

**MASSACHUSETTS PORT AUTHORITY**  
CAPITAL PROGRAMS AND ENVIRONMENTAL AFFAIRS DEPARTMENT  
SUITE 209S – LOGAN OFFICE CENTER SUITE 209S  
ONE HARBORSIDE DRIVE  
EAST BOSTON MA 02128-2909

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## **REQUEST FOR QUALIFICATIONS**

**MPA CONTRACT NO. M717,**

**CRANE 3 & 4 TROLLEY RAIL AND FESTOON**

**REPLACEMENT, CONLEY TERMINAL,**

**700 SUMMER STREET, SOUTH BOSTON,**

**MASSACHUSETTS**



**SUPPLEMENTAL INFORMATION PACKAGE**

**LEGAL NOTICE**  
**REQUEST FOR QUALIFICATIONS**

The MASSACHUSETTS PORT AUTHORITY (Authority) is soliciting consulting services for MPA CONTRACT NO. **M717 CRANE 3 & 4 TROLLEY RAIL AND FESTOON SYSTEM REPLACEMENT**. The Authority is seeking qualified multidiscipline consulting firm or team, with proven experience to provide professional services including planning, design, bid, and construction related services, including resident inspection, relative to replacement of trolley rail system on both existing ship-to-shore Crane numbers 3 and 4. In addition the festoon (boom and trolley) system of cables will be replaced on both cranes. Additional repairs related to the structural, electrical, and mechanical systems on Massport ship-to-shore Cranes may also be added to this work, if necessary. The Consultant must be able to work closely with the Authority and other interested parties in order to provide such services in a timely and effective manner.

The consultant shall demonstrate experience in several disciplines including but not limited to Low-Profile Ship-to-Shore Crane Design & Operation, Container Port Operations, Structural, Electrical, Mechanical, Waterfront Engineering, Cost Estimating, Utility Design, Construction Phasing, Climate Resiliency, and Sustainable Design.

The contract will be work order based, and Consultant's fee for each work order shall be negotiated; however, the total fee for the contract shall not exceed **\$1,000,000**.

A Supplemental Information Package will be available, on **October 4, 2023** on the Capital Bid Opportunities webpage of Massport <http://www.massport.com/massport/business/bids-opportunities/capital-bids> as an attachment to the original Legal Notice, and on COMMBUYS ([www.commbuys.com](http://www.commbuys.com)) in the listings for this project. If you have problems finding it, please contact Susan Brace at Capital Programs [SBrace@massport.com](mailto:SBrace@massport.com) The Supplemental Information Package will provide detailed information about Scope of Work, Selection Criteria and Submission Requirements.

By responding to this solicitation, consultants agree to accept the terms and conditions of Massport's standard work order agreement, a copy of the Authority's standard agreement can be found on the Authority's web page at <http://www.massport.com/massport/business/capital-improvements/important-documents/>. The Consultant shall specify in its cover letter that it has the ability to obtain requisite insurance coverage.

This submission shall be addressed to Luciana Burdi, Intl. Assoc. AIA, CCM, MCPPO, Director of Capital Programs and Environmental Affairs and received no later than **12:00 Noon on November 16, 2023** Via **Bid Express** <https://www.bidexpress.com/businesses/27137/home>. Any submission which is not received by the deadline shall be rejected by the Authority as non-responsive.

**MASSACHUSETTS PORT AUTHORITY**  
**LISA S. WIELAND**  
**CEO & EXECUTIVE DIRECTOR**

## **SCOPE OF WORK:**

The Authority is seeking qualified multidiscipline consulting firm or team, with proven experience to provide professional services including planning, design, bid, and construction related services, including resident inspection, relative to replacement of trolley rail system on both existing ship-to-shore Crane numbers 3 and 4. In addition the festoon (boom and trolley) system of cables will be replaced on both cranes. Additional repairs related to the structural, electrical, and mechanical systems on Massport ship-to-shore Cranes may also be added to this work, if necessary. The Consultant must be able to work closely with the Authority and other interested parties in order to provide such services in a timely and effective manner.

