanship shall automatically be extended for a period of time equal to the number of calendar days that the Vessel is non-operational as a result of warranty Work.

If during the warranty period the OWNER determines that equipment or component parts fail to satisfy the terms of the warranty, the CONTR must promptly repair or replace the failed equipment or component part to the satisfaction of the OWNER.

The OWNER, by determining that Final Acceptance has been achieved, does not waive any warranty, express or implied, under Sections 2312 to 2317 of the California Code with respect to any materials, equipment or supplies manufactured, supplied Commercial or assembled by the CONTR pursuant to this Contract.

CONTR shall be responsible for consequential damages due to a warranty Defect as described herein, to the extent not disclaimed in the contract agreement. Further, Contractor is responsible for damage to or failure of any part of the Vessel that may be caused, directly or indirectly, by a deficiency subject to this warranty.

On Site Repair Permitted. Subject to the approval of WETA, Contractor personnel may use WETA facilities and special equipment to perform warranty work, provided that such work does not interfere with other WETA activities, and is performed in accordance with WETA policies and directions. WETA will designate which facilities and equipment may be used, and the schedule thereof. WETA reserves the right to require the Contractor for expensed incurred using WETA facilities and equipment. If WETA in its sole discretion determines that its facilities or special equipment cannot be made available, Contractor will be responsible for obtaining its own facilities and special equipment at Contractor's cost. Damages to WETA's property caused by the Contractor, or its subcontractors or suppliers, will be the sole responsibility of the Contractor, and will be corrected at the Contractor's expense.

Use of WETA Spare Parts. At the sole discretion of WETA, as determined on a case-by-case basis, WETA owned spare parts may be utilized by the Contractor for correction purposes. The Contractor must replace each borrowed part with a new part within thirty (30) calendar days. All costs associated with replacing the spare parts will be borne by the Contractor.

Back Charge. If WETA determines, in the reasonable exercise of its discretion, that immediate repairs or replacements are essential to keep a Vessel in service, WETA may make any such repairs and charge the costs to the Contractor. WETA will give prompt notice to Contractor or its determination to conduct any repairs and will provide documentation of the deficiency, the action taken, and the costs that the Contractor must reimburse WETA. Contractor will reimburse WETA within thirty (30) calendar days or provide notice that it disputes the back-charge.

## 900 SHIPYARD CONTRACT SERVICES

The CONTR is required to notify the OWNER within two calendar days of any material deviations in the Contract Design Package from the OWNER's Requirements on a form that is acceptable to the OWNER. The scope of the Work associated with the term "design," as used throughout the Contract documents, shall be broadly interpreted to be inclusive of the associated engineering, calculations, studies, and other related Work necessary to affect a thorough design. The scope of the term "Material" shall be broadly interpreted to include the Vessel's "Equipment," except where a clear distinction is made between "Material" and "Equipment" in a particular clause, or group of clauses, for purposes of clarity of intent.

Work and materials shall not be deemed to have been called for under the Contract simply because they were included in a submission for a progress payment or were included in a progress payment.

Costs associated with the Shipyard Contract Services that do not fall into an identified SWBS section on the Schedule of Values can be charged to the 900 top level SWBS group as needed by the CONTR.

### 902 PROSECUTION & PROGRESS

After posting of the Notice of Intent to Award and prior to Notice to Proceed the CONTR shall submit the following to the OWNER:

- A. Project Schedule (see Sections 921 - 924).
- B. The following lists derived from the Project Schedule:
  - a. A list showing anticipated dates for procurement of materials and equipment, or the ordering of articles of special manufacture.
  - b. A list showing proposed begin and end fabrication and installation dates for each Vessels' systems, tests and trials, maintenance items, and other items of scheduled Work.
  - c. A list of proposed shipment dates for material other than stocked items.
- C. Deliverable Schedule (see Section 925).
- D. A list showing all proposed Subcontractors, Vendors, and Suppliers to be used, their addresses and applicable purchase order numbers.
- E. A letter designating the CONTR's Project Manager, defining that person's responsibility and authority, and providing a specimen of his signature.
- F. A letter designating the Equal Employment Opportunity Officer and that person's responsibilities and authority.

The CONTR shall provide adequate materials, labor and equipment to ensure the completion of the Project in accordance with all Contract requirements. The Work shall be performed as vigorously and as continuously as conditions may permit. The CONTR shall take into consideration and make due allowances for foreseeable delays and interruptions to the Work such as weather, equipment breakdowns, shipping, Regulatory agency inspections and approvals. Receipt and acceptance of a schedule submitted by the CONTR shall not be construed to assign responsibility for performance or contingencies to the OWNER or relieve the CONTR of his responsibility to adjust his forces, equipment, and Work schedules as may be necessary to ensure completion of the Work within prescribed time (See Sections 941 through 946).

### 910 MANAGEMENT REVIEW & PROGRESS MEETINGS

The CONTR shall present Management Reviews to the OWNER. The reviews shall be scheduled at least once per week at a location in or near the repair yard and shall be coordinated so that they are held concurrently with the progress

meetings. The first review is to be held within seven (7) calendar days following Notice to Proceed. These reviews shall, at a minimum, address the following topics:

- A. Status of the design and outstanding design issues. Actions taken to resolve issues and schedules for same shall be included. OWNER-responsible actions shall also be included that affect the CONTR.
- B. Material status, certification, delivery schedule and other outstanding issues. Actions taken to resolve issues and schedules for same shall be included. OWNER-responsible actions that affect the CONTR shall also be included.
- C. Rebuild schedule, issues and status. Actions taken to resolve any issues shall be addressed. OWNER-responsible actions that affect the CONTR shall be included.
- D. Status of the Work to date, current and potential problem areas that could affect the Project Schedule and cost, and activities including inspections scheduled for the following two weeks.
- E. Regulatory body approval and certification; status and outstanding issues; actions underway to resolve any outstanding issue(s).
- F. Quality Assurance.
- G. Schedule of Values and payment.
- H. Change Order status and any contractual issues.

The CONTR shall address any OWNER actions that are requested or required to resolve any issue and/or support the CONTR's efforts.

The CONTR shall prepare an agenda and submit the agenda to the OWNER for review, input and comment. The OWNER may comment and provide input for the agenda. OWNER's input shall be provided within one week of receipt of the proposed agenda from the CONTR. The OWNER may also request additional topics for the Management Review and the CONTR shall address those topics as part of the Management Review. A copy of the final agenda and any supporting documentation shall be provided to the OWNER not less than 24 hours prior to each scheduled meeting date.

The CONTR shall provide a written record of the minutes of the progress meetings, provide copies to the OWNER and maintain a file of minutes. The OWNER shall sign the minutes acknowledging receipt of the minutes and may, at his discretion, provide comments or additional information to the CONTR to be appended to the minutes to resolve questions of accuracy. The acknowledgement of the accuracy of the minutes by OWNER shall not constitute acceptance of any item of equipment or component parts.

## 921 PROJECT SCHEDULE

Within seven (7) calendar days after Notice to Proceed the CONTR shall prepare and submit to the OWNER for review and comment a **manpower resource loaded** schedule as described below. The OWNER to review and comment within seven (7) calendar days. CONTR then has seven (7) calendar days to modify or comment on the OWNER's review and resubmit the schedule. After the OWNER's comments are addressed to the satisfaction of the OWNER, the schedule at that time shall become the Project Schedule. The Project Schedule is to be developed to the CONTR's normal detail and as agreed in this document to produce OWNER-specific information, and shall be prepared by the CONTR's "in-house" supervisory personnel. The Project Schedule should not deviate significantly from the preliminary schedule submitted with the CONTR's Proposal. The completed Project Schedule shall define the operations required to bring the entire work to Acceptance by the scheduled Acceptance date and within the allotted time. The Project Schedule may be modified to incorporate the most efficient use of CONTR resources provided no additional costs or time delays are incurred on the Project.

The CONTR warrants that the Project Schedule is the CONTR's committed plan to complete all Work within the allotted Contract Time and assumes responsibility for prosecution of the work as shown. The CONTR shall utilize the Project Schedule in planning, scheduling, coordinating, and performing the Work under this Contract (including major activities of subcontractors, equipment vendors, and suppliers).

The purpose of the Project Schedule shall be to:

- A. Assure adequate planning, scheduling and reporting during execution of the work by the CONTR;
- B. Assure coordination of the work and material procurement of the CONTR and all subcontractors;
- C. Assist the CONTR and OWNER in monitoring the progress of the work and evaluating proposed changes to the Contract and the Project Schedule; and

NOTE: The Project Schedule shall be developed to connect and drive the work from Contract Award. The Project Schedule shall be developed to the contactors normal detail of major tasks by trade and job cost numbers.

The CONTR shall provide the Project Schedule to the OWNER in both electronic (on Microsoft Project compatible software) and hard copy format.

## 922 SCHEDULE REQUIREMENTS

The Project Schedule shall incorporate labor and major equipment resource data as described below. The schedule must show the order in which the CONTR proposes to carry out the Work. The Project Schedule shall cover the time from Notice to Proceed to Final Acceptance of each vessel, which period of time constitutes the Contract Time. The Project Schedule shall be itemized in sufficient detail to cover at a minimum the following tasks:

- A. Major milestones from CONTR.
- B. Anticipated dates for procurement of materials and equipment, or the ordering of articles of special manufacture;
- C. Construction broken down into modules for each major structure unit, Vessel system, or task, including proposed begin and end construction dates and installation dates.
- D. All subcontract/vendor/supplier activities, including begin and end dates.
- E. Any anticipated periods of shutdown and multiple-shift Work.
- F. Major inspection and testing. Final testing as defined for regulatory body approval, OWNER's approval or for Acceptance Trial approval. Intermediate testing shall be updated as construction progresses and added to the schedule as known.
- G. Trials and Acceptance tests.
- H. Delivery and Redelivery windows for each vessel with float allowed for reasonable weather impacts

Failure by the CONTR to include any element of Work required for performance of the Contract shall not excuse the CONTR from completing all Work by the scheduled Final Acceptance date. The terms of the Carl Moyer Grant have strict time limits that all work on all vessels needs to be completed by. Failure of the CONTR to complete the work by the Carl Moyer Deadline will result in the loss of grant funds. Should the CONTR not complete the contract scope of work within the Carl Moyer required time frame due to their own negligence the grant funds lost will be the responsibility of the CONTR. The Carl Moyer Deadline is 1<sup>st</sup> May 2023. For planning purposed the CONTR must plan to have a significant buffer on this deadline. To ensure that the deadline is not missed all proposed plans shall have **all work completed by 2<sup>nd</sup> January 2023** to provide for a sufficient buffer.

**923 SCHEDULE UPDATES**

The Project Schedule shall be updated whenever a Progress Payment request is submitted for payment. The updated Project Schedule shall include the dates activities were actually started and when they were completed, the physical percentage of work complete, and the estimated remaining duration for each activity in progress.

The CONTR shall also prepare a written narrative report that shall include a description of the amount of progress during the last reporting period in terms of completed activities, a description of problem areas, current and anticipated delaying factors and their estimated impact on performance of other activities and completion dates and an explanation of corrective action taken or proposed. The report shall include a forecast of key activities to be completed, started and worked during the next 15 calendar days.

The CONTR shall submit a corresponding schedule update with the Progress Payment request and will only be entitled to payments only upon OWNER approval of the Progress Payment request. The electronic and hard files provided shall be a complete copy of all information contained in the schedule.

Updating the Project Schedule to reflect actual progress made shall not be considered a revision to the Project Schedule.

**924 SCHEDULE REVISIONS**

If, as a result of the schedule updates, the schedule no longer represents the planned prosecution or progress of the remaining work, the OWNER may request, and the CONTR shall submit, a revision to the Project Schedule.

The CONTR may also request revisions to the Project Schedule in the event the CONTR's planning for the remaining work is revised.

Such revised schedules or lists shall conform to the Contract Time allocated by the Contract and take into account delays that may have been encountered in the performance of the Work. In submitting a revised schedule, the CONTR shall state specifically the reason for the revision and the adjustments made in his schedule or methods of operation to ensure completion of all Work within the prescribed time.

Should the prosecution of the Work during normal Work days be discontinued for any reason, for more than two calendar days, the CONTR shall notify the OWNER at least twenty-four (24) hours in advance of resuming operations.

**925 DELIVERABLE SCHEDULE**

Within fifteen (15) days after Contract Award and prior to Notice to Proceed, the CONTR shall submit a schedule of dates for deliverables for the Work on a spreadsheet. This Deliverable Schedule is the CONTR's committed plan to complete the Work within the Contract Time. The Deliverable Schedule shall list all drawings, analyses, reports, Technical Specifications, purchase technical specifications, technical publications, and other deliverables that must be developed pursuant to the OWNER's Requirements and other Contract Documents. The Deliverable Schedule shall include, but not be limited to, the various deliverables cited in these Technical Specifications and other Contract documents.

The Deliverable Schedule shall provide for various interim submittals, revisions, and a final submittal of each deliverable, and shall include columns giving the intended dates of all submittals. The quantity and timing of submittals for each deliverable shall be proposed by the CONTR in the Deliverable Schedule, and should appropriately consider the need for OWNER endorsement of intended arrangements and other salient characteristics of the design.

The Deliverable Schedule shall include columns for the following entries for each listed deliverable: scheduled dates of submittals, actual dates of submittals, latest revision (by letter), drawing size, outstanding reservations, and expected release date. The Project Schedule shall also identify deliverables that are required to be submitted to each regulatory body for approval, review and/or information, and the expected and actual dates of such approvals.

The schedule of deliverables shall, to the extent practicable, evenly distribute the submission of deliverables.

CONTR shall provide electronic copies of all drawings and data to OWNER for at least a seven (7) calendar day review and comment period. All drawings prepared for submittal to the U.S. Coast Guard shall be reviewed by OWNER prior to submittal to U.S. Coast Guard. OWNER shall receive all drawings approved by the U.S. Coast Guard.

The Deliverable Schedule shall allow at least seven (7) calendar days for OWNER review of each submitted deliverable, unless a longer review time for a particular submittal or deliverable is specified in the OWNER's Requirements, in which case the longer review time shall be used.

The Deliverable Schedule shall be revised to show all changes, progress and delays, and shall be submitted monthly in time to be received by the OWNER not later than the 10th of each month, beginning with the month following the initial submittal. Each Deliverable Schedule revision shall be clearly identified in color.

### **931 OWNER APPROVAL OF WORK**

Where the words "approved" or "for approval" are used without reference to the approving authority, they shall mean "approved by the OWNER" and "for the OWNER's approval."

Issuance by the OWNER of a Notice to Proceed, after the Contract execution where each Contract page shall be initialed by the CONTR and the OWNER, shall give effect to the documents comprising the Contract Design Package (i.e., drawings, technical specifications, OWNER's Requirements, General Provisions, forms, and others) as Contract Documents, shall constitute the OWNER approval of the Package, and shall oblige the CONTR to perform the Work contained in the Contract Design Package.

The Technical Specifications (revised OWNER's Requirements) negotiated and prepared by the OWNER and CONTR as well as contractual language within the General Provisions shall clearly indicate which deliverables, drawings, plans and documents shall be submitted to the OWNER for approval.

Approval of submitted Work by the OWNER shall be solely for the purpose of conveying the OWNER's determination that the OWNER does not object to continuing with the Project based on the submitted Work. In no event and under no circumstances shall approval of the OWNER of any aspect of the CONTR's Work be a warranty that the Work is complete, accurate or of sound design, or that the completed Vessels, subject to inclusion of the approved Work, shall necessarily conform to the minimum functional, performance or technical requirements of the Contract, or that the Work complies with regulatory body requirements. Such characteristics of the Work shall be the CONTR's responsibility, and any subsequent discovery of omissions or deficiencies with regard to the completeness, accuracy or soundness of the Work, and/or conformance with the Contract, and/or compliance with regulatory body requirements, shall be remedied by the CONTR to the OWNER's satisfaction through correction of the omissions or deficiencies at the CONTR's expense, irrespective of prior approval of the Work by the OWNER.

In conjunction with approvals, the OWNER, by virtue of such approvals, agrees that design aspects not addressed by the Contract, such as the placement of doors, and similar matters, are acceptable to the OWNER. Agreement by the OWNER to these design aspects does not abrogate or modify the CONTR's responsibility for ensuring the

constructability of these design aspects and in no way reduces the CONTR's obligation as to technical, regulatory, major functionality, and performance requirements as described in the OWNER's Requirements and the Contract Design Package.

"Approved" status cannot be conferred by anyone but an authorized employee or other representative of the OWNER, and except where explicitly prescribed by the OWNER otherwise in writing, are conferred by the OWNER. The OWNER approval does not relieve the CONTR of securing regulatory body approvals as required herein. Any submittal that is found to be substantially deficient upon review shall be rejected and returned to the CONTR for resolution of deficiencies and resubmitted. A "rejected" determination shall void any credit which may otherwise be due the CONTR with regard to meeting a deadline for submission of the material in question. When determined to be in the best interests of the OWNER, the OWNER may accept deliverables not involving life or safety issues that have not been certified by a registered professional engineer.

