

Metropolitan Washington Airports Authority
PROCUREMENT AND CONTRACTS DEPT.
AMENDMENT OF SOLICITATION

Metropolitan Washington Airports Authority Procurement and Contracts Dept., MA-29-IAD Washington Dulles International Airport 45025 Aviation Drive, Suite 240 Dulles, VA 20166	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #f2f2f2;">1A. AMENDMENT OF SOLICITATION NO.</td> <td style="background-color: #f2f2f2;">1B. DATED</td> </tr> <tr> <td>RFP-19-11458</td> <td>May 13, 2019</td> </tr> <tr> <td style="background-color: #f2f2f2;">2A. AMENDMENT NO.</td> <td style="background-color: #f2f2f2;">2B. EFFECTIVE DATE</td> </tr> <tr> <td>Three (003)</td> <td>June 17, 2019</td> </tr> </table>	1A. AMENDMENT OF SOLICITATION NO.	1B. DATED	RFP-19-11458	May 13, 2019	2A. AMENDMENT NO.	2B. EFFECTIVE DATE	Three (003)	June 17, 2019	
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RFP-19-11458	May 13, 2019									
2A. AMENDMENT NO.	2B. EFFECTIVE DATE									
Three (003)	June 17, 2019									
The solicitation identified in Block 1A is amended as set forth in Block 3. Hour and date specified for receipt of offers <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and dated specified in the solicitation or as amended, by one of the following methods: (a) by completing Block 4 and returning copy of the amendment; (b) by acknowledging receipt of this amendment on the Solicitation Offer and Award Sheet, Block 13. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.										
3. DESCRIPTION OF AMENDMENT										
<p>The Metropolitan Washington Airports Authority Solicitation RFP-19-11458, entitled “Design-Build Live Fire Training Facility Improvements Project at Washington Dulles International Airport” is amended as follows:</p> <ol style="list-style-type: none"> 1. Section X Attachments – 01 – Statement of Work - Live Fire Training Facility Improvements, dated March 29, 2019 is hereby deleted in its entirety and replaced with the attached Revised SOW, dated June 17, 2019. Revised are Task 1 (2), Task 2 (5 & 8), Task 4 (1 & 3) and Task 5. 2. Section X Attachments – 10 – Add Record Drawings: 60 Drawing Sheets available, Dated December 8, 1995 3. The due date and time remains unchanged at June 26, 2019, no later than 1:00 pm local time. 4. All other terms and conditions of the solicitation remain unchanged. 										
Except as provided herein, all terms and conditions of the document referenced in Block 1A, as heretofore changed, remain unchanged and in full force and effect.										
4A. NAME AND TITLE OF OFFEROR	4B. SIGNATURE	4C. DATE								

DESIGN BUILD SERVICES

LIVE FIRE TRAINING FACILITY IMPROVEMENTS RFP-1-19-11458

Dulles International Airport

STATEMENT OF WORK (Revised)

June 17, 2019

Overview

MWAA operates an Aircraft Live Fire Training facility to meet the Live Fire Drill requirements for its personnel as per 14 CFR Part 139 and Federal Aviation Administration Advisory Circulars (AC) 150/5210-17C for Airport Rescue and Firefighting (ARFF) programs and 150/5220-17B for ARFF Training Facilities.

The original facility was occupied in 1997 and was utilized for training firefighters on staff. MWAA calls upon the live fire training facility to provide training for each of the airport ARFF staff one to two times annually.

There are areas of deficiencies in the condition of the facility and currently, limits the training capability at MWAA. Only 25 percent of the burn area around the fuel spill area is functioning, in addition to other various elements and components that are non-functioning or near end of life. The operator's workstation at the control tower is outdated and would require a complete replacement.

The purpose of this project is to rehabilitate the existing Live Fire Training Facility by repairing, replacing and updating the areas of deficiencies summarized below. The rehabilitation will allow the facility to be fully operational to provide necessary training to MWAA ARFF personnel.

Scope

The project will be executed in design build delivery. The primary scope requires providing a specific type of work on aircraft fire trainers that are fueled by propane. There are five areas of improvements needed at the facility. The work shall be comprised of the following tasks, at a minimum:

TASK 1 – Trainer Infrastructure

The trainer infrastructure consists of the cooling water system, ventilation system, propane storage and distribution system and fuel spill bunkers. The infrastructure is generally in good condition with the exceptions of the few components in need of improvements.