The consultant shall demonstrate experience in several disciplines including but not limited to Low Profile Ship-to-Shore Crane Design & Operation, Container Port Operations, Structural, Electrical, Mechanical, Waterfront Engineering, Cost Estimating, Utility Design, Construction Phasing, Climate Resiliency, and Sustainable Design.

The scope of work shall include, but not be limited to the following:

- (1) Inspection and evaluation of current trolley/ trolley rail system on ship-to shore crane number 3 and 4.
- (2) Review of previous consultant reports on issues related to Cranes 3 & 4.
- (3) Meet with Conley Terminal Operations and Maintenance team to understand issues with trolley/ trolley rail system;
- (4) Prepare and implement a study of the trolley/trolley rail systems, if necessary, to more fully understand issues compromising those systems;
- (5) Develop recommendations for repair or replacement of existing trolley/ trolley rail system and if necessary, design new trolley/ trolley rail system;
- (6) Design of new boom and trolley cable festoon system to replace existing worn system;
- (7) Inspection, evaluation, and study of other potential issues on Cranes 1, 2, 5, 6, and 7, as well as the two currently inactive cranes on Berth 11, as required;
- (8) Prepare design documents and bid documents for both trolley rail system and festoon system repairs, as well as other issues identified during the work on Cranes 1-7 and the inactive cranes (please note that Massport may also elect to bid out trolley rail system and festoon system repairs separately);
- (9) Prepare engineering cost estimates;
- (10) Provide construction support services, field inspections and qualified structural and electrical resident engineering during construction to ensure contractor's compliance;
- (11) Manage commissioning of the systems and closeout of the construction contract.

## **CONLEY TERMINAL:**

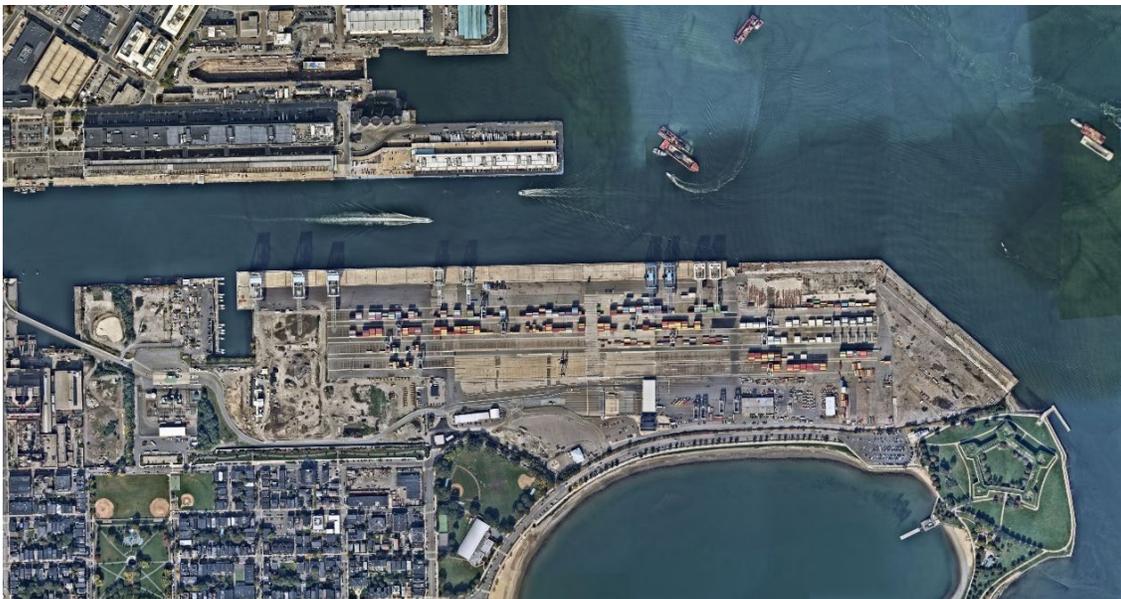
The Port of Boston's Paul W. Conley Terminal (Conley Terminal) is owned and operated by the Massachusetts' Port Authority (Massport). Conley Terminal is the only full-service container terminal in New England. All of the world's leading container lines ship through the Port of Boston's Conley Terminal, moving nearly 1.5 million metric tons of cargo each year. The Terminal also services warehousing and distribution for all six New England states. Conley Terminal is an economic engine fueling the New England regional economy. The terminal facilitates the movement of goods to New England's markets with speed and efficiency ensuring that the region's 14 million consumers have the products they need, when they need them, while also providing a gateway to the world for the region's exporters.