### **932 CONFORMITY WITH CONTRACT**

All Work performed and all materials furnished shall be in conformity with the contract. In the event the OWNER finds any materials furnished, Work performed or finished products that are not in conformity with any aspect of the Contract, but that reasonably acceptable Work has been produced and is in accordance with Regulatory Body requirements, he shall then make a determination if such non-conforming Work shall be accepted and remain in place. In this event, the OWNER shall document the basis of acceptance by an agreed upon Change Order which may provide for an appropriate adjustment in the Contract Price for such Work or materials as agreed in the Change Order. The OWNER shall not be obliged by this or any other portion of the Contract to accept non-conforming Work. In certain respects, the requirements of the approved design for the Vessels may exceed the requirements of pertinent Regulatory Bodies. Such approved design requirements shall not be changed except on written approval of the OWNER.

### **933 COOPERATION BY CONTR**

The CONTR shall maintain a minimum of two full size sets of approved plans and Contract Documents, one set of which the CONTR shall keep available on the Work site at all times.

The CONTR shall give the Work the constant attention necessary to facilitate the progress thereof in accordance with the Project Schedule, and shall cooperate with the OWNER, his Inspectors and other CONTRs in every way possible. The CONTR shall have on the Work site at all times, as his agent, a competent Superintendent or Project Manager, thoroughly experienced in the type of Work being performed and capable of reading and thoroughly understanding the plans and specifications, who shall receive instructions from the OWNER or his authorized representatives to the extent provided elsewhere in the Contract Documents. The Superintendent or Project Manager shall have full authority to supply such materials, equipment, tools, labor and incidentals as may be required. Such Superintendent or Project Manager shall be furnished irrespective of the amount of Work subcontracted.

The CONTR shall bear the sole risk and the obligation to rebuild, repair, restore, replace and to otherwise make good all damage, loss or injury to all or any portion of the Vessels, and to any Work or material for the Contract, including Change Order Work, on or incorporated into the Vessels until the entire Work for all Vessels has been finally accepted by the OWNER. The OWNER will provide Final Acceptance for each vessel at the completion of the scope of work for each vessel.

**934 DUTIES OF THE OWNER'S INSPECTORS**

Inspectors employed by the OWNER are authorized to inspect all Work done and materials furnished. The Inspector is not authorized to issue instructions contrary to the terms of the Contract documents, or to act as foreman for the CONTR; however, the Inspector shall have the authority to reject Work and materials, which rejection the CONTR may request to be decided by the OWNER. The OWNER personnel are not to be considered as part of CONTR's Quality Assurance personnel.

**935 QUALITY ASSURANCE & INSPECTION OF WORK AT CONTR'S SITE**

Nothing contained in this subsection shall in any way restrict or impair the OWNER's rights under any warranty or guarantee.

The CONTR shall utilize a Quality Assurance (QA) program that assures that all aspects of design, construction, and completion of the Work comply with the requirements of the Contract. The program shall ensure that the latest applicable drawings, requirements, specifications and instructions defined in the Contract, as well as authorized changes, are communicated to workers and used in the Work. The program shall also include sequential and well-documented inspections and tests of completed elements of Work by the CONTR. The intent of these inspections and tests are to identify and resolve all deficiencies prior to presentation of the Work to the OWNER for acceptance. The QA program and its implementation plan (described below) shall be coordinated with the inspection and test requirements of the Contract; as well as the weight control program, noise and vibration control program, and other programs required by the Contract or otherwise developed by the CONTR to control the Work.

The personnel assigned to the development and administration of the QA program shall have independent authority and organizational freedom to identify and evaluate quality problems and initiate and recommend timely and positive solutions.

The implementation of QA procedures by a Subcontractor or Vendor does not relieve the CONTR of his responsibility to assure that the supplied items fully comply with the requirements of the Contract.

At a minimum, the Quality Assurance program shall make provision for the following or similar:

- A. A status report shall be provided monthly, on a mutually pre-established date, by the CONTR, listing any and all discrepancies in a Discrepancy Report (hereinafter "DR") and their disposition(s). Outstanding issues shall be highlighted.
- B. A process utilizing a CONTR-developed standard DR form, through which the OWNER can communicate potential issues and problems to the CONTR. The form shall include, at a minimum:
  - a. Independent tracking number suitable to the OWNER;
  - b. Date of issue initiated or identified by the OWNER;
  - c. Reference drawings/materials and revisions;
  - d. Subject;
  - e. Requirement references;
  - f. Issue or problem description;
  - g. Signature column by OWNER and date, if corrected;
  - h. Response area for CONTR, sign off and date.

The CONTR shall be responsible for tracking and providing a disposition for all issues raised by the OWNER.

The CONTR shall maintain and comply with its internal QA program as reviewed by the OWNER.

### 936 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK

All Work that does not conform to the Contract shall be considered as unacceptable Work, unless determined acceptable under the provisions of Section 932.

Unacceptable Work, whether the result of poor workmanship, use of defective, unsuitable, or unauthorized materials or equipment, or damage through carelessness or any other cause, found to exist prior to the Final Acceptance of the Work, shall be remedied or removed immediately and replaced in an acceptable manner at the CONTR's expense.

No Work shall be done on the Vessel except as required by the Contract or directed by WETA. Work done contrary to directives, except as herein provided, or any Work done without authority, shall be considered as unauthorized and shall not be paid for under the provisions of the Contract. Work so done may be ordered removed or replaced at the CONTR's expense.

Upon failure on the part of the CONTR to comply forthwith with any order of the OWNER made under the provisions of this section, the OWNER shall have authority to cause unacceptable Work to be remedied, or removed and replaced, unless determined acceptable under Section 932. No change in the Contract Price will be allowed in respect to any costs incurred by CONTR for such remedial work.

### 941 CONTRACT TIME DEFINITION

Contract Time shall be the period of time, measured in calendar days, that is allocated to the CONTR to complete the design and construction Work required by the Contract and to take delivery and redeliver all of the Vessels to the OWNER in full compliance with the Contract requirements and Preliminary Acceptance by the OWNER. Contract Time equals the number of days of time stipulated in the Contract at the time of Contract Award as proposed by the CONTR and agreed to by the OWNER, plus any additional days of time allocated during the course of the Contract by approved extensions of time, minus any days of time reclaimed by the OWNER based upon reductions in the scope or character of the Work during the course of the Contract.

The count of Contract Time expended shall begin on the date of the Notice to Proceed for the contract. The count of Contract Time, in conjunction with approved modifications or suspensions of the count of Contract Time, shall be the basis for establishing the approved scheduled date of Acceptance and for assessing liquidated damages associated with untimely Delivery of all Vessels as described in Section 945. Failure to complete the Work, submit all deliverables, and deliver the Vessels to the OWNER within the Contract Time may also be an event of default authorizing the OWNER to take any steps permitted by the Contract Agreement.

### 942 EXTENSION OF CONTRACT TIME

The OWNER may consider requests for extension of Contract Time and, if deemed warranted, approve extensions of Contract Time equal to the number of additional days considered by the OWNER to be necessary to accomplish approved change Work or Work associated with OWNER-issued directives other than Work orders. Work associated with changes and directives, or any portion of such Work, which could reasonably be accomplished within the Contract Time, as determined by the approved CONTR's schedule, shall be completed within the established Contract Time.

The CONTR shall be responsible for promptly requesting extensions of Contract Time and for furnishing **any and all information necessary to justify each proposed extension** to the satisfaction of the OWNER. For changes to the Work, a request for extension of Contract Time shall be considered timely only if the request is included with the CONTR's originally submitted Change Order. The CONTR's Change Orders must be submitted in the WETA approved

Change Order Format for this contract. The Change Order template is provided in the contract reference documents, **RFP 21-009 Change Order Detail Worksheet.xlsx**.

Under no circumstances shall Contract Time be extended due to inclement weather or the results of inclement weather. However, extraordinary weather conditions for the pertinent geographical area may, but not necessarily shall, provide a basis for an extension of Contract Time. Severe weather, including hurricanes, with historical precedent in the pertinent geographical area is not extraordinary weather.

Approved change documents and OWNER -issued directives which reduce the scope of the Contract or change the character of the Work so as to justify a reduction in the amount of Contract Time allotted, may result in an agreement between the parties to the Contract, to reduce the number of days of design time or construction time, as applicable. Extensions to Contract Time must be approved in writing by the OWNER.

A claim that insufficient Contract Time was originally specified or otherwise required by the Contract shall not constitute a valid reason for extension of Contract Time.

#### **943 SUSPENSION OF CONTRACT TIME**

The OWNER may, by written order, suspend Work on the Project, in whole or in part, for such periods as he determines to be necessary. The OWNER shall discuss impact of suspension with CONTR to determine impact on schedule. Unless an item of Work is suspended which is agreed by the OWNER to be on the Critical Path of the Project Schedule, no consideration shall be given to extending the Contract Time or stopping the count of Contract Time during the period of suspension of the Work until an item lands on the Critical Path.

In those instances where the OWNER orders suspension of the Work for failure by the CONTR to carry out contractual provisions, the count of Contract Time shall continue throughout the suspension period.

Suspension of the count of Contract Time may be allowed by the OWNER because of delays in the completion of the Work due to unforeseeable causes beyond the control of and without the fault or negligence of the CONTR, including but not restricted to acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and extraordinary weather or delays of Subcontractors due to such causes provided that the CONTR shall, within 10 calendar days of the beginning of any such delay, notify the OWNER in writing of the cause of delay and request suspension of the count of Contract Time. The OWNER shall ascertain the facts and the extent of the delay and the parties shall agree upon the number of days that justify such suspension.

Suspension of Work by the OWNER or delays in the completion of the Work shall not constitute grounds for any claims by the CONTR for damages or extra compensation unless otherwise provided for in the Contract. For any suspension in the count of Contract Time to be allowable, such suspension must be approved in writing by the OWNER.

#### **944 SUSPENSIONS OF WORK ORDERED BY THE OWNER**

If the performance of all or any portion of the Work is suspended or delayed by the OWNER in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the shipbuilding industry) and the CONTR believes that additional compensation and/or Contract Time is due as a result of such suspension or delay, the CONTR shall submit to the OWNER in writing a request for adjustment within 7 calendar days of receipt of the notice to resume Work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the OWNER shall evaluate the CONTR's request. If the OWNER agrees that the cost and/or time required for the performance of the Contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the CONTR, its suppliers, or Subcontractors at any approved tier, and not caused by weather, the OWNER shall make an adjustment including reasonable profit and modify the Contract in writing accordingly. The OWNER shall notify the CONTR of his determination whether or not an adjustment of the Contract is warranted.

No Contract Time adjustment are allowed unless the CONTR has submitted the request for adjustment within the time prescribed.

No Contract Time adjustment are allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this Contract.

#### **945 FAILURE TO DELIVER ON TIME**

Liquidated damages associated with untimely delivery of the final Vessel shall be enforced as per the terms of the agreement.

#### **946 TIME IMPACT ANALYSIS**

When Contract modifications are initiated by either the CONTR or the OWNER these changes shall be dealt with using WETA's approved Change Order Format for this contract. The Change Order template is provided in the contract reference documents, *RFP 21-009 Change Order Detail Worksheet.xlsx*. The documentation provided by the CONTR shall show the CONTR's estimated labor, materials, subcontractor expenses and markups in sufficient detail so that the OWNER can determine if the Change Order is fair and reasonable. The OWNER is required to validate all contract modifications or change orders with Independent Cost Estimates (ICE). Should the ICE deviate to far from the proposed change order the CONTR shall provide all information required to determine if the ICE is not accurate or if the CONTR's proposal is not accurate. It is not permissible or in any way acceptable for the CONTR to provide change orders not in the WETA approved Change Order Detail Worksheet.

Any contract modifications that propose to change the time of performance have to be justified against the CONTR's resource loaded schedule. If the change in the time of performance is being justified by a limitation to the CONTR's yard wide resources then the CONTR will need to provide documentation of the yards entire resource loaded schedule to prove the limitation. The CONTR cannot prove resource limitation simply by allocating WETA contract resources to a different project at their discretion. The baseline resource loaded schedule will be used to determine if the CONTR has chosen to under resource the project versus being resource limited.

#### **951 FINAL CLEAN-UP**

Before the Preliminary Acceptance Survey on each vessel, all rubbish, excess materials, temporary structures, and CONTR's equipment shall be removed from the Vessel and, as applicable to the item, disposed of. All interior and exterior surfaces of the Vessel shall be washed, dusted, polished, vacuumed, and/or disinfected, as applicable to the surface, so as to be thoroughly clean, new, undamaged, and fit for OWNER service.

Immediately prior to the Final Acceptance Trials of each Vessel, all surfaces that require re-cleaning as a result of use during the Preliminary Acceptance Trials or other cause shall be washed, dusted, polished, vacuumed, and/or

disinfected, as applicable to the surface, so as to be thoroughly clean, new, undamaged, and fit for OWNER service, throughout the Vessel.

### 952 COMPLETION OF WARRANTY PERIOD

Following completion of the Guarantee/Warranty Period on each vessel required by Section 860 and all provisions stated therein and upon receipt of the executed final estimate, CONTR's Release, settlement of all claims and proof of payment of any applicable sales, payroll and revenue taxes, the OWNER shall issue the letter of Completion of Warranty releasing the CONTR from further performance under the Contract for that specific vessel subject to rights and remedies reserved in the Contract Agreement. Completion of Warranty Period shall be withheld until the CONTR furnishes all certificates, guarantees, releases, affidavits, and other documentation required by the Contract.

### 953 SEQUENCE OF EVENTS LEADING TO FINAL ACCEPTANCE OF VESSEL

The CONTR shall develop, in cooperation with the OWNER, a comprehensive testing and trials plan. The following table outlines the minimum required tests and trials for each vessel:

Required Test or Trial	Location	Purpose	Reference Section
Shipyards Internal QA and Testing Plan	CONTR Facility	Routine and ongoing QA and inspection using the shipyard's standard processes and documentation.	840
Factory Acceptance Tests	CONTR or OEM Facility	Test and verification of certain components and equipment with prior approval from the OWNER.	840.1
Dock Trials	CONTR's Facility	Verification equipment / systems perform satisfactory / establish readiness for Sea Trials,	982.1
Sea Trials	CONTR's Facility	Confirm the vessel meets all requirements and functions properly prior to Delivery.	982.2
Preliminary Acceptance	CONTR's Facility	CONTR states readiness for Acceptance Survey and Delivery	836
Delivery	WETA Facility	CONTR shall deliver vessel to the specified WETA facility in San Francisco Bay	983

Drydocking	San Francisco Bay	CONTR shall dry dock vessel in San Francisco Bay should Delivery related damages warrant it.	835
Final Acceptance	San Francisco Bay	Vessel to be tested to verify post Delivery performance. Acceptance whereby The OWNER accepts the Vessel as satisfying all the requirements of the Contract, except the warranty, and signals start of warranty period.	837

### 981.1 PROTECTION AND RESTORATION OF PROPERTY

The CONTR shall be responsible for all damage or injury to property of any character, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the Work, or at any time due to defective Work or materials, during the prosecution of the Work, and said responsibility shall not be released until the Project shall have been completed and accepted.

The CONTR shall safeguard the Vessel's machinery and electrical equipment, the use of which shall be made only upon the express written approval of the OWNER, and under supervision of competent, trained personnel.

The CONTR shall at all times, insofar as conditions of the Work permit, keep the openings of the Vessel's closed against the weather. Deck openings, permanent and/or temporary shall be protected by a watertight coaming with a securely fastened cover.

During the course of the Work, the CONTR shall maintain adequate heating and ventilation throughout each Vessel to preclude the formation of molds and/or other deleterious substances.

### 981.2 CHARACTER OF WORKERS, METHODS AND EQUIPMENT

The CONTR shall at all time employ sufficient labor and equipment for prosecuting the several classes of Work to full completion in the manner and time required by this Contract. All workers and management personnel shall have sufficient skill and experience to perform properly the Work assigned to them. Workers engaged in special Work or skilled Work shall have sufficient experience in such Work and in the operation of the equipment required to perform all Work properly and satisfactorily.

Any person, whether worker or superintendent, employed by the CONTR or by any Subcontractor whom the OWNER deems incompetent, careless, insubordinate, or otherwise objectionable, or whose continued employment on the Work is deemed to be contrary to the public interest shall, at the written request of the OWNER, be removed forthwith by the CONTR or Subcontractor employing such person, and shall not be employed again in any portion of the Work without the approval of the OWNER. The OWNER shall notify the CONTR in writing at least five days before submitting a written request to remove any worker and shall cite the reason for the impending removal in the notice.

Should the CONTR fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the OWNER may suspend the Work by written notice until such orders are complied with.