- 1) The cistern pump that reclaims water from the burn pit is not maintaining pressure to be functioning properly. Evaluate and calculate performance (flow, pressure, etc) required for proper operation. Replace pump and motor with proper sizing. Existing pump is a 150HP pump.
- 2) Cistern holding tank may be leaking water and needs maintenance repair. Assess and evaluate the tank. Provide repairs to the tank to ensure leakage provision.
- 3) Manual vapor shutoff valves of the propane tank have valve stems that are binding making it difficult to operate the valves. Replace shutoff valves.

- 4) Tank pressure relief valve is past its useful life and requires replacing. Replace pressure relief valve.
- 5) Pressure regulating bypass valves are hard piped currently. There are significant vibrations experienced at the valves and replacement to flexible gas lines will be beneficial to longer life and usage. Replace with flexible gas lines.

Design Builder shall ensure the following:

- a) The work is in accordance with FAA Advisory Circular 150/5220-17B.
- b) The work is in compliance with NFPA.
- c) The work is coordinated for proper outage.
- d) The work of the pump shall comply with NEMA MG-1 designation for premium efficient motors. Shall be for hydronic application. Provide with durable, weather-resistant motor frame material. Provide with controller to meet design demands of the pump. Provide pump type equivalent to existing.
- e) The work of the valves shall comply with ASME, ASTM, and/or ANSI based on application. Provide valve types equivalent to existing. The valves provided shall be for propane gas application.
- f) The work of the flexible gas lines shall comply with ANSI and ICC. Provide corrugate stainless steel tubing, semi-rigid, flexible piping. Ensure proper sizing for integration with existing system. Flexible piping shall be for propane gas application.
- g) The work shall ensure for proper sizing of equipment and appurtenances.
- h) The work shall be furnished with all required accessories.
- i) The work shall be coordinated with all other trades as needed to ensure proper installation.
- j) The work shall be completely operational.

TASK 2 – Fire Generation and Control

Fire generation and control system is in need of much improvements and replacements.

- 1) The fuel spill manifold system utilizes eight manifold assemblies. Due to leaking valve stems, several of them have been mechanically isolated. Valve leaking is occurring at the stem due to failure of the valve packing seals. Replace leaking valve stems of the manifold assemblies with similar to match existing.
- 2) Pneumatic valve enclosures are affected by valve leaks and have been taken out of service. Replace steel Pneumatic Valve enclosures.
- 3) Steel enclosures housing the control components are showing significant amounts of corrosion. Replace steel enclosure.
- 4) The steel enclosures containing control components for the Pilot Control are showing significant amount of corrosion. Replace steel Pilot control enclosures.
- 5) There is no support for existing Programmable Logic Controller (PLC) and software for I/O rack assemblies. Replace PLC to ensure safe and operable fire training. Provide PLC with available vendor/manufacturer customer support.
- 6) Fuel Spill Operator Workstation is showing age with antiquated software. Upgrade software to fuel spill operator workstation.
- 7) Many fuel spill burner elements are showing sign of degradation. Inspect and evaluate all 4 quadrants of burner elements. Repair/replace up to 25% of total elements as necessary.
- 8) Agent thermocouples need to be inspected and evaluated. Thermocouples shall be repaired/replaced.

- 9) Thermocouple junction box enclosures are significantly corroded. Replace junction box enclosures.

Design Builder shall ensure the following:

- a) The work is in accordance to FAA Advisory Circular 150/5220-17B.
- b) The work is in compliance to NFPA.
- c) The work shall account for burner rock removal and refill.
- d) The work is coordinated for proper outage.
- e) The work of the enclosures shall comply with NEMA. Provide stainless steel 304 for high corrosion resistance. Coordinate to accommodate existing condition and integration.
- f) The work shall ensure proper sizing of equipment and appurtenances.
- g) The work shall be furnished with all required accessories.
- h) The work shall be coordinated with all other trades as needed to ensure proper installation.
- i) The work shall be completely operational.

TASK 3 – Safety Systems

The safety systems are generally functioning properly. However, an update and improvement will allow for greater security.

- 1) The radio emergency stop switch are functioning but working intermittently and causing nuisance shutdowns. Replace radio emergency stop switch.
- 2) The existing propane detection system utilizes catalytic bead type sensors. These sensors were delivered originally with the facility. Replace propane detection sensors from the propane vault.