The Working Port supports \$8.2 billion in economic impact annually and more than 9,000 jobs. Over 2,500 businesses throughout New England utilize Conley Container Terminal. In 2018, Conley Container Terminal saw record-breaking growth in container volume, setting a record of more than 298,000 TEUs (twenty-foot equivalent units) shipped through the terminal.



Several top shipping lines call the Port of Boston on a weekly basis including MSC, COSCO, OOCL, Evergreen and CMA CGM, while ZIM calls on a bi-weekly basis. There are now six services connecting New England to China, North Europe, Southeast Asia, including Vietnam and India, the Mediterranean, Middle East, and Latin America.

The Port of Boston is an economic engine fueling the New England regional economy. This is a testament to the technology, the convenience and the efficiency of the only full-service container terminal in New England. Conley Terminal handles nearly 1.5 million metric tons of cargo each year. Key containerized cargos include: Seafood, Beer/Wine, Footwear, Apparel, Furniture, Waste paper, and Scrap metal.



*Existing Conley Terminal*

Over the last decade Massport has invested \$850 million in waterside and landside infrastructure as part of the Conley Terminal Modernization Program (the Program), to keep Conley Terminal competitive and cost-effective. The Program includes the Boston Harbor Dredging Project, a \$350 million partnership between the U.S. Army Corps of Engineers, the Commonwealth of Massachusetts, and Massport. The project was completed in June of 2022, dredging the harbor to -47 feet, and expanding the turning basin to 1,725 feet. The deepening of the main ship channels enables the port to better accommodate the large container vessels calling today and even larger ships expected in the future. As part of the \$215 million New Berth 10 project, Massport constructed a brand new berth on the northern side of the Former Coastal Oil site, and added three new ship-to-shore cranes with lift height of 160 feet above the rail and an outreach of 22 containers wide. The cranes were commissioned in October 2021. The Port of Boston now operates nine ship-to-shore

cranes at Conley Terminal, although two of the nine cranes are anticipated to be decommissioned in the near future.



*Cranes 1 and 2*

Other Program improvements at Conley Terminal include the deepening of Berth 11 to 50 feet (in addition to the new 50-foot Berth 10), expanded reefer storage, and new in-and-out gate facilities, all of which were facilitated by the award of \$42 million in funding as part of an overall program of \$103 million in spending from a 2016 FASTLANE Grant issued to Massport by the United States Department of Transportation Maritime Administration (MARAD).

The Port of Boston also now operates a fleet of 16 RTG's, six of those RTGs are currently slated to be retrofitted with hybrid drive systems and motors before the end of 2024. A \$75 million Dedicated Freight Corridor was opened in 2017 for the trucking community to conveniently access the interstate highways. Conley Terminal is able to support continued growth by handling the larger ships now transiting through the Panama and Suez Canals. Key containerized cargos include: Seafood, Beer/Wine, Footwear, Apparel, Furniture, Waste paper, and Scrap metal.