No convict labor shall be employed and no materials manufactured or produced by convict labor shall be used in connection with the Work. This provision shall not be construed as applying to convicts on parole or probation. The CONTR shall not discriminate against any person because of sex, race, creed, color, sexual orientation, or national origin.

All equipment which is proposed to be used shall be of appropriate size and in such mechanical condition as to meet the requirements of the Work and to produce a satisfactory quality of Work.

When the methods and equipment to be used by the CONTR in accomplishing the construction are not prescribed in the Contract, the CONTR is free to use any methods or equipment that he demonstrates to the satisfaction of the OWNER shall accomplish the Work in conformance with the requirements of the Contract, except as provided above.

When the Contract or manufacturer's instruction specifies that the construction be performed by the use of certain methods and equipment, such methods and equipment are used unless others are authorized.

## **982 TRIALS**

The CONTR shall plan, prepare for, and conduct all required Dock and Sea Trials. The CONTR is responsible for all costs associated with performance of these trials. These trials include all trials required by RDI Marine and the MAN factory for prove the successful installation of the subject engines in each vessel to the satisfaction of RDI Marine, the Man factory, USCG and the OWNER.

### **982.1 DOCK TRIALS**

Dock trials shall be conducted to demonstrate proper functioning of propulsion systems and controls, auxiliary systems, electronics and safety equipment prior to Sea Trials. At least two weeks prior to dock trials on each vessel, the CONTR will present an agenda to the OWNER for review and comment.

Generator start-up, running and testing under load will be completed for a minimum of four (4) hours to demonstrate readiness for Sea Trials.

All auxiliary systems will be run at the dock to verify proper operation. Bilge and fire systems will be demonstrated to be fully operable in case of an emergency during Sea Trials. The proper operation of the steering system will be verified from each Control station, including the emergency steering station.

All navigation and communication electronics shall be verified to be functioning properly prior to the start of the contract work. A check list of navigation and communication equipment shall be reviewed between the CONTR and the OWNER. After the completion of the contract work, all navigation and communication electronics shall be verified to be functioning properly. Any discrepancies shall be discussed between the OWNER and the CONTR as to the responsible party for correction.

It will be the responsibility of the CONTR to have all necessary spare parts for their systems (i.e. filters, fuses, gaskets, relays, valves) readily available so as to not delay dock or sea trails if such failure should or does occur and these parts are needed.

As per the 252 Section of these specifications all required automation and propulsion controls testing required by the USCG and MAN shall be completed and document prior to sea trials.

The dock trials will consist of the following (not necessarily all-inclusive) list:

- Weather/water tightness of hatches, windows, port lights, doors, and shell doors.
- Steering gear
- Ventilation and heating system
- HVAC system
- Electrical systems and generators, load tests
- Generator to Generator switching. Shore power to generator switching and vice versa
- Bilge and fire-fighting systems
- Bridge and navigation equipment
- Hydraulic equipment
- Alarm tests for safety systems
- Inspect lifesaving equipment
- Fire shutdown systems for ventilation, valves and required pumps
- Working tests of all machinery
- Complete electrical lighting systems
- Thermographic Survey of electrical installations
- Communication equipment
- P/A and CCTV camera / monitoring equipment
- Navigation equipment that can be pre-tested in port
- USCG Lightship survey and propulsion controls related testing
- Harbor condition noise and vibration level measurements

The shore fuel, sewage and water connections will be separately verified and tested.

## **982.2 SEA TRIALS**

Following completion of dock trials, Sea Trials will be conducted to demonstrate the performance of the Vessel and proper function of new propulsion engines, controls and systems underway. Every effort shall be made to replicate a “working” scenario at sea.

Sea Trials shall be Performance Trials to demonstrate contractual performance and proper functioning of all systems to the OWNER and to RDI Marine and the MAN factory. This trial shall be a minimum of eight (8) hours in length unless specified otherwise.

Sea trials will be conducted in a location mutually agreed to by the OWNER and the CONTR.

The procedures shall follow SNAME T&R Bulletin C-2, 1973 “Code for Sea Trials.” Sea Trials shall include measurement of speed, fuel consumption, noise and vibration in accordance with the agreement. Care shall be taken to specify, in the test documents, the acceptable level for all figures to be recorded during Trials.

At least two (3) weeks prior to the start of Sea Trials, the CONTR will present a Sea Trials agenda to the OWNER for approval and to the equipment manufacturers for review and comment. Following completion of Sea Trials, the CONTR shall prepare the final Sea Trials report in a timely fashion and present the results to the OWNER.

At a minimum, Sea Trials shall consist of the following:

- Propulsion Engine Commissioning Trials (all RPM and time intervals required by RDI and MAN)
- Speed Trials (at full range of RPM)
- Ahead Steering (at full speed ahead)
- Astern Operation and Steering (up to maximum safe speed, not to exceed 12 knots)
- Turning Circle (at full speed ahead)
- Zigzag Maneuver (at full speed ahead)
- Auxiliary Systems Testing (underway testing of systems, as required)
- Noise and Vibration Survey (underway portion; see Section 073)
- Navigation and Communications Systems Testing (underway testing, as required; i.e. GPS, depth sounder, RADAR, integration, et cetera)
- Propulsion Control System Commissioning and USCG required testing and verification
  - Test from ahead to astern and astern to ahead
  - 'Slow ahead' trial with two engines
  - 'Slow ahead' trial with one engine
  - 'Full ahead' trial on one/two engines at a time, port and starboard
- SCR Emissions System testing as required by MAN and EPA/CARB

All domestic items that would normally be in use during service conditions are to be run and tested while on the trials, including but not limited to: HVAC, heads and miscellaneous equipment throughout the Vessel to be sure that they function normally under sea conditions.

Additional trials may be required if the conditions are not favorable due to excessive wind or waves.

The CONTR shall be responsible for all costs associated with Sea Trials including provision of crew, fuel oil, lube oil, water provisions, food and any instrumentation or other test equipment required.

Any defects found during the Sea Trials shall be corrected by the CONTR at their own expense and demonstrated to the OWNER prior to acceptance of the Vessel by the OWNER.

### **983 DELIVERY & REDELIVERY**

The CONTR must take Delivery of the Vessels at its shipyard or at one of WETA's San Francisco Bay Area facilities if the CONTR's shipyard is outside the San Francisco Bay Area. CONTR is fully and solely responsible for each Vessel once it takes delivery and until redelivery of each vessel. Upon completion of the work, including the inspection and testing, the OWNER will accept Redelivery of each Vessel at the CONTR's shipyard, if the shipyard is within the San Francisco Bay Area.

If the shipyard is outside the San Francisco Bay Area, the CONTR must Deliver from and Redeliver each Vessel to one of WETA's San Francisco Bay Area facilities (as directed by the OWNER) as a condition of completion of the work. All costs associated with the Delivery and Redelivery of all the Vessels to and from one of WETA's San Francisco Bay Area

facilities from outside of the San Francisco Bay Area shall be the sole responsibility of the CONTR. Contractor may not commence Re-Delivery of each Vessel from its location until WETA has approved Preliminary Acceptance at Contractor's location. Contractor may not commence Re-Delivery until WETA has issued an Authorization for Re-Delivery to the Contractor. Re-Delivery will be considered complete after WETA conducts a post-delivery inspection and will be acknowledged by WETA's issuance of a Post-Delivery Receipt.

Re-Delivery does not constitute Acceptance, nor does Re-Delivery include a transfer of any risk of loss or transfer of title. The OWNER will make the vessels available such that the Redelivery crew may also take Delivery of the next vessel if so desired. The CONTR may not take Delivery of more than one (1) GEMINI class vessel at a time unless specifically approved by the OWNER. The CONTR will be required to obtain a Notice To Proceed on each vessel prior to taking Delivery of that vessel. The order of vessel Delivery shall be as follows:

1. PISCES
2. TAURUS
3. SCORPIO
4. GEMINI

The OWNER may require up to three OWNER's Designated Representatives (OR) onboard for all legs of deliveries at OWNER's expense.

The OWNER, at its expense, will Deliver and Redeliver the Vessels to and from the CONTR's location within the San Francisco Bay Area. If the CONTR's shipyard location is outside the Bay Area, the Vessels become the CONTR's responsibility upon taking possession of the Vessels from the OWNER at the OWNER's Bay Area facilities. Upon taking possession of the Vessels for Delivery until the Vessels have been Redelivered and the CONTR has received Final Acceptance from the OWNER in writing, the CONTR shall insure the Vessel for all risk, liability, peril, including the Delivery and Redelivery voyages.

The CONTR shall have a Superintendent or Project Manager on-site at all times with the authority to act on the CONTR's behalf.

Insurance during Delivery and Redelivery. The CONTR retains full responsibility, including risk of loss or damage to the Vessel, until the completion of Re-Delivery. CONTR is responsible for providing all necessary insurance, security, safety maintenance and operation of the Vessel at all time, including during delivery. The CONTR must procure and maintain and provide proof of insurance against any loss of or damage to the vessel or personal injury or death or damage to or loss of property caused during the delivery voyage including without limitation full form hull and machinery insurance in an amount equal to the Total Contract Price, and full form protection and indemnity insurance. Such insurance and proof must be at the CONTR 's sole expense, including all deductibles. WETA must be named as an additional insured under any such insurance.

Protection of Vessel during Delivery and Re-Delivery. The CONTR is fully responsible for adequately preparing the Vessel for open ocean and local transport. Whenever the CONTR sails the Vessel under its own power, the Vessels must be under the command of an experienced Captain, holding a valid USCG license with a rating acceptable for the delivery voyage from the Contractor's facility.

Damage to Vessel During Delivery and Re-Delivery. Contractor must report to WETA any allision, collision, grounding, or other incident that may have caused damage to the Vessel during the delivery voyage. WETA may require that its

representative be onboard at all times while the Vessel is underway. WETA's representative will not be in command of the Vessel. If at any time during the voyage, WETA's representative observes an allision, collision, grounding, or other incident that may have caused damage to the Vessel, WETA has the right, as a condition of completion of Re-Delivery, to require a dry-dock inspection to ascertain any suspected damage. The cost of this inspection and any necessary repairs are the responsibility of the Contractor.

#### **984 OPEN & INSPECT**

Provide labor, material and equipment to open the four (4) Voids and two (2) Forepeaks for inspection by the USCG Inspectors. The CONTR shall provide all resources required for a full USCG COI inspection on all vessels while in dry dock undergoing the contract scope of work.

Provide, and maintain for the duration of the Work, a Marine Chemist certificate for SAFE FOR MEN TO ENTER, and SAFE FOR HOT WORK, and all required ventilation and temporary lighting for inspection, any additional work resulting from inspection, and any other work required by this Work.

Upon completion of inspection and work, the CONTR shall close up the voids and forepeaks in good order following successful inspection after undocking as part of Dock Trials, using new gaskets for the Forepeak exterior hatches. Thoroughly clean the seating flange prior to closure.

#### **993 MATERIAL HANDLING & REMOVAL**

The CONTR shall be responsible for all material handling, wrapping, packing, crating, trucking, freight, shipping, and transportation charges in connection with this Work. This includes shipment of removed and spare components back to the OWNER'S facility in San Francisco, California. The CONTR shall be responsible for the shipment of the marine gears from the vessel to the ZF Marine Facility in Mukilteo, WA and from there to RDI Marine's facility in Seattle, WA. RDI Marine will handle all shipping charges for delivery of the engines, gears, control systems and auxiliary equipment from their Seattle facility to the CONTR's shipyard. RDI will only ship one shipset of equipment at a time. It is the CONTR's responsibility to coordinate all logistics with RDI.

The CONTR shall be responsible for proper disposal of any items deemed to be discarded by the OWNER during the course of the Work. CONTR shall be responsible for the proper disposal of all wastes generated within its facility during the course of the Work.

##### **993.1 CARL MOYER INSPECTIONS & DISPOSAL**

As a requirement of the Carl Moyer Grant that WETA received to repower these vessels the CONTR will be required to provide for Bay Area Air Quality Management District (BAAQMD) inspections and disposition of the removed MTU Tier 2 engines as required by the terms of the Grant.

As part of the kickoff meetings for this project the CONTR shall work with the OWNER and BAAQMD to develop the regulatory plan for inspections and disposals of the Tier 2 MTU engines meet all of the Carl Moyer and BAAQMD requirements. The CONTR will be required to follow this regulatory plan to obtain OWNER approval for every step. Should the CONTR disregard the plan and violate any portion of the Carl Moyer Grant agreement in doing so the CONTR will be liable for any lost grant funds.

The Required District Destruction-Inspection Protocol for Destroyed Engines and/or Equipment Prior to Disposal document by BAAQMD will be provided as a reference. For estimating purposes, the CONTR shall plan on punching a large jagged hole at least 3" at its narrowest point in addition to removing a portion of the Oil pan flange in each engine.

This matches BAAQMD item #1 on the reference document. The CONTR and the OWNER will arrange for inspection of the as destroyed engines for each vessel by BAAQMD. After successful inspection the CONTR shall have the engine shipped to a scrap yard approved by BAAQMD for disposal. As per the reference documents the Project Implementation Report (PIR) will require an OWNER and Scrap Yard staff signature verifying the engines were permanently destroyed. All of these items will require the CONTR to coordinate these activities with the OWNER and BAAQMD at least seven (7) days in advance of the event taking place. Should either the OWNER or BAAQMD not be able to attend with the required advance notice the event will be reschedule to a time where the OWNER and BAAQMD can attend.

#### **994 CLEANING**

After the Work is complete, and just prior to Acceptance, the CONTR shall thoroughly clean the entire Vessel, keel to mast, stem to stern, interior and exterior, all to the satisfaction of the OWNER.

All bilges shall be dry and free of debris prior to sea trials and delivery to WETA.

#### **997 DRY DOCKING**

Docking plans are attached see Appendix B ICO502-150 (GEMINI & PISCES) or ICO725-150 (SCORPIO & TAURUS) Docking Plan.

While in dry dock the CONTR shall connect all required utilities including shore power, and provide for personnel access to the Vessels.

Tug assistance during undocking is required until the propulsion system is stabilized.

The designated CONTR'S Project Manager shall meet with OWNER personnel and jointly ship check each vessel at least five (5) days prior to the docking. The Project Manager shall meet with the OWNER once per week during the project for progress reports. The CONTR shall provide minutes from the meeting in electronic form outlining all aspects of the project. Additional meetings shall be held if necessary, by mutual agreement.

At least seven (7) days prior to dry docking, the CONTR shall provide to the OWNER a written report which details the status of all material ordered for the Work. The CONTR shall then update the status of all material as requested by the OWNER.

Provide and maintain electricity (shore power), a safely illuminated gangway, and trash removal services while Vessel is in dry-dock and alongside at the CONTR'S facility.

Provide safety and security for the entire Vessel throughout the Work until such time as the OWNER has accepted the Vessel. Every reasonable precaution shall be taken to protect the Vessel from the hazards of fire, flooding, pilferage, malicious damage, and other events including cataclysmic phenomena of nature.

Provide and maintain comprehensive and effective fire prevention and fire detection, and firefighting programs and systems sufficient to ensure the safety and integrity of the Vessel. Provide personnel trained in shipboard firefighting techniques and also trained to cooperate with and assist local firefighting organizations. Provide sufficient shore fire hoses to ensure an adequate supply of firefighting water, at sufficient pressure, and maintain an adequate number of tested fire-hoses aboard the Vessel to effectively fight fires at any location in the Vessel.

Provide and maintain portable fire extinguishers in sufficient quantity, and of the appropriate type, to combat local fires of any class. Provide sufficient fire watches, including roving watches as may be required, to ensure that fires that may be inadvertently started by welding sparks or heat, electrical malfunction, or spontaneous combustion are detected, reported and promptly extinguished.

Provide labor, material and equipment to clean and gas free any spaces that will require hot work associated with any of the Work list items contained herein, as necessary, and obtain a Marine Chemist certificate for Safe for Men and Safe for Hot Work. Maintain the certificate during the course of the work. Provide fire watches as required.

Prior to installing shore power, or performing any welding on the Vessel or on the dock, ensure that the San Francisco Bay Ferry Welding Check List has been completed and countersigned by the OWNER.

Provide labor, material, and equipment to restore and repair any surfaces, equipment, or furnishings that may have been damaged during all Work described herein to the as-arrived condition.

All costs associated with this dry docking shall be borne by the CONTR.

**Part C –Sample Agreement 21-009**

between

**SAN FRANCISCO BAY AREA WATER EMERGENCY TRANSPORTATION AUTHORITY**

and

**[SHIPYARD]**

**This AGREEMENT** is made and entered into as of \_\_\_\_\_ (Effective Date), by and between the San Francisco Bay Area Water Emergency Transportation Authority, (WETA) and **[SHIPYARD]** located at **[ADDRESS]** (Contractor). For purposes of this AGREEMENT, each of the WETA and Contractor may be referred to individually as a “Party” or together, as “Parties.”

**RECITALS**

**WHEREAS**, WETA requires services for repowering the main engines from Tier 2 to Tier 4 EPA regulations for the MV Gemini, Pisces, Scorpio, and Taurus and has issued a Request for Proposals (RFP) dated 6/3/21. A copy of the Scope of Services included in the RFP is attached and incorporated into this Agreement as Exhibit A; and

**WHEREAS**, the Contractor desires to provide such services and has represented that it is experienced and qualified to perform such services. It has submitted a written proposal, dated [Date], a copy of which is attached and incorporated into this Agreement as Exhibit B; and

**WHEREAS**, on [Date], WETA’s Board of Directors authorized award of the Agreement to the Contractor;

NOW THEREFORE, THE PARTIES AGREE AS FOLLOWS:

**1. TERM; TIME FOR PERFORMANCE**

The term of this Contract begins upon the Effective Date and continues through Delivery and Final Acceptance by WETA of all Work on the Vessels and completion of the warranty period, including satisfactory resolution of all warranty claims, unless otherwise terminated or extended as provided in this Contract. The Contractor will not commence performing work under this Contract until it is authorized in writing by WETA to do so by a Notice to Proceed (“NTP”) issued separately for each Vessel. The Contractor must achieve Final Acceptance of each vessel as follows:

MV Pisces	No later than XX Days from NTP
MV Taurus	No later than XX Days from NTP

MV Scorpio	No later than XX Days from NTP
MV Gemini	No later than XX Days from NTP

The Contractor must take into consideration and make due allowance for foreseeable delays and interruptions to the Work such as weather, equipment breakdowns, shipping, and regulatory inspections and approvals. Granting or acceptance of extensions of time to complete the work or furnish the labor, supplies, materials, equipment, or any one of the aforementioned will not operate as a release to the Contractor or the surety on the Contractor's faithful performance bond from said guarantee.

## 2. CONTRACT DOCUMENTS AND PRECEDENCE

This Contract consists of the documents listed below (the "Contract Documents"), all of which are incorporated into the Contract by this reference. The Contractor may not take advantage of any apparent error or omission in the Contract Documents. Omissions from the Contract specifications, or incorrect description of details of work that are manifestly necessary to carry out the intent of the Contract specifications will not relieve the Contractor from performing such omitted work or incorrectly described details of the Work, and they must be performed as if fully and correctly set forth and described. The Contract Documents constituting the Contract between WETA and the Contractor are intended to be complementary so that what is required by any one of them will be as binding as if called for by all of them. In the event of any conflicting provisions or requirements within the several parts of the Contract Documents, they will take precedence in the following order, the first stated document being of the highest precedence:

- Amendments to this Contract (if any)
- This Contract
- Technical Specification, as modified by any addendum to the RFP or through negotiations prior to the Effective Date (Exhibit A)
- Contractor's Proposal, including all forms, attachments, certifications and exhibits, as accepted by WETA (Exhibit B)
- Insurance Requirements (Exhibit C)
- Performance Guarantee (Exhibit D)

## 3. DEFINITIONS

Preliminary Acceptance – Satisfaction by the Contractor of the requirements set forth in Section 836 of the Technical specifications.

Contract or Contract Documents – This Agreement, including all incorporated attachments and exhibits. The terms Contract and Agreement both refer to the Contract.

Contractor – The entity to which WETA has awarded this Contract and which is a party to this Contract.

Contractor Software – Any Software for which any applicable Intellectual Property Rights necessary to grant the licenses contained in this Contract are owned by Contractor or its Subcontractors

Effective Date – The date the last party signs this Contract.

Final Acceptance – Satisfaction by the Contractor of the requirements set forth in Section 837 of the Technical Specifications.

Intellectual Property Rights – Any and all inventions (whether patentable or unpatentable and whether or not reduced to practice), patent rights, copyrights, trademark or service-mark rights, trade secrets, know-how, or other intellectual-property or proprietary rights, regardless of whether any such rights have been recorded, perfected, or have been recognized in registrations or issued patents.

Key Personnel – The individuals identified in Section 16.

Project Manager – WETA's representative with oversight of the Work and of the Contractor, including the power to enforce compliance with the Contract, including giving orders to do work determined necessary for Contractor to fulfill the requirements of the Contract. The Project Manager will have the authority to resolve disputes informally, and to issue change orders or amendments to the Contract, provided that such change orders or amendments do not exceed the authority delegated to the Project Manager by the WETA's Board of Directors. The exercise of or failure to exercise such power will not relieve Contractor of any of its obligations under the Contract.

Re-Delivery—Satisfaction by the Contractor of the requirements set forth in the technical specifications.

RFP – The Request for Proposals issued on [DATE].

Software - Any and all computer application programs which are incorporated in the Vessel as part of the Work, or in or as part of any system, subsystem, assembly, subassembly or components of the Work (or any interfaces or interface system control between or among any of these), or which are used by Contractor for diagnostics on or other testing of the Vessel as part of the Work.

Subcontractor – Any firm or person under contract to Contractor, authorized by WETA to assist in the Work.

Technical Specifications – The Technical Specifications included in the RFP, as may be modified by addendum or during negotiations prior to award of the Contract.

Third Party Software – Any Software that is not Contractor Software.

Total Contract Price – The amount listed in Section 6, representing the total amount to be paid the Contractor for the Work under the Contract.

Work – All the obligations of Contractor under the Contract -- including delivery and re-delivery, testing, submission of deliverables, performance of warranty obligations, furnishing of all equipment, items, materials, parts, systems, data, design, services, and other matters and things necessary or the required labor and management to be done by Contractor pursuant to this Contract, including all miscellaneous and incidental work.

Vessel -- Each vessel on which the Work will be performed, that is the subject of this Contract.

#### 4. CONTRACTOR'S REPRESENTATIONS AND WARRANTIES

In the performance of the Work, the Contractor represents and warrants that:

Workmanship. It has and will exercise the degree of care, skill, efficiency, and judgment of contractors in the passenger vessel shipbuilding industry; that it carries all applicable licenses, certificates, and registrations in current and good standing that may be required to perform the Work; and that it will retain all such licenses, certificates, and registrations in active status throughout the duration of this engagement. Contractor will supervise and be solely responsible for the proper performance of the Work in accordance with the Contract, including the means, methods, techniques, and procedures, and for coordination of all parts of the Work.

Intellectual Property Rights. The Work, and any components of the Work, does not and will not infringe or violate the patent, copyright, trade-secret, or other intellectual-property or proprietary rights of any third party. Contractor further represents and warrants that it has or will have all appropriate licenses, agreements, or ownership rights pertaining to all U.S. patent, copyright, trade-secret, or other intellectual-property or proprietary rights needed for the performance of its obligations under this Agreement—including without limitation that it will have all necessary rights to use patentable (in the U.S.) or copyrightable materials, equipment, devices, or processes not furnished by WETA used in or incorporated in the Work. Contractor assumes all risks arising from the use of any such U.S. patented or copyrighted materials, equipment, devices, or processes.

Existence and Powers. Contractor is a [insert type of entity] duly organized, validly existing and in good standing under the laws of the State of [Insert State], and has the authority to do business in the State of California. It has the full legal right, power, and authority to own its properties and to carry on its business as now owned and operated and as required by this Agreement.

Corporate Authorization and Binding Obligation. Contractor has the authority and legal capacity to enter into and perform its obligations under this Agreement. This Agreement has been duly authorized, executed and delivered by all necessary corporate action of Contractor and constitutes a legal, valid and binding obligation of Contractor, enforceable against Contractor in accordance with its terms, except to the extent that its enforceability may be limited by bankruptcy, insolvency or other similar laws affecting creditor's rights from time-to-time in effect and equitable principles of general application. The persons signing this Agreement on behalf of Contractor have authority to do so.

No Conflict. Neither the execution and delivery by Contractor of this Agreement nor the performance by Contractor of its obligations in connection with the transactions contemplated hereby or the fulfillment by Contractor of any terms or conditions hereof to the best of its knowledge: (a) conflicts with, violates or results in a breach of any constitution, law or governmental regulation, bylaws or certificates of incorporation applicable to Contractor; or (b) conflicts with, violates or results in a breach of any order, judgment or decree, or any contract, agreement or instrument, to which Contractor is a party or by which Contractor or any of its properties or assets are bound, or constitutes a default under any of the foregoing.

No Litigation. Except as disclosed in writing to WETA before the Effective Date of this Agreement, there is no legal proceeding, at law or in equity, before or by any governmental body, pending or, to the best of Contractor's knowledge, overtly threatened or publicly announced against Contractor, or any of its affiliates or its parent or subsidiary corporations, or

otherwise affecting Contractor, in which an unfavorable decision, ruling, or finding, in any single case or in the aggregate, could reasonably be expected to have a material and adverse effect on the execution and delivery of this Agreement by Contractor or on the validity or enforceability of this Agreement against Contractor, or any other agreement or instrument entered into by Contractor in connection with the transactions contemplated in this Agreement, or on the ability of Contractor to perform its obligations under this Agreement or any such other agreement or instrument, or on the financial condition of Contractor.

Claims and Demands. Except as disclosed in writing to WETA before the Effective Date of this Agreement, there are no material and adverse claims and demands based in contract or tort law pending or, to the best of its knowledge, threatened against Contractor, or any of its affiliates or its parent or subsidiary corporations, with respect to any project similar to the one that is the subject of this Agreement.

Title. Contractor warrants that it owns or will own, and has or will have, good and marketable title to all goods, materials, equipment, tools, supplies, or systems furnished or to be furnished, by it and its Subcontractors, free and clear of all encumbrances. Contractor warrants that any title conveyed under the terms of this Agreement will be good and that all goods, materials, equipment, supplies, or systems, will be delivered free from all security interests or other liens or encumbrances. Contractor also agrees to defend the title against all persons claiming the whole or part of any goods, materials, equipment, supplies, or systems.

Personnel. The Contractor represents that it has or will obtain all personnel and equipment required to perform the Work. The Contractor represents and warrants that it and its Subcontractors will procure and keep current throughout the duration of this Contract any and all license, permits, registrations or certificates which are or may be required by properly constituted authorities for the performance of Work under this Contract.

## **5. SCOPE OF WORK**

Contractor will perform the Work and all related tasks in accordance with the Technical Specifications, Exhibit A. The Contractor is responsible for performing all work necessary to complete, in a manner satisfactory to WETA, the Work described in this Contract, and in any properly approved Change Orders or amendments.

## **6. COMPENSATION. MANNER OF PAYMENT**

WETA will pay Contractor the total fixed sum of \$\_\_\_\_ for the Work (Total Contract Price). The Total Contract Price includes all costs, charges, taxes and fees necessary and incidental to the Contractor's performance of the Work, including but not limited to insurance and bonding, including all parts and components thereto. WETA will make payments according to the Milestone schedule set forth below. All milestones are based on the requirements contained in the Technical Specifications. Upon completion of each milestone, to WETA's satisfaction and as determined in WETA's sole discretion, the Contractor may submit an invoice for the payment associated with the completed milestone. WETA make payment to the Contractor within thirty (30) days following the receipt of approved invoices. WETA will retain 5% of each milestone payment to be released upon satisfactory completion of the warranty period as set forth below.

[TBD MILESTONE SCHEDULE]

Contractor may not submit more than one invoice per calendar month. Invoices must state the milestone number that is the subject of the invoice and must also include the contract number, the full name, phone number, and email of the person to contact with invoice questions.

PDF invoices should be emailed to the WETA Project Manager, Tim Hanners at Hanners@watertransit.org with cc to payables@watertransit.org. No hard copy invoices are required if WETA acknowledges receipt of the email invoice.

WETA will endeavor to pay approved invoices within thirty (30) days of their receipt. If WETA objects to any invoice submitted by Contractor, WETA will so advise the Contractor in writing giving reasons for its objection. If any invoice submitted by the Contractor is disputed by WETA, only that portion so disputed may be withheld from payment and the Contractor must continue to perform diligently during the pendency of any dispute resolution process that may ensue.

Upon making a milestone payment, WETA is granted title to all work in progress, materials, equipment, machinery, fittings, items of outfit and furnished goods (hereinafter "property") for which the milestone payment was made. Title to the property must be free of all encumbrances.

WETA's making of milestone payments does not constitute acceptance of any work by WETA, which will only occur as otherwise set forth in the Contract Documents. Nor shall making milestone payments alter the Contractor's responsibility for any damage to the Vessel, which remains with the Contractor at all times until the earlier of Conditional or Final Acceptance. Furthermore, the Contractor bears the risk of any loss or damage to property, even though WETA may hold title to property. Nothing in this paragraph undermines any rights that WETA has under any insurance coverage pursuant to the Contract.

As a condition of Final Acceptance of the last Vessel, and prior to submission of an invoice for Milestone Payment #X, the Contractor must furnish to WETA satisfactory evidence that all liens, claims and demands of Subcontractors, laborers and materialmen arising out of the Work, are fully satisfied, and that all of the Work is fully released from all liens, claims and demands of whatever kind and nature, whether just or otherwise.

The Contractor's acceptance of Milestone Payment #X, whether such payment be made pursuant to any judgment of any court, or otherwise, will constitute and operate as a release to WETA of any and all claims of the Contractor and liability to the Contractor for anything theretofore done or furnished for or relating to or arising out of this Contract and the Work, and for any prior act, neglect or default on the part of WETA or any of its directors, officers, agents or employees. Contractor will sign release in the form required by WETA as a condition of payment of Milestone Payment #X.

Should the Contractor refuse to accept any payment as tendered by WETA, it will constitute Contractor's waiver of any right to interest on such payment.

## **7. TRIALS, PRELIMINARY ACCEPTANCE, DELIVERY, AND FINAL ACCEPTANCE**

Trials, Preliminary Acceptance, Delivery, and Final Acceptance will follow the process outlined in the Technical Specifications.

## **8. LIQUIDATED DAMAGES**

It is agreed by the Parties that time is of the essence, and in the event of delay in completion of the Work or the delivery of the supplies, materials, or equipment beyond the date set forth in the contract documents, or beyond authorized extensions thereof, damage will be sustained by WETA and that it is or will be impracticable to determine the actual amount of the damage by reason of such delay, and it is, therefore, agreed that WETA may assess an amount as set forth below as liquidated damages. If the delay is caused by strikes, government controls, or other causes beyond the control of the Contractor, an extension of time without liquidated damages liability shall be granted by WETA upon a proper showing and finding by WETA that the extension is justified.

In the event that Final Acceptance of the last Vessel is not complete by XXXX, WETA may assess liquidated damages in the amount of **\$6,000** for each and every calendar day or part of a day over 12 hours that Final Acceptance is not complete.

## **9. RISK OF LOSS**

The Contractor will bear all risk of loss or damage to the Vessel, and all materials delivered pursuant to the Contract, until completion of Re-Delivery. Responsibility for risk of loss or damage includes during the time any materials under the Contractor's control are being shipped to or from WETA, RDI Marine, ZF Marine, other subcontractors or the Contractor's location and Contractor must insure all such materials during any such delivery. The Contractor will not be responsible for any loss or damage arising from the sole negligence or willful misconduct of WETA.

Contractor will bear the risk of loss or damage to any WETA property arising from actions or inactions of Contractor. In addition, Contractor will bear all risk of loss or damage with respect to all materials acquired for the purpose of performing the Work. The foregoing applies to any property of Contractor, Subcontractors, workers, and others performing the work, as well as third parties. Contractor will protect from damage existing property, belonging to WETA or any third parties affected by Contractor's activities and will provide appropriate protection for all such property during progression of the work. Should any of WETA's or third party property be damaged, such property will be repaired or replaced at Contractor's expense to the satisfaction of WETA, and if applicable, to the satisfaction of the affected third party. No extension of time will be allowed for repair or replacement of such damaged items. Should Contractor not repair or replace such damaged items, WETA will have the right to take corrective measures itself and deduct the cost from any sums owed to the Contractor.

## **10. INDEMNIFICATION**

To the fullest extent permitted by law, the Contractor assumes liability for and will save and protect, hold harmless, indemnify, and defend WETA, its directors, officers, agents, employees, representatives, contractors, subcontractors, insurers, attorneys, successors and assigns (all the foregoing, hereinafter collectively, "Indemnitees") from and against all claims, suits, demands, damages, losses, expenses, and liabilities of any kind whatsoever (all the foregoing, hereinafter collectively "Claims") including, without limitation, attorneys' fees, arising out of, resulting from, relating to, or claimed to have arisen out of, resulted from or related to the performance of the Work by the Contractor (including its subcontractors and suppliers), or any

allegation that WETA's use of the Vessel as contemplated under this Contract infringes or violates any Intellectual Property Rights. It is expressly intended by the parties that Contractor's indemnity and defense obligations will apply, and Indemnitees will be fully indemnified without offset, deduction or contribution, regardless of any negligence or other fault of Indemnitees, or any of them, and whether or not such Indemnitee negligence or other fault caused or contributed to the arising of the Claims provided, however that the indemnity and defense obligation will not apply to the extent a Claim arises from the sole negligence or willful misconduct of any of the Indemnitees.