### **CONLEY TERMINAL SHIP TO SHORE CRANES**

The Port of Boston currently utilizes nine ship-to-shore cranes, although two of the nine cranes are currently inactive, and are anticipated to be decommissioned in the near future. In addition to the three newly-acquired low profile ship-to-shore cranes at Berth 10 (numbers 5, 6, and 7), Massport owns and operates four other, older, ship-to-shore cranes (numbers 1 through 4) and two inactive cranes:



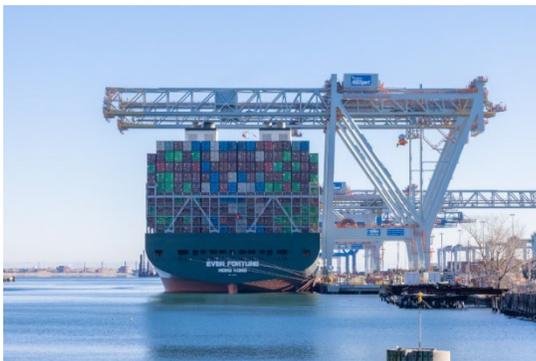
- Low Profile Ship-to-shore Cranes 1 and 2 were originally designed by Kocks Crane and Marine, built by Samsung Heavy Industries, and delivered to the Port of Oakland in 1991. In 2010 these cranes were purchased from the Port of Oakland by Massport and transported to the Port of Boston. Cranes 1 and 2 received major upgrades to mechanical and electrical systems in 2017. Cranes 1 and 2 were recently painted light blue, and operate primarily on Berths 11 and 12.

- Low Profile Ship-to-shore Cranes 3 and 4 were manufactured by the Paceco Corporation in 1992 for Massport. Ship-to-shore Cranes 3 and 4 are Paceco Portainer type cranes with a weight capacity of 50 long tons. Most of the electrical equipment and devices on the cranes were installed at the time the cranes were built. Some upgrades and modifications were done on the control systems of each crane in 2010. Cranes 3 and 4 are painted dark blue, and operate primarily on Berths 11 and 12.
- Massport added three new low-profile ship-to-shore cranes (Cranes 5, 6, and 7) with a lift height of 160 feet above the rail and an outreach of 22 containers wide, which were manufactured by ZPMC, and were commissioned in October 2021. Cranes 5, 6, and 7 are painted light blue. All three new ship-to-shore cranes operate on Berth 10 and cannot move onto Berths 11 or 12.
- Two low profile ship-to-shore cranes that were constructed by the Paceco Corporation in 1980, are painted light blue, are currently inactive, and sit on Berth 11, immediately adjacent to Berth 10, between Cranes 5 and 4.



*Cranes 3 and 4*

## **Scope of Work**



*New Cranes 5, 6 and 7*

In 2018 Massport hired HDR Engineering, Inc. (HDR) to perform mechanical and electrical inspections of Ship to Shore Cranes 3 and 4 in response to issues noted by Massport Maritime Operational Personnel. The HDR report found both ship-to-shore cranes 3 and 4 both had following mechanical and electrical issues:

### **Mechanical**

- Premature wear of crane hoist trolley wheels, which require the wheels to be replaced frequently (i.e., almost on an annual basis); and
- Hoist trolley rail wear due to a variety of misalignment issues.

### **Electrical**

- Boom and trolley festoon cable systems that are in bad condition due to weathering and UV damage to the outer jackets of the cables.

As part of the scope of work for this project, Massport seeks to study the issues and to design and complete necessary repairs to address these issues on Cranes 3 and 4. However, it may also become necessary to make additional repairs to ship-to-shore cranes as part of this work. The selected designer for the M717 project will ultimately produce construction bid documents which will allow Massport to procure the services of a qualified contractor to make necessary repairs.

Key tasks included but are not limited to:

### Investigation and Data Gathering

This task is anticipated to include inspection and evaluation of the existing conditions of Cranes 3 and 4, as well as other cranes (as required). More specifically, an evaluation of the trolley/trolley rail system on Cranes 3 and 4 will be required in order to diagnose the issue and determine possible solutions. In addition, this task will include review of the existing festoon systems for Cranes 3 and 4.