"Claims" as used in this section includes, without limitation, those for personal injuries, wrongful death, mental or emotional distress, loss of consortium, damage to or loss of use of real, personal or intangible property of any kind, loss of income, loss of earning capacity, and business, financial, commercial or pecuniary losses of any kind whatsoever, and reasonable attorneys' fees, and costs and expenses of any kind whatsoever.

Contractor's indemnity and defense obligations cover the acts or omissions of any of Contractor's subcontractors, suppliers and consultants, and the employees of any of the foregoing.

The Contractor's indemnity and defense obligation under this section includes, without limitation, any claims, suits, demands, damages, losses, expenses, and liabilities arising from allegations of violations of Contractor's or its Subcontractor's personnel practices or from any allegation of an injury to an employee of the Contractor or subcontractor performing work or labor necessary to carry out the provisions of this Contract.

The indemnification obligations in this section will not be construed to negate, abridge or otherwise reduce any other obligation of indemnity the Contractor may have with respect to WETA which may otherwise exist. If any judgment is rendered against WETA or any of the other individuals enumerated above in any Claim subject to this indemnity, the Contractor will, at its expense, satisfy and discharge the same. This indemnification will survive termination or expiration of this Agreement and the Contractor must procure and maintain insurance coverage with a Contractual Liability endorsement that will insure its indemnity obligations.

If WETA is enjoined either temporarily or permanently from the use of any subject matter or materials as to which Contractor is to defend and indemnify WETA against a claim of infringement or other violation of Intellectual Property Rights, Contractor, at its sole cost and expense, must: (a) secure for WETA the right to continue using the subject matter or materials at issue by suspension of the injunction or procuring a license which imposes no cost on WETA; (b) replace the subject matter or materials at issue with non-infringing alternatives; or (c) modify the subject matter or materials at issue so that they become non-infringing or remove the enjoined subject matter or materials at issue and refund the sums paid for them without prejudice to any other rights of WETA. The option of (a), (b), and (c) in the preceding sentence must be selected in consultation with WETA and with WETA's consent, which will not be unreasonably withheld or delayed. The selected option may not entail an unreasonable or excessive amount of time or cause undue disruption to WETA's operations.

## **11. INSURANCE**

Contractor will at all times comply with the insurance requirements set forth in Exhibit C.

## **12. PERFORMANCE GUARANTY**

As a condition of any payment under this Agreement, the Contractor must furnish at its own expense a Performance Bond to guarantee the faithful and timely performance of the Work in accordance with the terms and conditions of the Contract and in a manner acceptable to WETA, in an amount equal to twenty five percent (25%) of the Total Contract Price. The Performance Bond must be supplied using WETA's form and must be issued by an admitted Surety satisfactory to WETA and authorized to issue such bond in the state of California. As an alternative to furnishing a bond, the Selected Proposer may guarantee faithful performance of the contract by depositing with WETA a certified check or cashier's check from a solvent bank for the prescribed amount. An irrevocable standby letter of credit issued in a form approved by WETA may also be an acceptable substitute to a Performance Bond

The Performance Guaranty must be effective from the date of award of the Contract to the completion of the warranty period and satisfactory resolution of any outstanding warranty claims.

Failure to provide a performance guaranty in accordance with this section is a material breach of the Contract. In lieu of finding Contractor in breach of its obligations under this section, WETA may, in its sole discretion, allow Contractor to continue the Work until it cures any deficiency in the requirements of this section. No further payments may be deemed due or will be made under the Contract until the Contractor is in compliance with this section, at which point WETA will pay all monies owed.

## **13. QUALITY ASSURANCE**

The Contractor must establish and maintain an effective in-facility quality assurance program consistent with the Technical Specifications. The quality assurance program must exercise quality control over all phases of production from initiation of design through construction and preparation for delivery and will maintain an ongoing history of complaints with corrective action. The program must also control the quality of subcomponent articles. The quality assurance program must have the authority and responsibility for reliability, quality control, inspection planning, establishment of the quality control system, and acceptance/rejection of materials and manufactured articles in the construction of the vessel.

## **14. WARRANTY REQUIREMENTS**

Warranty requirements are as set forth in the Technical Specifications.

## **15. SUBCONTRACTORS**

The Contractor may not subcontract any services to be performed by it under this Contract, or any materials or equipment incorporated into the Vessel, for an amount of \$50,000 or higher without the prior written approval of WETA's Project Manager. Any subcontractors must be engaged under written contract with Contractor with provisions allowing the Contractor to comply with all requirements of this Contract. Without limitation to the generality of the foregoing, each such written subcontract will at a minimum contain the following express provisions:

- Contractor, not WETA, is solely responsible for payment to the Subcontractor for any amounts owing—and the Subcontractor will have

- no claim, and will take no action against WETA or its officers, directors, employees, or sureties for nonpayment by Contractor.
- Subcontractor agrees that the subcontract is subservient to this Agreement and that it will be bound to the applicable terms and conditions of this Agreement.
  - Subcontractor and Contractor must agree that in the event of termination of this Agreement, any subcontract will be assigned to WETA, at WETA's discretion.

Consent by WETA's Project Manager to any subcontracting will not relieve the Contractor of its primary responsibility for performance under this Contract. If subcontracting is approved, the Contractor agrees that all applicable FTA flow down compliance requirements will be included in such subcontracts and the Contractor will obtain all applicable FTA-required certifications before entering into any subcontract.

The Contractor will be fully responsible to WETA for all acts and omissions of its own employees, and of Subcontractors, Suppliers and their employees. The Contractor will also be responsible for coordinating the Work performed by Subcontractors/Suppliers. When a portion of the subcontracted Work is not performed in accordance with the Agreement, or if a Subcontractor/Supplier commits or omits any act that would constitute a breach of the Agreement, the Subcontractor/Supplier will be replaced at the request of WETA and will not again be employed on the project. The Contractor will be responsible for all materials and workmanship in the construction of the Vessel and all accessories used, whether the same are manufactured by the Contractor, subcontracted, assigned, or purchased from a supplier. The Contractor will be solely responsible for reimbursing any subcontractors and WETA will have no obligation to them.

Within ten (10) days of the Effective Date, the Contractor will submit for WETA's approval a preliminary list of Subcontractors. In the event that WETA in the exercise of its reasonable discretion, does not approve a proposed Subcontractor, Contractor will propose a suitable replacement within ten days of notice of WETA's rejection of the initial proposed Subcontractor.

Nothing contained herein nor any course of conduct will be construed to create any contractual relationship between WETA and any Subcontractor. Upon request, Contractor will provide to WETA an executed copy of each subcontract agreement, including any amendments thereto.

## **16. PERSONNEL**

Contractor will assign only competent personnel to perform work hereunder. In the event that at any time WETA, in its sole discretion, desires the removal of any person or persons assigned by Contractor to perform work hereunder, Contractor will remove such person or persons immediately upon receiving written notice from WETA. Key Personnel for this Contract, and the amount of time such Key Personnel will dedicate to the Contract are set forth below.

[INSERT INFORMATION HERE]

Any and all persons identified in the above table are deemed by WETA to be Key Personnel whose services were a material inducement to WETA to enter into this Contract, and without whose services WETA may not have entered into this Contract. Contractor may not remove, replace, substitute, or otherwise change any Key Personnel without the prior written consent of WETA.

In the event that any of Contractor's personnel assigned to perform services under this Agreement become unavailable due to resignation, sickness or other factors outside of Contractor's control, Contractor will be responsible for timely provision of adequately qualified replacements. In no event will a position remain unfilled for more than three months. Except for excusable delays as set forth in Section **Error! Reference source not found.**, unavailability of personnel, even due to factors outside of Contractor's control, will not provide Contractor an excuse from meeting the time requirements under this Contract.

## **17. COOPERATION WITH OTHER CONTRACTORS**

At any time, WETA reserves the right to engage other contractors to perform additional work that is not the subject of this Agreement. Contractor will cooperate with all such contractors and allow them access to the Vessel, provided that such additional work will not interfere with or hinder the Contractor's Work. WETA will require, as a condition of gaining access to the Vessel, that additional contractors hired under this section have their own insurance to cover liability associated with their work. These contractors will also be required to indemnify the Contractor from liability associated with their work.

## **18. PROMPT PAYMENT TO SUBCONTRACTORS**

The Contractor will pay any Subcontractor approved by WETA for work that has been satisfactorily performed no later than seven (7) days from the date of the Contractor's receipt of payments by WETA.

In the event WETA holds retainage from the Contractor, it will make prompt and regular incremental acceptances of portions of the contract work, as determined by WETA, and pay retainage to the Contractor based on these acceptances. The Contractor will return all monies withheld from all Subcontractors within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by WETA. Any delay or postponement of payment may take place only for good cause and with WETA's prior written approval. In the event the Contractor does not make progress payments or release retentions to the Subcontractors in accordance with the time periods in this section, the Contractor will be subject to a charge of two percent (2%) per month on the untimely or improperly withheld payment.

Upon WETA's request, the Contractor will make available to WETA evidence that the Contractor has paid Subcontractors all amounts due in accordance with this section. This section applies to both DBE and non-DBE Subcontractors.

## **19. CHANGES**

**19.1 General.** All changes to the Contract must be accomplished through the procedures set forth in this section. Any plan or method of work, whether suggested by Contractor or WETA, but not specified or required in the Contract, if adopted or followed by Contractor in whole or part without compliance with this section XX, will be adopted at the risk

and responsibility of Contractor, and WETA assumes no responsibility. In particular, any approval by WETA's Project Manager of any modification, sample, schedule document, substitution, drawing or other matter not accomplished by the procedures set forth in this section XX will not impose any liability upon WETA or relieve Contractor of any responsibilities under the Contract, including without limitation, the accuracy of any drawing or any obligation under any warranty provision, or the responsibility to deliver the vessel in compliance with all regulatory requirements, the Technical Specification, and this Contract. There are no verbal modifications to the Contract. The Contractor is responsible to ensure proper interrelation, functioning and systems integration of all aspects of the work related to the Vessel's systems and their relationship with other equipment and systems of the Vessel. The Contractor is responsible to ensure the suitability of the systems, devices, apparatus, components and parts for the service intended.

19.2 Contractor Changes. Any Contractor-proposed change in this Contract must be submitted to WETA for its prior approval. Oral change orders are not permitted. All Contractor initiated requests for a change must be made within 10 days after Contractor knows, or should have known, of the issues giving rise to the request. At WETA's request, Contractor will provide information giving the basis for the requested change, or will provide a proposal containing the information set forth in Section XX.3. No change in this Contract will be made unless WETA gives prior written approval. The Contractor will be liable for all costs resulting from, and/or for satisfactorily correcting, any specification change not properly ordered by written modification to the Contract and signed by WETA.

19.3 WETA Changes. WETA may obtain changes to the Contract by notifying the Contractor in writing. As soon as reasonably possible but no later than ten (10) calendar days after receipt of the written change order to modify the Contract, the Contractor will submit to WETA's Project Manager a detailed price and schedule proposal for the work to be performed as follows.

19.3.1 The proposal must detail all applicable direct costs, including labor and materials, with the unit price and corresponding quantity, Subcontractor(s) or supplier(s) quote or purchase order, and mark up, etc. which makes up the total proposed cost. The information must be in sufficient detail for WETA to determine if the proposed costs are fair and reasonable.

19.3.2 Contractor agrees that in no event will the combined profit and overhead of the supplier(s)/Subcontractor(s) and Contractor with respect to any change order work exceed 10 percent (10%). Calculation of profit for the change order will be on the costs of Contractor and any subcontracted work without profit and overhead of the Contractor or supplier(s)/subcontractor(s). The Contractor agrees that it will include a provision in each subcontract which conforms to the provisions of the preceding sentence.

19.3.2.1 The Contractor represents that all rates charged by suppliers or Subcontractors contained in the proposal will be equal to or better than rates charged to other transit properties.

19.3.2.2 Equipment costs used for the work will be reimbursable to Contractor. All receipts, vouchers and all other supporting documentation required to substantiate the material costs will be available for WETA's inspection and verification.

19.4 Change Order.

19.4.1 Contractor's price and schedule proposal will be accepted or modified by negotiations between the Contractor and WETA. At that time a detailed modification will be executed in writing by both parties. Modifications that increase the cost to be paid Contractor may need to be approved by WETA's Board of Directors. Disagreements that cannot be resolved within negotiations will be resolved in accordance with the procedures in Section 20 below. In the event of a disagreement over a change order, WETA reserves the right unilaterally to direct the Contractor to perform work through a change order that does not need to be executed by both parties. The Contractor will perform the work as directed and may exercise its rights to pursue a claim pursuant to Section 20.1. Regardless of any disputes, the Contractor will proceed with the Work ordered.

19.4.2 A change order must be issued and executed before any work is started on the items covered by the change order. Any extra work done without a written change order signed by WETA's authorized representative will be considered as unauthorized and at the sole expense of Contractor. In the event Contractor receives direction, instruction, interpretation, or determination from any source which may cause any change in the Work, Contractor will promptly notify WETA. Such written notification will be given to WETA before Contractor acts on said direction, instruction, interpretation, or determination.

19.4.3 Unless specified, no change order will impose any liability upon WETA, nor will any change order relieve Contractor of any responsibilities under the Contract, including without limitation, the accuracy of drawing or any obligation under any warranty provision.

## **20. DISPUTE RESOLUTION**

### **20.1 Contractor Claims.**

The Contractor will be solely responsible for providing timely written notice to WETA of any claims for additional compensation and/or time in accordance with the provisions of this Contract. It is WETA's intent to investigate and attempt to resolve any Contractor claims before the Contractor has performed any disputed work. Therefore, Contractor's failure to provide timely notice will constitute a waiver of Contractor's claims for additional compensation and/or time.

Claims by the Contractor disputing the meaning and intent of this Contract or arising from performance of this Contract will be referred in writing to WETA's Project Manager for a written decision. Except for claims that result from a disagreement over a proposed change order pursuant to Section 19, all such claims must be filed within 10 days after Contractor knows, or should have known, of the issues giving rise to the claim, and must be accompanied by written documentation substantiating the reasons for which the Contractor believes additional compensation may be due, the nature of the costs involved, and the amount of the potential claim. Claims resulting from a disagreement over a proposed change order pursuant to Section 19 must be filed within 10 days of the documented failure to resolve any disagreement or within 10 days of WETA's rejection of Contractor's request for a change order. WETA's Project Manager will respond to the Contractor in writing with a decision within thirty (30) calendar days following receipt of the Contractor's claim. WETA may in its discretion extend the time for its response if necessary.

The Contractor will not be entitled to the payment of any additional compensation for any cause, including any act, or failure to act, by WETA, or the failure or refusal to issue a

modification, or the happening of any event, thing, or occurrence, unless it has given WETA due written notice of the claim as set forth above.

20.2 Appeal of Project Manager Decision. If the Contractor disagrees with any determination or decision of WETA's Project Manager, the Contractor will, within 15 calendar days of the date of such determination or decision, appeal the determination or decision in writing to WETA's Executive Director. Such written appeal will include all documents and other information necessary to substantiate the dispute or claim. The Executive Director will review the dispute or claim and transmit a decision in writing to the Contractor within 30 calendar days from the receipt of the dispute or claim. Failure of the Contractor to appeal the decision or determination of WETA's Project Manager within the 15 calendar day period will constitute a waiver of the Contractor's right to assert thereafter any claim resulting from such determination or decision. Submission of a dispute or claim to the Executive Director of WETA will be a condition precedent to any litigation under this Contract. The Executive Director of WETA may, at her discretion, extend the time period for response to the Contractor specified in this section.

20.3 Alternative Dispute Resolution. Any claim or controversy concerning the interpretation, application, or implementation of this Agreement between WETA and Contractor which cannot be resolved through the efforts described above, may, by specific agreement of the parties, be submitted to alternative dispute resolution (that is, mediation or arbitration) with the parameters for such dispute resolution being agreed to by the Parties at the time. Each party will bear the costs and expenses incurred by it in connection with such alternative dispute resolution processes. The cost of any independent decision maker will be shared equally between the parties. If a dispute is not resolved through discussion or the Parties do not agree to alternative dispute resolution, either party may pursue available legal remedies in a California State or Federal court of competent jurisdiction. Contractor must file a government claim pursuant to Government Code section 910 *et seq.* in order to initiate a civil action.

20.4 Any matter that is subject to the express sole discretion of either party to this Agreement will not be subject to the dispute resolution process described in this section.

20.5 Pending final decision of a dispute under this Section 20, the Contractor will proceed diligently with the performance of the Contract and the question or claim will be temporarily resolved in accordance with the decision of WETA's Executive Director, until final resolution of the question or claim.

## **21. SUSPENSION**

WETA may at any time and for any reason within its sole discretion issue a written order to the Contractor suspending, delaying or interrupting all or any part of the work for a specified period of time.

The Contractor will comply immediately with any such written order and take all reasonable steps to minimize costs allocable to the work covered by the suspension during the period of work stoppage. Contractor must continue the work that is not included in the suspension and will continue such ancillary activities as are not suspended. The Contractor will resume performance of the suspended work upon expiration of the notice of suspension, or upon direction from WETA.

The Contractor will be allowed an equitable adjustment in the contract price (excluding profit) and/or an extension of the contract time, to the extent that cost or delays are shown by

the Contractor to be directly attributable to any suspension. However, no adjustment will be made under this section for any suspension, delay or interruption due to the fault or negligence of the Contractor, or for which an equitable adjustment is otherwise provided for, or excluded under any other term or condition of the Contract. As soon as reasonably possible but no later than forty-five (45) calendar days, or any other period of time agreed to by the parties, after receipt of the written suspension of work notice, the Contractor will submit to WETA a detailed price and schedule proposal for the suspension, delay or interruption.

## **22. TERMINATION OF CONTRACT.**

### **22.1 Termination for Default.**

If Contractor fails to perform any of the provisions of this Contract, WETA may find Contractor to be in partial or complete default. If Contractor does not cure such default within thirty (30) days after receipt of written notification that such failure has occurred, or provide a plan to cure such default which is acceptable to WETA within the time specified by WETA, then WETA may, in its discretion, terminate this Contract, in whole or in part, on the basis of Contractor's default of this Agreement. If the Contractor cures the default within the cure period, but subsequently defaults again, WETA may immediately terminate the Contract or a portion of it without giving the Contractor a right to cure.

The term "default" for purposes of this section includes, but is not limited to: the performance of the work in violation of the terms of the Contract; abandonment, assignment or subletting of the Contract without approval of WETA; filing a petition for bankruptcy by or against the Contractor or appointment of a receiver for Contractor's property; initiation of a federal or state proceeding for relief of debtors by or against Contractor; failure of the Contractor to perform its obligations under the Contract Documents (including but not limited to use of materials, supplies, plant, or equipment of quality or quantity below the requirements in the Contract Documents; failure to use an adequate number of properly skilled workers; failure to provide required Key Personnel; failure to provide proper workmanship); failure to perform its obligations under the Contract Documents within the time specified therein; failure to take effective steps to end a prolonged labor dispute; or the performance of the Contract in bad faith.

If the Contract is terminated in whole or in part for default, WETA may complete the Work, upon such terms and in such manner as WETA may deem appropriate. Without in any way affecting WETA's rights under the Performance Guaranty, the Contractor may be liable to WETA for any excess costs expenses incurred by WETA in completing the Work.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties will be the same as if the notice of termination had been issued pursuant to termination for convenience of WETA.

All finished or unfinished documents and any goods or materials procured for or produced pursuant to this Contract will become the property of WETA upon the effective date of such termination for default.

### **22.2 Termination for Convenience.**

WETA may terminate this Contract for convenience, including for non-availability of funds, in whole or in part, upon 30 calendar days' notice sent by certified mail, return receipt requested, to the Contractor. If WETA terminates this Contract for convenience, the Contractor will:

- Stop Work under the Contract on the date and to the extent specified in the notice of termination.
- Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work under the Contract as is not terminated.
- Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination.
- Settle all outstanding liabilities and all claims arising out of such termination or orders and subcontracts, with the approval or ratification of WETA, to the extent that may be required, which approval or ratification will be final for all the purposes of this section.
- Transfer title to WETA and deliver in the manner, at the times, and to the extent, if any, directed by WETA the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated, and the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been furnished to WETA.
- Use its best efforts to sell, in the manner, at the times, to the extent, and at the price(s) directed or authorized by WETA, any property of the types referred to above, provided however, that the Contractor will not be required to extend credit to any purchaser, and may acquire any such property under the conditions prescribed by and at a price(s) approved by WETA. The proceeds of any such transfer or disposition will be applied in reduction of any payments to be made by WETA to the Contractor under this Contract or will otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as WETA may direct.
- Complete performance of such part of the Work as will not have been terminated by the notice of termination.
- Take such action as may be necessary, or as WETA may direct, for the protection or preservation of the property related to this Contract which is in the possession of the Contractor and in which WETA has or may acquire an interest.

In the event of termination for convenience, the Contractor will be paid all sums actually due and owing for all services performed and all expenses incurred up to the day written notice of termination is given, plus any costs reasonably and necessarily incurred by Contractor to effect such termination. Contractor will not be entitled to payment for any lost profit it might have

earned had the Contract not been terminated. Thereafter, Contractor will not be entitled to make any claim against WETA in connection with this Agreement. All finished or unfinished documents and any materials procured for or produced pursuant to this Agreement will become the property of WETA upon the effective date of such termination for convenience.

In the event of termination for convenience, Contractor, and its Subcontractors, will provide reasonable and good faith cooperation in any transition to other vendors or contractors as WETA may determine necessary. Failure to so cooperate is a breach of the agreement and grounds for a termination for convenience to be treated as a termination for breach.

Contractor Responsibility for Subcontracts. If this Contract is terminated, WETA will have no liability or responsibility for leases or contractual agreements entered into by the Contractor for performance of the Contractor's responsibilities under this Contract, except as provided in this section. In the event of termination for any reason, and at WETA's direction, Contractor must assign any Subcontract to WETA, and must include in any Subcontract the assignability to WETA in the event of any termination.

### **23. RECORD-KEEPING; AND ACCESS TO RECORDS; AUDIT**

23.1 Establishment and Maintenance of Information. The Contractor agrees to establish and maintain accurate, detailed, and complete separate books, accounts, financial records, documentation, and other evidence pertaining to: i) the performance of the work under this Contract, and ii) the receipt and expenditure of all funds received under this Contract. The Contractor will also maintain the financial information and data used in preparation or support of the cost submission for any negotiated Contract amendment or change order under this Contract. The Contractor will establish and maintain all such information in accordance with generally accepted accounting principles and practices and will retain intact all such information until the latest of:

- (a) complete performance of this Contract; or
- (b) six years following the end of the term of this Contract; or
- (c) if any litigation, claim, or audit is commenced during either such period, when all such litigation, claims or audits have been resolved.

If the Contractor engages any subcontractors to perform any of the work under this Contract, the Contractor agrees that the contract for such work will include provisions requiring the subcontractor to establish and maintain information in accordance with the provisions of this section and to allow access to and audit of such information in accordance with Section 23.2 below.

23.2 Access to Data and Other Information. WETA, as well as representatives of the California State Auditor and the Federal Transit Administration, will have access to all Contractor data under this Contract and Contractor will cooperate with WETA's reasonable requests for access to the data for the purpose of inspection and copying. The Contractor must maintain the data in convenient formats reasonably requested by WETA. The Contractor will provide appropriate facilities for such access, inspection, audit, and copying and will require that this section be included in any subcontract for the work under the contract. For WETA to determine whether the Contractor has complied with the requirements under this section, the Contractor will, at any time when requested, submit to WETA properly authenticated documents

or other satisfactory proof as to the Contractor's compliance with such requirements. The term "data" for the purposes of this section includes all information and records collected, created, received, maintained, or disseminated by the Contractor in the performance of the work under this Contract, regardless of physical form, storage media, or conditions of use.

23.3 Audits. The accounts and records of the Contractor relating to this Contract will be audited in the same manner as all other accounts and records of the Contractor are audited. Authorized representatives of WETA, as well as representatives of the California State Auditor and the Federal Transit Administration, will have access to all such books, records, documents, accounting practices and procedures, and other information for the purpose of inspection, audit, and copying during normal business hours. The Contractor will provide proper facilities for such access and inspection. Financial adjustments resulting from any audit will be paid in full within 30 calendar days of the Contractor's receipt of audit.

23.4 Within 30 calendar days after completion, the Contractor will deliver to WETA a copy of any audit of the Contractor done by the Contractor or at its request or at the direction of any governmental agency or department which relate to the performance of the work under this Contract.

## **24. CONFLICT OF INTEREST**

In addition to those direct conflicts of interest discussed and prohibited in the RFP, Contractor will take all reasonable measures to preclude the existence or development of an organizational conflict of interest in connection with work performed under this Contract. An organizational conflict of interest occurs when, due to other activities, relationships, or contracts, a firm or person is unable, or potentially unable, to render impartial assistance or advice to WETA.

Contractor will not engage the services of any Subcontractor or consultant on any work related to this Agreement if the Subcontractor or consultant, or any employee of the Subcontractor or consultant, has an actual or apparent organizational conflict of interest related to work or services contemplated under this Agreement.

If at any time during the term of this Agreement Contractor becomes aware of an organizational conflict of interest in connection with the work performed thereunder, Contractor immediately will provide WETA with written notice of the facts and circumstances giving rise to this organizational conflict of interest. Contractor's written notice will also propose alternatives for addressing or eliminating the organizational conflict of interest. If at any time during the term of this Agreement, WETA becomes aware of an organizational conflict of interest in connection with the Contractor's performance of the Work, WETA will similarly notify the Contractor. In the event a conflict is presented, whether disclosed by the Contractor or discovered by WETA, WETA will consider the conflict presented and the alternatives proposed and meet with the Contractor to determine an appropriate course of action. WETA's determination as to the manner in which to address the conflict will be final.

During the term of this Agreement, Contractor must maintain lists of its employees, and the Subcontractors and consultants used and their employees. Contractor must provide this information to WETA upon request. Submittal of such lists does not relieve the Contractor of its obligation to assure that no organizational conflicts of interest exist.

The Contractor must maintain written policies prohibiting organizational conflicts of interest and must ensure that its employees are fully familiar with these policies. The Contractor must monitor and enforce these policies and must require any subcontractors and affiliates to maintain, monitor and enforce policies prohibiting organizational conflicts of interest.

Failure to comply with this section may subject the Contractor to damages incurred by WETA in addressing organizational conflicts that arise out of work performed by the Contractor, which damages the Contractor agrees to reimburse, or to termination of this Agreement for breach.

## **25. PUBLICITY**

The Contractor, its employees, subcontractors, and agents will not refer to WETA, or use any logos, images, or photographs of WETA for any commercial purpose, including, but not limited to, advertising, promotion, or public relations, without WETA's prior written consent. Such written consent will not be required for the inclusion of WETA's name on a customer list.

## **26. CONFIDENTIALITY**

Any WETA materials to which the Contractor has access or materials prepared by the Contractor during the course of this Contract ("Confidential Information") will be held in confidence by the Contractor, who will exercise all reasonable precautions to prevent the disclosure of Confidential Information to anyone except the officers, employees and agents of the Contractor as necessary to perform the Work.

The Contractor will not release any reports, information or promotional materials prepared in connection with this Contract, whether deemed confidential or not, to any third party without the approval of WETA's Project Manager.

Confidentiality obligations hereunder will not apply to any portion of WETA's Information which:

- (a) has become a matter of public knowledge other than through an act or omission of the Contractor;
- (b) has been made known to the Contractor by a third party in accordance with such third party's legal rights without any restriction on disclosure;
- (c) was in the possession of the Contractor prior to the disclosure of such Information by WETA and was not acquired directly or indirectly from the other party or any person or entity in a relationship of trust and confidence with the other party with respect to such Information; or
- (d) Contractor is required by law to disclose.

## **27. PUBLIC RECORDS ACT**

All records, documents, drawings, plans, specifications and other material relating to conduct of WETA's business, including materials submitted by Contractor in its Proposal and during the course of performing the work under this Agreement, will become the exclusive property of WETA and may be deemed public records. Said materials may be subject to the

provisions of the California Public Records Act. WETA's use and disclosure of its records are governed by this Act.

Contractor may designate material submitted to WETA as "Trade Secret" or "Proprietary" and request that WETA not disclose such information to the public. If WETA agrees not to disclose such information, Contractor assumes all responsibility for any challenges resulting from the non-disclosure, and will defend, indemnify and hold harmless WETA from and against all damages (including but not limited to attorneys' fees that may be awarded to the party requesting the Contractor's information), and pay any and all costs and expenses related to the withholding of Contractor's information. Contractor will not make a claim, sue, or maintain any legal action against WETA or its directors, officers, employees, or agents concerning the withholding from disclosure of Contractor information.

## **28. ANTITRUST CLAIMS**

Contractor and its Subcontractors must comply with California Government Code Section 4552, which states:

"In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder."

## **29. ENVIRONMENTAL AND SAFETY AND HEALTH STANDARDS COMPLIANCE**

The Contractor must comply with all applicable environmental statutes, regulations, and guidelines in performing the Work. The Contractor must also comply with applicable occupational safety and health standards, regulations, and guidelines in performing the Work.

## **30. HAZARDOUS AND NON-HAZARDOUS CHEMICALS AND WASTES**

Contractor will bear full and exclusive responsibility for any release of hazardous or non-hazardous chemicals or substances during the course of performance of this Contract except to the extent that any such releases are caused by the direct negligence of WETA. The Contractor will immediately report any such release to WETA. The Contractor will be solely responsible for all claims and expenses associated with the response to, removal and remediation of the release, including, without limit, payment of any fines or penalties levied against WETA by any agency as a result of such release and will hold harmless, indemnify and defend WETA from any claims arising from such release. For purposes of this section only, the term "claims" will include (i) all notices, orders, directives, administrative or judicial proceedings, fines, penalties, fees or charges imposed by any governmental agency with jurisdiction, and (ii) any claim, cause of action, or administrative or judicial proceeding brought against WETA, its member agencies, their directors, or employees, or for any loss, cost (including reasonable attorney's fees), damage or liability, sustained or suffered by any person or entity, including WETA. This indemnification will survive the termination of the Contract.

If the performance of the work outlined by these contract specifications creates any hazardous wastes, those wastes will be properly disposed of according to federal, state, and local laws, at the expense of Contractor. The Contractor will dispose of the wastes under its own EPA Generator Number. In no event will WETA be identified as the generator. The Contractor will notify WETA of any such hazardous wastes. WETA reserves the right to a copy of the results of any tests conducted on the wastes and, at its cost, to perform additional tests or examine those wastes, prior to their disposition.

### **31. OWNERSHIP OF WORK AND INTELLECTUAL PROPERTY RIGHTS**

31.1 Ownership of Copies of Written Materials. Any and all copies (whether physical or electronic) of any materials prepared, or in the process of being prepared, for the Work to be performed by Contractor under this Agreement will be and are the property of WETA. WETA will be entitled to access to and copies of any such materials during the progress of the Work under this Agreement. Any copies of such materials as specified in the Technical Specifications and required for performance of training and maintenance under this Agreement must be delivered to WETA. If any copies of such materials which the Contractor is owing JPB under this Agreement particularly under the Technical Specification are lost, damaged, or destroyed before final delivery to WETA, Contractor will replace them at its own expense and the Contractor assumes all risks of loss, damage, or destruction of or to any such materials

31.2 Intellectual Property Rights to Written Materials. Contractor will retain ownership of all intellectual property rights in the written materials described in the previous paragraph delivered to WETA under this Agreement. Contractor grants to WETA a perpetual, unlimited, royalty-free, non-exclusive and irrevocable license for WETA (including without limitation its officers, directors, employees, contractors, and agents) to use, copy, distribute, perform, and modify (and create derivative works from) any and all such written materials for its business purposes, including without limitation operation, maintenance, and repair of the Vessel, as well as for the purposes of future procurements of Vessels

31.3 Software Documentation. Without limitation to the generality of sub-paragraphs A and B above, Contractor must provide WETA the documentation listed in this section C in compliance with any requirements as to form, format, or media set forth in the Technical Specifications and Contractor must provide WETA any new, modified, or updated versions of such documentation promptly as such documentation becomes available, through the end of the warranty period of the Vessel. The copies of documentation to be delivered to WETA by Contractor will become the property of WETA. Contractor must provide:

- documentation relating to Contractor Software reasonably necessary or desirable for WETA's operation and maintenance of the Vessel, including without limitation: user manuals, systems manuals, training manuals, and other such guides; logic diagrams; programmer's notes; flow-charts; algorithms; development tools and platforms, and data identifying source, functional characteristics, and performance requirements.
- documentation relating to any Third Party Software authorized by WETA under the terms of this Contract reasonably necessary or desirable for WETA's operation and maintenance of the Vessel, including without limitation any user manuals, systems manuals, training manuals, and other such guides.

- documentation relating to any and all input/output protocols and operating parameters for all microprocessor-based control systems in or used with the Vessel, including without limitation a complete list of all commands and operating parameters generated by electronic input devices (such as manual controls, sensors, and test equipment used with the system) and responses generated by the controller to such devices, directives and responses sent between controllers, and the output to the controlled system.
- documentation relating to the form, fit, and function of any and all systems, subsystems, assemblies, subassemblies, or components thereof in or relating to the Vessel, including without limitation: as-built drawings; parts lists; schematics and diagrams; data relating to items, components, or processes sufficient to enable physical and functional interchangeability; data identifying source, size, configuration, mating, and attachment characteristics; and performance requirements.
- Contractor grants WETA a perpetual, irrevocable, royalty-free, non-exclusive license to use, copy, distribute, modify, and create derivative works from any and all documentation and data set forth in this section.