This task will also include review of previous consulting reports, and meeting with the Conley Terminal Operations and Maintenance team to understand the issues with the existing systems on Cranes 3 and 4, including the trolley/trolley rail system and festoon systems. As part of the M717 Supplemental Information Package, Massport is providing HDR's 2018 Mechanical and Electrical Inspection Report of Ship to Shore Cranes 3 and 4 (see **Attachment A**).

This task will also include studies, as required, to assist in definition and evaluation of the existing problems facing Massport personnel. Studies are specifically anticipated to be necessary to solve the issues associated with the trolley/trolley rail system for Cranes 3 and 4, for which it is currently understood that there may be many possible sources; however, other issues on Cranes 1-7 (as well as the two currently inactive cranes on Berth 11) may be studied. The results of such studies will be presented to Massport for review before moving into the Preliminary Design phase.



Photo above shows crane hoist trolley, trolley wheels, and trolley rail.

### Preliminary Design

This task is anticipated to include preparation of recommendations for repair or replacement of the existing trolley/trolley rail systems and the existing festoon systems (or other identified issues on any of Cranes 1-7 or the two inactive cranes on Berth 11) for Massport's review. Once the final scope of work has been approved by Massport, this task will include preliminary designs for crane repairs, preparation of preliminary design drawings, preparation of a design schedule and an anticipated construction schedule, preparation of a preliminary cost estimate and meetings with Massport to present the design.

### Final Design and Bid Documents

This task is anticipated to include preparation of final construction and bid documents, including construction plans, technical specifications, an anticipated construction schedule, a final constructability review, and a construction level cost estimate. Please note that Massport may elect to bid the trolley/trolley rail system repairs and the festoon system repairs (or other items) out in separate bid packages.

### Bid Phase Services

This task is anticipated to include providing assistance to Massport during the bidding process, including attendance at the pre-bid conference, as necessary, preparation of addenda as may be required, and assistance in responding to questions from bidders during the bidding process. Additionally, this task will include review of bids and preparation of a recommendation as to qualifications of the bidders.

### Construction Phase Services

This task will include attendance at the pre-construction meeting, review of contractor submissions, periodic inspections/coordination for construction activities, attendance at job site meetings, visits to verify work progress and ongoing activities, resident engineering, provision of meeting minutes for site meetings, review of change orders, responses to requests for information, review of submittals, review of payment applications, commissioning of new systems, final site inspections, and preparation of record drawings and project close-out information.

### **EVALUATION CRITERIA:**

The submission shall be evaluated on the basis of the following equally weighted criteria:

- (1) Demonstrated experience and knowledge of the team for similar projects of similar size and complexity particularly important to demonstrate for the Project Manager. Highlight the experience and expertise for major sub-consultants and their assigned staff. Familiarity with public construction procurement under MGL Ch. 30, and
- (2) Project understanding and proposed technical approach including QA/QC process during document preparation, cost management and scheduling capabilities, construction oversight, ability to plan and perform work with minimal disruption to operations, and
- (3) Demonstrated experience in integrating and managing BIM/VDC in the planning, design and construction. Experience of utilizing Lean Design & Construction (Last Planner System®, Scrum or others tools) to increase the reliability and significantly improve projects and teams' performance, and
- (4) Firms are encouraged to demonstrate “outside of the box” thinking for examples of inclusion of sustainable practices into its projects and specify how those practices may be applied to this project proposal. Firms should also specify how best practices in environmental stewardship will be applied to this project, and
- (5) Proposed approach to enhance diversity and inclusion of the project team to increase the pool of consultants working on the Authority’s projects. For those M/WBE firms proposed, please describe type and/or category of work (i.e. architecture, structural, Lean, etc.); include the specific roles to be played by M/WBE, and the extent to which such M/WBE involvement is anticipated as of date of the proposal submission, (% goal)



Photo above shows a portion of festoon cable system. Note deterioration of outer jacket.

The Authority recommends that each evaluation criteria is addressed in the response as a separate section.

The selection shall involve a two-step process including the shortlisting of a minimum of three firms based on an evaluation of the Statements of Qualifications received in response to this solicitation, followed immediately by a final selection of the consultant by the Authority. The Authority reserves the right to interview the firms prior to final selection, if deemed appropriate.