#### 31.4 Software License.

- Contractor hereby grants to WETA a perpetual, irrevocable, royalty-free, non-exclusive license under any and all applicable Intellectual Property Rights as reasonably necessary for WETA to operate, maintain, or repair the Vessel—including without limitation any systems, subsystems, assemblies, subassemblies, components, interface systems and controls and including without limitation any hardware or Software—but excluding Third Party Software.
- Contractor further grants WETA a perpetual, irrevocable, royalty-free, non-exclusive license to use, copy, distribute, modify, create derivative works from any and all Contractor Software for purpose of operating, maintaining, or repairing the Vessel.
- For any Third Party Software authorized by WETA under the terms of this Contract, Contractor will be responsible for negotiating and procuring, at its cost, all needed licenses for WETA's use of such software. Such licenses will be in WETA's name and must be reviewed, approved, and ultimately signed and agreed to by WETA.
- All rights and licenses granted under or pursuant to this Contract are and are deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of rights to “intellectual property,” as defined under Section 101 of the U.S. Bankruptcy Code (or any successor or amended statutory provision). The parties agree that JPB, as a licensee of such rights under this Contract, retains and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code; however, nothing herein is deemed to constitute a present exercise of such rights and elections.

## **32. EQUAL EMPLOYMENT OPPORTUNITY AND NON-DISCRIMINATION**

In connection with the performance of this Agreement, the Consultant will not discriminate against any employee or applicant for employment because of race, religious creed (including religious dress and grooming practices), color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, sexual orientation, gender (which includes pregnancy, childbirth, breastfeeding, or related medical conditions), gender identity, gender expression, age (if 40 or over), military and veteran status, taking or requesting statutorily protected leave, or any other category protected under federal, state, or local laws,

The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religious creed (including religious dress and grooming practices), color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, sexual orientation, gender (which includes pregnancy, childbirth, breastfeeding, or related medical conditions), gender identity, gender expression, age (if 40 or over), military and veteran status, taking or requesting statutorily protected leave, or any other category protected under federal, state, or local laws. Such actions will include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the consulting officer setting forth the provisions of this nondiscrimination clause.

The Consultant will, in all solicitations or advertisements for employees placed by or on behalf of the consultant, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

The Consultant will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed or disclosed the compensation of the employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

The Consultant will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Consultant's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The Consultant will comply with all provision of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

The Consultant will furnish all information and reports required by Executive Order 11246 of September 24, 1964, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

In the event of the Consultant's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the Consultant may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

The Consultant will include the provisions of 41 C.F.R. section 60-1.4 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Consultant will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance.

### **33. NON-DISCRIMINATION ASSURANCE**

The Consultant agrees to carry out applicable requirements of 49 CFR Part 26 in the award and administration of U.S. DOT-assisted contracts. Further, the **Consultant** agrees to comply with all provisions prohibiting discrimination on the basis of race, color, or national origin of Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §§ 2000d *et seq.*, and/or the Fair Employment and Housing Act Government Code section 12940 *et seq.* and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 *et seq.*) and with U.S. DOT regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act," 49 C.F.R. Part 21.

The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12940 *et seq.*, set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Contract by reference and made a part hereof as if set forth in full.

In the event of the Consultant's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part

### **34. CONTINUING OBLIGATIONS**

The Contractor acknowledges that the following provisions of this Contract impose continuing obligations on the Contractor which extend and are effective notwithstanding termination or the conclusion of the term of this Contract: Sections [TBD]

**35. NOTICE**

All communications relating to the day-to-day activities of the project must be exchanged between WETA's Project Manager and the Contractor's \_\_\_\_\_.

All other notices and communications regarding interpretation of the terms of this Agreement and changes thereto must be given to the other party in writing and may be given by personal delivery to a representative of the parties or by mailing the same postage prepaid, addressed as follows:

If to WETA: San Francisco Bay Water Emergency Transportation Authority  
Pier 9, Suite 111  
San Francisco, CA, 94111  
Attn: Tim Hanners, Director of Operations

If to the Contractor: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attention: \_\_\_\_\_

The address to which mailings may be made may be changed from time to time by notice mailed as described above. Any notice given by mail will be deemed given on the day after that on which it is deposited in the United States Mail as provided above.

**36. COMPLIANCE WITH LAWS**

Contractor and its employees, agents, and Subcontractors performing the Work must at all times comply with all applicable local, state, federal laws, ordinances, statutes, and regulations in effect at the time Work is performed. Contractor must indemnify and hold harmless WETA from and against any and all claims or expenses caused or occasioned directly or indirectly by its failure to so comply.

**37. NON-WAIVER**

WETA's failure to insist in any one or more instances upon the Contractor's performance of any term or condition of the Contract will not be construed as a waiver or relinquishment of WETA's right to such performance, or to future performance, of such term or condition by the Contractor, and the Contractor's obligation for performance of that term or condition will continue in full force and effect.

**38. APPLICABLE LAW, JURISDICTION, AND VENUE**

All matters relating to the performance of this Contract will be controlled by and determined in accordance with the laws of the State of California. Venue for all legal proceedings arising out of this Contract, or breach of this Contract, will be in the state or federal court with competent jurisdiction in San Francisco, California.

### **39. RIGHTS AND REMEDIES**

The rights and remedies of the parties provided herein are not exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

### **40. ASSIGNMENT**

The Contractor will not assign any interest, obligation, or benefit under or in the Contract or transfer any interest in the Contract, whether by assignment, or novation, without prior written consent of WETA. If assignment is approved, the Contract will be binding upon and inure to the benefit of the successors of the Contractor. Any attempt by the Contractor to assign any interest in the Contract without WETA's prior written consent will be null, void, and of no effect whatsoever.

### **41. SUCCESSION**

This Contract is binding on the parties, their successors, and assigns.

### **42. ATTORNEYS' FEES**

If any legal proceeding should be instituted by either of the parties to enforce the terms of this Contract or to determine the rights of the parties under this Agreement, the prevailing party in said proceeding will recover, in addition to all court costs, reasonable attorneys' fees.

### **43. NO THIRD PARTY BENEFICIARIES**

This Agreement is not for the benefit of any person or entity other than the Parties.

### **44. WETA WARRANTIES; PERSONAL LIABILITY**

WETA makes no warranties, representations or agreements, either express or implied, beyond such as are explicitly stated in this Agreement. In carrying out any of the provisions of the Contract or their duties to WETA, WETA's employees and agents will incur no personal liability under this Contract.

### **45. CONTRACTOR STATUS**

Neither the Contractor nor any party contracting with the Contractor will be deemed to be an agent or employee of WETA. The Contractor is and will be an independent contractor, and the legal relationship of any person performing services for the Contractor will be one solely between that person and the Contractor.

### **46. HEADINGS, COMPLETE CONTRACT, AND SEVERABILITY**

The section headings in this Contract are for reference purposes only and do not affect in any way the meaning or interpretation of this Contract. If any provision of this Contract is deemed invalid or unenforceable, that provision is reformed and/or construed consistently with applicable law as nearly as possible to reflect the original intentions of this Agreement, and in any event, the remaining provisions of this Contract remain in full force and effect.

This Contract, including exhibits and other documents incorporated in this Contract or made applicable by reference, constitutes the complete and exclusive statement of the terms

and conditions of the Contract between the Contractor and WETA. This Contract supersedes all prior representations, understandings, and communications.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their authorized representatives on the dates shown below.

**FOR WETA:**

By:

Title

ATTEST:

By:

**FOR THE CONTRACTOR\*:**

By:

Title:

By:

Title:

APPROVED AS TO FORM:

By:

Attorney for WETA

\*If the Contractor is a corporation, this Agreement must be executed by two corporate officers, consisting of: (1) the president, vice president or chair of the board; and (2) the secretary, assistant secretary, chief financial officer or assistant treasurer. In the alternative, this Agreement may be executed by a single officer or a person other than an officer provided that evidence satisfactory to WETA is provided demonstrating that such individual is authorized to bind the corporation or LLC (e.g. a copy of a certified resolution from the corporation's or LLC's board or a copy of the corporation's bylaws or LLC's operating agreement.)

**PART D: FORMS AND ATTACHMENTS**

1. REQUIRED FORMS. Each Proposer must submit all of the forms listed below. Failure to submit these required forms may result in WETA declaring a proposal non-responsive. All forms should be signed by an authorized individual. Electronic signatures, including digital signatures, are acceptable. WETA may reject as non-responsive forms containing interlineations, alternations, or erasures.
  - A. Attachment A, "Cost Proposal Form," in accordance with Part A, Section 15.
2. ATTACHMENTS. The following attachments are made part of this RFP and any contract awarded pursuant to this RFP:
  - A. Attachment B, "Insurance Requirements"
  - B. Attachment C, "Performance Bond"

## ATTACHMENT A SCHEDULE OF VALUES AND COST PROPOSAL

Name and Address of Contractor: \_\_\_\_\_

Contract No. \_\_\_\_\_ Date \_\_\_\_\_

Prepared By: \_\_\_\_\_ Date \_\_\_\_\_

<b>Vessel Pisces</b>								
A Pay Item	Item #	B Description	C Shipyard Material Cost	D Shipyard Labor Hours	E Shipyard Direct Labor Cost	F Subcontractor Cost	G Total Direct Cost	H Total Direct Cost w/O&P
1	070	<i>Vessel Regulatory Requirements</i>						
2	073	<i>Noise and Vibration</i>						
3	080	<i>Temporary Services</i>						
4	110	<i>Padeyes</i>						
5	163	<i>Seachests</i>						
6	233	<i>Main Engines</i>						
7	245	<i>Propellers</i>						
8	252	<i>Propulsion Control System</i>						
9	256.1	<i>Sea Valves</i>						
10	256.2	<i>Sea Water Supply &amp; Discharge Piping</i>						
11	259	<i>Exhaust Lagging</i>						

REQUEST FOR PROPOSALS #21-009  
SAN FRANCISCO WATER EMERGENCY TRANSPORTATION AUTHORITY

12	259.1	<i>DEF System</i>						
13	261	<i>Fuel Oil System</i>						
14	290	<i>SCR System</i>						
15	298	<i>Operating Fluids</i>						
16	313	<i>Main Engine 24vdc Systems</i>						
17	324	<i>Switchboard &amp; Panels</i>						
18	390	<i>PLC Systems</i>						
19	410	<i>Pilothouse</i>						
20	513	<i>Machinery Space Ventilation</i>						
21	551	<i>Compressed Air Systems</i>						
22	555	<i>Fire Extinguishing Systems</i>						
23	631	<i>Paint &amp; Coatings</i>						
24	633	<i>Cathodic Monitoring System</i>						
25	633.1	<i>Anodes</i>						
26	635	<i>Insulation</i>						
27	800	<i>Shipyards Management</i>						
28	810	<i>Design &amp; Engineering</i>						
29	833	<i>Weight Control</i>						
30	841	<i>Testing &amp; Trials Requirements</i>						
31	921	<i>Project Schedule</i>						
32	983	<i>Delivery &amp; Redelivery</i>						
33	993	<i>Material Handling &amp; Removal</i>						
34	997	<i>Dry Docking</i>						
		<i>Total Bid Price</i>						

REQUEST FOR PROPOSALS #21-009  
SAN FRANCISCO WATER EMERGENCY TRANSPORTATION AUTHORITY

<b>Vessel Taurus</b>								
<b>A</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
<b>Pay</b>		<b>Description</b>	<b>Shipyard</b>	<b>Shipyard</b>	<b>Shipyard</b>	<b>Subcontractor</b>	<b>Total Direct Cost</b>	<b>Total Direct Cost</b>
<b>Item</b>	<b>Item #</b>		<b>Material Cost</b>	<b>Labor Hours</b>	<b>Direct Labor Cost</b>	<b>Cost</b>		<b>w/O&amp;P</b>
1	070	<i>Vessel Regulatory Requirements</i>						
2	073	<i>Noise and Vibration</i>						
3	080	<i>Temporary Services</i>						
4	110	<i>Padeyes</i>						
5	163	<i>Seachests</i>						
6	233	<i>Main Engines</i>						
7	245	<i>Propellers</i>						
8	252	<i>Propulsion Control System</i>						
9	256.1	<i>Sea Valves</i>						
10	256.2	<i>Sea Water Supply &amp; Discharge Piping</i>						
11	259	<i>Exhaust Lagging</i>						
12	259.1	<i>DEF System</i>						
13	261	<i>Fuel Oil System</i>						
14	290	<i>SCR System</i>						
15	298	<i>Operating Fluids</i>						
16	313	<i>Main Engine 24vdc Systems</i>						
17	324	<i>Switchboard &amp; Panels</i>						
18	390	<i>PLC Systems</i>						
19	410	<i>Pilothouse</i>						
20	513	<i>Machinery Space Ventilation</i>						
21	551	<i>Compressed Air Systems</i>						

REQUEST FOR PROPOSALS #21-009  
 SAN FRANCISCO WATER EMERGENCY TRANSPORTATION AUTHORITY

22	555	<i>Fire Extinguishing Systems</i>							
23	631	<i>Paint &amp; Coatings</i>							
24	633	<i>Cathodic Monitoring System</i>							
25	633.1	<i>Anodes</i>							
26	635	<i>Insulation</i>							
27	800	<i>Shipyards Management</i>							
28	810	<i>Design &amp; Engineering</i>							
29	833	<i>Weight Control</i>							
30	841	<i>Testing &amp; Trials Requirements</i>							
31	921	<i>Project Schedule</i>							
32	983	<i>Delivery &amp; Redelivery</i>							
33	993	<i>Material Handling &amp; Removal</i>							
34	997	<i>Dry Docking</i>							
		<i>Total Bid Price</i>							

<b>Vessel Scorpio</b>								
<b>A</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
<b>Pay Item</b>	<b>Item #</b>	<b>Description</b>	<b>Shipyards Material Cost</b>	<b>Shipyards Labor Hours</b>	<b>Shipyards Direct Labor Cost</b>	<b>Subcontractor Cost</b>	<b>Total Direct Cost</b>	<b>Total Direct Cost w/O&amp;P</b>
1	070	<i>Vessel Regulatory Requirements</i>						
2	073	<i>Noise and Vibration</i>						
3	080	<i>Temporary Services</i>						
4	110	<i>Padeyes</i>						
5	163	<i>Seachests</i>						

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6	233	<i>Main Engines</i>						
7	245	<i>Propellers</i>						
8	252	<i>Propulsion Control System</i>						
9	256.1	<i>Sea Valves</i>						
10	256.2	<i>Sea Water Supply &amp; Discharge Piping</i>						
11	259	<i>Exhaust Lagging</i>						
12	259.1	<i>DEF System</i>						
13	261	<i>Fuel Oil System</i>						
14	290	<i>SCR System</i>						
15	298	<i>Operating Fluids</i>						
16	313	<i>Main Engine 24vdc Systems</i>						
17	324	<i>Switchboard &amp; Panels</i>						
18	390	<i>PLC Systems</i>						
19	410	<i>Pilothouse</i>						
20	513	<i>Machinery Space Ventilation</i>						
21	551	<i>Compressed Air Systems</i>						
22	555	<i>Fire Extinguishing Systems</i>						
23	631	<i>Paint &amp; Coatings</i>						
24	633	<i>Cathodic Monitoring System</i>						
25	633.1	<i>Anodes</i>						
26	635	<i>Insulation</i>						
27	800	<i>Shipyards Management</i>						
28	810	<i>Design &amp; Engineering</i>						
29	833	<i>Weight Control</i>						
30	841	<i>Testing &amp; Trials Requirements</i>						
31	921	<i>Project Schedule</i>						

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32	983	<i>Delivery &amp; Redelivery</i>						
33	993	<i>Material Handling &amp; Removal</i>						
34	997	<i>Dry Docking</i>						
<i>Total Bid Price</i>								

<b>Vessel Gemini</b>								
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	
<b>Pay Item</b>	<b>Item #</b>	<b>Description</b>	<b>Shipyard Material Cost</b>	<b>Shipyard Labor Hours</b>	<b>Shipyard Direct Labor Cost</b>	<b>Subcontractor Cost</b>	<b>Total Direct Cost</b>	<b>Total Direct Cost w/O&amp;P</b>
1	070	<i>Vessel Regulatory Requirements</i>						
2	073	<i>Noise and Vibration</i>						
3	080	<i>Temporary Services</i>						
4	110	<i>Padeyes</i>						
5	163	<i>Seachests</i>						
6	233	<i>Main Engines</i>						
7	245	<i>Propellers</i>						
8	252	<i>Propulsion Control System</i>						
9	256.1	<i>Sea Valves</i>						
10	256.2	<i>Sea Water Supply &amp; Discharge Piping</i>						
11	259	<i>Exhaust Lagging</i>						
12	259.1	<i>DEF System</i>						
13	261	<i>Fuel Oil System</i>						
14	290	<i>SCR System</i>						
15	298	<i>Operating Fluids</i>						
16	313	<i>Main Engine 24vdc Systems</i>						

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17	324	<i>Switchboard &amp; Panels</i>						
18	390	<i>PLC Systems</i>						
19	410	<i>Pilothouse</i>						
20	513	<i>Machinery Space Ventilation</i>						
21	551	<i>Compressed Air Systems</i>						
22	555	<i>Fire Extinguishing Systems</i>						
23	631	<i>Paint &amp; Coatings</i>						
24	633	<i>Cathodic Monitoring System</i>						
25	633.1	<i>Anodes</i>						
26	635	<i>Insulation</i>						
27	800	<i>Shipyard Management</i>						
28	810	<i>Design &amp; Engineering</i>						
29	833	<i>Weight Control</i>						
30	841	<i>Testing &amp; Trials Requirements</i>						
31	921	<i>Project Schedule</i>						
32	983	<i>Delivery &amp; Redelivery</i>						
33	993	<i>Material Handling &amp; Removal</i>						
34	997	<i>Dry Docking</i>						
		<i>Total Bid Price</i>						

## PRICE PROPOSAL

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

To the Administrator of Engineering and Maintenance, SAN FRANCISCO BAY AREA WATER EMERGENCY TRANSPORTATION AUTHORITY:

In compliance with your Request for Proposals dated \_\_\_\_\_, the undersigned offers the attached response to the RFP for the shipyard repair services of the Project:

### **Tier 4 Main Engine Conversion Gemini Class 21-009**

**Offerors Please Note:** Before preparing the Price Proposal, carefully read the Contract Documents. Offeror agrees that it is responsible for and that WETA will not be responsible for any errors, omissions, inaccuracies or incomplete statements in this Price Proposal.

The Offeror shall insert a lump sum price in figures opposite each pay item for which an estimated quantity appears in the Price Proposal.

Wherever a contingent amount is shown for any item in this Price Proposal, such amount shall govern and be included in the total price. The estimated quantity of work for payment on a lump sum basis will be "all required."

Any changes shall be initiated by the person signing the Proposal.

The undersigned hereby agrees that WETA may rely on the information provided in this Price Proposal as being factual and correct. The undersigned acknowledges that providing incorrect or misleading information in this response may be considered a breach of the Agreement.

The undersigned hereby acknowledges that this Price Proposal will be incorporated into the final Contract Documents. This Price Proposal shall be governed by and construed in all respects according to the laws of the State of California.

<b>BASIC CONTRACT ITEMS</b>				
<b>Pay Item (1)</b>	<b>Pay Item Description (2)</b>	<b>Pay Unit (3)</b>	<b>Quantity (4)</b>	<b>Total Unit Price Amount (5)</b>
1	Total Schedule of Values (Vessel Pisces)	LS	1	
2	Total Schedule of Values (Vessel Taurus)	LS	1	
3	Total Schedule of Values (Vessel Scorpio)	LS	1	
4	Total Schedule of Values (Vessel Gemini)	LS	1	
<b>5</b>	<b>TOTAL PRICE</b> (including all applicable fees)			

<b>Shipyards Rate Schedule</b>			
<b>Pay Item (1)</b>	<b>Description (Fully burdened rates for change order work) (2)</b>	<b>Pay Unit (3)</b>	<b>Unit Price (4)</b>
i	Shipyards Craft Labor Rate	HR	
ii	Shipyards Craft Labor Overtime Rate	HR	
iii	Shipyards Engineering & Management Labor Rate	HR	
iv	Shipyards Engineering & Management Overtime Rate	HR	
v	Equipment/Material Markup	%	
vi	Vendor/Subcontractor Markup	%	

All pricing shown above includes all applicable fees and taxes, except California State sales or use tax, which will be paid directly by the Owner. The undersigned has read the foregoing Price Proposal and has full authority to enter into the Contract on behalf of the Offeror and to bind the Offeror to the terms and conditions and other requirements of the Contract, and hereby agrees to the conditions stated therein by affixing his signature below:

Full legal name of entity making Price Proposal: \_\_\_\_\_

\_\_\_\_\_  
Signature/Date

\_\_\_\_\_  
Name and Title of Person Signing

## ATTACHMENT B

### INSURANCE REQUIREMENTS FOR CONTRACTOR

CONTRACTOR shall procure and maintain for the duration of the agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of work hereunder by the CONTRACTOR, its agents, representatives, or employees or SUBCONTRACTORS:

#### INSURANCE REQUIREMENTS

##### PART 1 - INSURANCE REQUIREMENTS

###### 1.01 GENERAL

A. Any person, firm or corporation CONTRACTOR authorizes to work upon the Property, including any SUBCONTRACTOR, shall be deemed to be CONTRACTOR's agent and shall be subject to all the applicable terms of this Section. Prior to entry upon the Property by such agents, CONTRACTOR shall provide WETA with satisfactory evidence (e.g., in the form of a Certificate of Insurance) that it and its SUBCONTRACTORS or other agents who will perform work under this agreement are insured in accordance with the following. Such insurance shall remain in effect throughout the term of this Agreement and shall be at the sole cost and expense of CONTRACTOR (or its agents or SUBCONTRACTORS).

###### 1.02 WORKERS' COMPENSATION COVERAGE

A. CONTRACTOR shall at its own cost and expense procure and maintain Workers' Compensation coverage to its employees, as required by the California Labor Code including Longshoreman's and Harbor Workers Act Insurance in compliance with the laws of the State of California, and Federal laws where applicable. The CONTRACTOR shall also maintain Employer's Liability coverage with minimum limits of One Million Dollars (\$1,000,000) for each disease, with a policy limit of One Million Dollars (\$1,000,000).

B. The policy shall contain a waiver of subrogation in favor of WETA and its respective officers, directors, employees, volunteers and agents while acting in such capacity.

C. Prior to commencing work or entering onto the Property, CONTRACTOR shall provide WETA the Designated Representative with a certificate evidencing coverage, and upon request, a certified duplicate original of the policy. The certificate and policy shall also provide that the CONTRACTOR's policy will not be cancelled without 30 days prior written notice to WETA's Designated Representative.

###### 1.03 MARINE GENERAL LIABILITY

A. CONTRACTOR shall, at its own cost and expense, procure and maintain Marine General Liability insurance which shall include, as additional insureds, WETA and its respective directors, officers, employees, volunteers and agents while acting in such capacity.

B. The CONTRACTOR shall provide and maintain coverage limits not less than \$10,000,000 limit per occurrence and annual aggregates where generally applicable and shall include premises-operations, independent contractors, products/completed operations, broad form property damage, blanket contractual, personal injury and sudden & accidental pollution endorsements. The Marine General Liability Insurance Policy shall not contain a Care, Custody and Control exclusion provision. The Marine

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General Liability may include Ship Repairers Liability or such coverage shall be provided by a separate policy with limits of liability of not less than \$10,000,000.

C. Prior to commencing work or entering onto the Property, CONTRACTOR shall provide the Designated Representative of WETA with a Certificate(s) of Insurance evidencing coverage, and upon request, a certified duplicate original of the policy

D. The policy(ies) shall indicate that it is primary to any other insurance and the insurance company(ies) providing such policy(ies) shall be liable thereunder for the full amount of any loss or claim, up to and including the total limit of liability, without right of contribution from any of the insurance effected or which may be effected by WETA. The policy shall contain a waiver of subrogation in favor of WETA and its respective directors, officers, employees, volunteers, agents while acting in such capacity.

E. The policy shall also contain either a Cross Liability endorsement or Severability of Interests Clause and stipulate that inclusion of WETA as additional insureds shall not in any way affect WETA's rights either as respects any claim, demand, suit or judgment made, brought or recovered against the CONTRACTOR. Said policy shall protect CONTRACTOR and WETA in the same manner as though a separate policy had been issued to it, but nothing in said policy shall operate to increase the insurance company's liability as set forth in its policy beyond the amount or amounts shown or to which the insurance company would have been liable if only one interest had been named as an insured.

**1.04 BUSINESS AUTOMOBILE LIABILITY**

CONTRACTOR shall, at its own cost and expense, procure and maintain Business Automobile Liability insurance providing bodily injury and property damage coverage with a combined single limit of at least \$2 million per occurrence for all owned, non-owned and hired automobiles. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from commercial general liability insurance. Such insurance shall include, as additional insureds, WETA and its respective directors, officers, employees, volunteers, and agents while acting in such capacity. Said policy shall contain a waiver of subrogation in favor of WETA and its respective directors, officers, employees, volunteers, agents while acting in such capacity. Prior to commencing work or entering onto the Property, CONTRACTOR shall provide the Manager, Operations of WETA with a Certificate(s) of Insurance evidencing coverage, and upon request, a certified duplicate original of the policy.

**1.05 Design Professional Liability Insurance.**

The CONTRACTOR shall provide Design Professional Insurance (Errors and Omissions Insurance) with limits of liability not less than \$1,000,000 per claim and \$2,000,000 in the aggregate. This insurance coverage may be provided by a subcontractor to the CONTRACTOR. However, evidence of such insurance for the design of the vessel shall be provided to Owner prior to the commencement of work. Such insurance shall remain in place throughout the term of this contract until the vessel has been accepted by the Owner and for 12 months after acceptance.

**1.06 All Risk Marine Builders Risk Insurance**

The CONTRACTOR shall provide All-Risk Builders Risk insurance with coverage limits by the terms of the policy equal to the Contract Price plus the value of WETA furnished equipment or materials. Coverage to include Protection & Indemnity and vessel pollution while vessels are undergoing Builder's Trials, Acceptance Trials through Delivery Acceptance of each of the Vessels by WETA. Applicable policy deductibles shall be the responsibility of the contractor. Loss shall be payable to Contractor and WETA as their interests may appear.

## 1.07 UMBRELLA COVERAGE

A. CONTRACTOR may provide Umbrella or Excess Liability insurance at its own cost and expense, procure and maintain Umbrella Liability Insurance coverage of at least \$10 million per occurrence and in the annual aggregate in excess of Marine General Liability, Ship Repairers Legal Liability, Business Automobile Liability and Employer's Liability.

## 1.08 GENERAL INSURANCE REQUIREMENTS

### A. Acceptable Insurance

1. All policies will be issued by insurers acceptable to WETA (generally with a Best's Rating of A 10 or better). Upon evidence of financial capacity satisfactory to WETA, CONTRACTOR's obligation hereunder may be satisfied in whole or in part by adequately funded self-insurance. All insurance specified above shall remain in force until all work to be performed is satisfactorily completed, all of CONTRACTOR's personnel and equipment have been removed from the property, and the work has been formally accepted. The failure to procure or maintain required insurance and/or an adequately funded self-insurance program will constitute a material breach of this Agreement.

2. Prior to commencing work or entering onto the property, CONTRACTOR shall provide WETA's Designated Representative with a Certificate(s) of Insurance evidencing the coverage listed above, and upon request, a certified duplicate original of the policy(ies). The Certificate shall stipulate that the insurance company(ies) issuing such policy(ies) shall give written notice to the Executive Director or the owner's designated representative of any material alteration or reduction in coverage of aggregate limits, if such limits apply, and provide at least thirty (30) days' notice of cancellation.

### B. Claims-Made Insurance

1. If any insurance specified above shall be provided on a claim-made basis, then in addition to coverage requirements above, such policy shall provide that:

(a) Policy retroactive date coincides with or precedes the CONTRACTOR's start of work (including subsequent policies purchased as renewals or replacements).

(b) CONTRACTOR shall make every effort to maintain similar insurance for at least three (3) years following project completion, including the requirement of adding all named insureds.

(c) If insurance is terminated for any reason, CONTRACTOR agrees to purchase an extended reporting provision of at least two years to report claims arising from work performed in connection with this Agreement.

(d) Policy allows for reporting of circumstances or incidents that might give rise to future claims.

### C. Failure to Procure or Maintain Insurance

1. The failure to procure or maintain required insurance and/or an adequately funded self-insurance program will constitute a material breach of the agreement.

### D. Regulatory Compliance

1. In addition to the requirements described above, CONTRACTOR shall comply with any additional coverages required by the United States Department of Transportation, the Environmental Protection Agency and/or related state and local laws, rules and regulations. The CONTRACTOR and/or SUBCONTRACTORS shall

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obtain all permits, licenses and other forms or documentation which are required and forward them with the required evidence of insurance to WETA.

E. Terms of Policies

1. Except as provided in Section 2 concerning claims made insurance policies, all insurance specified above shall remain in force until all work to be performed is satisfactorily completed, all of CONTRACTOR's personnel and equipment have been removed from WETA's property, and the work has been formally accepted.

F. Evidence of Insurance

1. The CONTRACTOR shall furnish to WETA Certificates of Insurance or, upon request a certified copy of all policies, for all specified coverages prior to commencing work within ten (10) business days of award of contract. All policies and certificates required hereunder shall provide for thirty (30) days written notice to WETA of cancellation or reduction in limits. The certificates and policies shall also evidence any specific requirements of coverage as set forth in this Section.

G. Reporting of Incidents, Losses or Claims

1. The CONTRACTOR agrees to immediately notify WETA's Manager of Operations, at **(415) 364-3192** following any accident or injury, which occurs in connection with the Work under this AGREEMENT. In addition, the CONTRACTOR shall provide a detailed written report of the accident or injury to WETA within seven (7) days of its occurrence.

**END OF SECTION**

**ATTACHMENT C  
PERFORMANCE BOND**

KNOW ALL PERSONS BY THESE PRESENTS, that

WHEREAS THE SAN FRANCISCO BAY AREA WATER EMERGENCY TRANSPORTATION AUTHORITY, (hereinafter referred to as "WETA") has entered into a Contract with \_\_\_\_\_ (hereinafter referred to as "Principal") for Contract 21-009 (hereinafter referred to the Contract) ; and

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond of faithful performance of said Contract;

NOW, THEREFORE, we, the Principal, and \_\_\_\_\_, as Surety are held and firmly bound unto WETA, in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_)

lawful money of the United States, being a sum equal to twenty-five percent (25%) of the total amount payable under the Contract for work on the M.V. Gemini, Pisces, Scorpio, and Taurus Ferries, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above-bound Principal, or its heirs, executors, administrators, successors, or assigns approved by WETA, shall promptly and faithfully perform the covenants, conditions and agreements in the Contract until the completion, delivery and acceptance of said work, and shall also promptly and faithfully perform all the covenants, conditions, and agreements of any alteration of the Contract made as therein provided, notice of which alterations to Surety being hereby waived, on Principal's part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify, defend, protect, and hold harmless WETA as stipulated in the Contract, then this obligation shall be reduced as described below; otherwise it shall be and remain in full force and effect.

No extension of time, change, alteration, modification, or addition to the Contract, or of the work required thereunder, shall release or exonerate Surety on this bond or in any way affect the obligation of this bond; and Surety does hereby waive notice of any such extension of time, change, alteration, modification, or addition.

As a condition precedent to satisfactory completion of the said contract, the above obligations will be reduced, upon acceptance of the work on the M.V. Gemini, Pisces, Scorpio, and Taurus, to the amount of \_\_\_\_\_ (\$ \_\_\_\_\_), being not less than ten percent (10%) of the total amount payable under the Contract, and shall hold for a period of twelve (12) months after the completion, delivery and acceptance of the M.V. Gemini, Pisces, Scorpio, and Taurus, during which time if the above bounded Principal shall fail to make full, complete and satisfactory repair and replacement or totally protect WETA from loss or damage made evident during said period of twelve (12) months from the date of acceptance of the M.V. Gemini, Pisces, Scorpio, and Taurus, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done on the vessels subject to the Contract, the above obligations in the

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said sum of \_\_\_\_\_ (\$\_\_\_\_\_) shall remain in full force and virtue; otherwise the above obligation shall be void.

Whenever Principal shall be declared by WETA to be in default under the Contract, Surety shall promptly remedy the default, or shall promptly do one of the following at WETA's election:

1. Undertake through its agents or independent Contractors, reasonably acceptable to WETA, to complete the Contract in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including without limitation, all obligations with respect to warranties, guarantees, and the payment of liquidated damages.
2. Reimburse WETA for all costs WETA incurs in completing the Contract, and in correcting, repairing or replacing any defects in materials or workmanship and/or materials and workmanship which do not conform to the specifications in the Contract.

Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing WETA's rights against the others.

No right of action shall accrue on this bond to or for the use of any person or corporation other than WETA or its successors or assigns.

In the event suit is brought upon this bond by WETA, Surety shall pay reasonable attorney's fees and costs incurred by WETA in such suit.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their seals this \_\_\_\_ day of \_\_\_\_\_, 2021, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

\_\_\_\_\_  
(Principal)

NOTE:  
To be signed by Principal  
and Surety and acknowledgement  
and notarial seal attached.

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
(Surety)

\_\_\_\_\_  
(Address)

By: \_\_\_\_\_

By: \_\_\_\_\_