### **SUBMISSION REQUIREMENTS:**

Each submission shall include a Statement of Qualifications that provides detailed information in response to the evaluation criteria set forth below and include Architect/Engineer & Related Services questionnaires SF 330 ([www.gsa.gov/portal/forms/download/116486](http://www.gsa.gov/portal/forms/download/116486)) with the appropriate number of

Part IIs. M/WBE certification of the prime and subconsultants shall be current at the time of submittal and the Consultant shall provide a copy of the M/WBE certification letter from the Supplier Diversity Office for M/WBE, within its submittal.

All individuals responsible for technical disciplines shall, upon commencement of the project, be registered Architects or Engineers, in that discipline, in the Commonwealth of Massachusetts.

The Consultant shall specify in its cover letter that it has the ability to obtain requisite insurance coverage.

***The Authority may reject any application if any of the required information is not provided: Cover Letter, Insurance Requirements and SF330 Part IIs for the Prime and every sub-consultant. Make sure that the Cover Letter is signed “Under the pain and penalty of perjury”, and that you mention the Insurance in the Cover Letter itself.***

RFQ Instructions for Electronic Submission:

Electronic submissions will be via <https://www.bidexpress.com/businesses/27137/home>. Please refer to <https://www.massport.com/massport/business/bids-opportunities/capital-bids/> website for instructions on how to submit an electronic RFQ submittal.

1. Download RFQ documents in Bid Express and fully review them before submitting your electronic Statement of Qualifications.
2. Upload ALL required documents listed below in accordance with the instructions on Bid Express and those in the RFQ. Failure to include all required materials or to provide materials in a format different than that specified may have a negative effect on the evaluation or result in disqualification.
3. Click the “Submit” button in Bid Express to review your response for completeness and to encrypt/submit your response electronically.

File Naming Convention:

MPA project #\_Company Name-YY-MM-DD.pdf  
*Example:* L2302\_Massport-23-04-24.pdf

Files submitted via Bid Express must follow the above filing naming convention specific in the “Description” field for each document in the “Required Document Upload” table in Bid Express. The file name and description entered during the file upload process ensures each file can be readily identified by Massport.

All submissions must be in .pdf format and must be in such a way that they can be read on a computer and printed on 8 ½” x 11” paper, unless otherwise specified.

Please consider the number of pages being submitted, including the following:

- Resumes of the top 10 key individuals, each limited to one (1) page under SF 330, Section E,
- No more than ten (10) projects each limited to one (1) page under SF 330, Section F,
- No more than ten pages (5 sheets) between SF 330 Section H and “other relevant materials” section of the submission.

By responding to this solicitation, consultants agree to accept the terms and conditions of Massport’s standard work order agreement, a copy of the Authority’s standard agreement can be found on the Authority’s web page at <http://www.massport.com/massport/business/capital-improvements/important-documents/>. The Consultant shall specify in its cover letter that it has the ability to obtain requisite insurance coverage.

In recognition of the unique nature of the project and the services required to support it, the Authority has scheduled a Consultant Briefing **via zoom** at **11:00 AM on October 13, 2023** via the following link: <https://massport.zoom.us/j/84338871878?pwd=WGdxR1JEdjJCcHRoLzJTT3Jyd09EUT09>, Meeting ID: 843 3887 1878, Passcode: 915179, Dial In Number: (646) 518-9805. At this session, an overview of the project will be provided, the services requested by the Authority will be described, and questions will be answered.

This submission, shall be addressed to Luciana Burdi, Intl. Assoc. AIA, CCM, MCPPO, Director of Capital Programs and Environmental Affairs and received no later than **12:00 Noon on November 16th, 2023** via **Bid Express** <https://www.bidexpress.com/businesses/27137/home>. Any submission which is not received by the deadline shall be rejected by the Authority as non-responsive. Any information provided to the Authority in any Proposal or other written or oral communication between the Proposer and the Authority will not be, or deemed to have been, proprietary or confidential, although the Authority will use reasonable efforts not to disclose such information to persons who are not employees or consultants retained by the Authority except as may be required by M.G.L. c.66.

The procurement process for these services will proceed according to the following anticipated schedule:

<b>EVENT</b>	<b>DATE/TIME</b>
<b>Solicitation: Release Date and Supplemental Package Available</b>	<b>October 4<sup>th</sup>, 2023</b>
<b>Consultant Briefing</b>	<b>October 13<sup>th</sup>, 2023 at 11:00 AM</b>
<b>Deadline for submission of written questions</b>	<b>October 19<sup>th</sup>, 2023 at 12:00PM (noon)</b>
<b>Official answers published (Estimated)</b>	<b>October 26<sup>th</sup>, 2023</b>
<b>Solicitation: Close Date / Submission Deadline</b>	<b>November 16<sup>th</sup>, 2023 at 12:00PM (noon)</b>

Times are Eastern Standard Time (US).

Questions may be sent via email to [CPBidQuestions@massport.com](mailto:CPBidQuestions@massport.com) subject to the deadline for receipt stated in the timetable above. *In the subject lines of your email, please reference the MPA Project Name and Number.* Questions and their responses will be posted on Capital Bid Opportunities webpage of Massport <http://www.massport.com/massport/business/bids-opportunities/capital-bids> as an attachment to the original Legal Notice and on COMMBUYS ([www.commbuys.com](http://www.commbuys.com)) in the listings for this project.

**PROJECT REQUIREMENTS:**

Massport, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, all bidders/proposers will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

Project requirements include, but are not limited to:

Terms & Conditions:

By responding to this solicitation, consultants agree to accept the terms and conditions of Massport's standard agreement, a copy of the Authority's standard agreement can be found on the Authority's web page at <http://www.massport.com/massport/business/capital-improvements/important-documents/>.

Additional Requirements and Guidelines:

As deemed appropriate and required by the Authority or the project's needs, the consultant agrees to follow the requirements set forth in the various Guidelines and Standards that can be found on the Authority's web page at <http://www.massport.com/massport/business/capital-improvements/important-documents/>.

M/WBE Participation:

The Authority is committed to helping address the disparity in the participation of minorities and women in design. Along with the M/WBE commitments which reflect ownership status set forth below, the Authority's Designer Selection Panel are interested in learning about the applicant firm's approach and commitment to diversity in its HR policy, its overall business practices and in assembling this Project team. Firms are encouraged to be creative in assembling their teams by considering dividing the work of a particular discipline, when appropriate, including work it would typically provide in house, partnering, offering opportunities to qualified firms with which it or its consultants have not previously worked or firms that may have less experience working on public projects, and other means that provide additional opportunities for M/WBE firms in new ways.

Applicants, as prime firm and team lead, in their application, should directly address their approach to enhancing diversity in assembling the team for this Project, including a clear description of each working relationship, and in their overall HR and business practices. The Authority strongly encourages teams composed of firms that expand the overall breadth of different firms working on Authority Projects.

The Commonwealth of Massachusetts establishes combined M/WBE participation goals of 21.6% for design of state-funded and state-assisted projects. Massport will be highly interested in those proposals whose strategy and approach exceed the stated goal.

Applications from M/WBE firms as prime consultant are encouraged. Applicants that are themselves M/WBE certified may use their participation toward meeting the determined work order goal for the certification they hold and will be required to bring participation by additional firm(s) that holds the necessary certifications to meet or exceed the goals assigned. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet the M/WBE goals. Consultants to the prime can team within their disciplines in order to meet the M/WBE goals, but must state this relationship.

Please note that only firms that are currently certified as M/WBE in the Commonwealth of Massachusetts be credited toward meeting Project M/WBE goals.

**MASSACHUSETTS PORT AUTHORITY  
LISA S. WIELAND  
CEO & EXECUTIVE DIRECTOR**