Design Builder shall ensure the following:

- a) The work is in accordance to FAA Advisory Circular 150/5220-17B.
- b) The work is in compliance to NFPA.
- c) The work of the stop switch for radio emergency shall be similar to existing. Coordinate for integration with existing system.
- d) The work of the propane detection system shall be infrared sensor type. Provide high range hydrocarbon sensor with SIL certification. Sensor shall contain all necessary optics, electronics and firmware to provide output for propane sensing. Shall have user calibration capability.
- e) The work is coordinated for proper outage.
- f) The work shall be furnished with all required accessories.
- g) The work shall be coordinated with all other trades as needed to ensure proper installation.
- h) The work shall be completely operational.

TASK 4 – Control Building

The control building is in fair condition for the age. However, there are maintenance issues and some shortcomings that need improvements.

- 1) Flashings around window openings need to be inspected and evaluated. Repair flashings as needed.
- 2) There are many damaged ceiling tiles. Replace damaged ceiling tiles.
- 3) Evaluate and repair existing HVAC system serving this building.

- 4) Northern most windows on the east and west sides of the building have lost their seal. Replace window seals.
- 5) There are signs of water leakage on the second floor. Inspect and verify integrity of roof membrane and flashings. Repair up to 40% of the total roof area as needed.

Design Builder shall ensure the following:

- a) The work is in accordance to FAA Advisory Circular 150/5220-17B.
- b) The work is in compliance to Virginia USBC.
- c) The work is in compliance to ASHRAE.
- d) The work is coordinated for proper outage.
- e) The work shall be furnished with all required accessories.
- f) The work shall coordinate all other trades as needed to ensure for proper installation.
- g) The work shall be completely operational.

TASK 5 –Props

Additional prop for the training facility to enhance training exercises.

- 1) Provide a mobile aircraft fire trainer/simulator.

Design Builder shall ensure the following:

- a) The work is in accordance to FAA Advisory Circular 150/5220-17B.
- b) The work is in compliance to NFPA.
- c) The work shall be furnished with all required accessories.
- d) The work shall coordinate all other trades as needed to ensure for proper installation.
- e) The work shall be completely operational.
- f) The work of the trainer shall include at minimum:
 - I. Mobile trainer/simulator not exceeding 50 feet in length.
 - II. Non-fixed, mobile option with trailer.
 - III. Propane fired. Provision of DOT approved propane tank required.
 - IV. Stainless-steel construction for non-corrosion and extended life use
 - V. Completely self-contained for power.
 - VI. Both high-wing or low-wing will be considered.
 - VII. Variety of fire training arrangements (e.g. engine fire, wheel well, wing, tail, cockpit, etc.)
 - VIII. Safety provisions.

Review and Research

The Airports Authority will make available its files of documents related to existing conditions. The Design-Build Contractor shall be responsible for the return of all documents upon completion of this project. The Design Build Contractor will be provided access to record documents, however such information must be verified by the Design Build Contractor for accuracy and completeness. The Design Build Contractor shall coordinate all field work and access to the site with the Airports Authority. The Airports Authority will review all work prepared by the Design Build Contractor for compliance with the Design Manual, requirements stated herein and other requirements which may be identified during the development of the project and will advise the Design Build contractor of its findings. Review by the Airports Authority does not relieve the Design Build Contractor of responsibility for the technical accuracy of its work and for conformance to contractual requirements.

Any work that does not meet contractual requirements shall be corrected by the Design Build Contractor without cost to the Airports Authority.

Meetings

The Design Build Contractor shall prepare agendas and conduct meetings with the Airports Authority and others as required completing the work. Minutes will be prepared and distributed by the Design Build Contractor within five days of the meeting.

Interviews with Authority offices will be held for the purpose of establishing requirements, reviewing progress and resolving issues affecting the completion of the project. These meetings will be held at the offices of the Airports Authority.

The meetings include but are not limited to the following, will be held at Dulles International Airport and will require attendance and participation by the Design Build Contractor and any applicable sub-consultants as identified by the Design Build Contractor:

- Kick-off meeting with the Airports Authority and Design Build contractor
- On site review meeting with Authority offices including Building Codes and Dulles Maintenance and Engineering offices to determine requirements
- 60% Design Documents review meeting
- 90% Design Documents review meeting
- 100% Final Design Documents review meeting
- Up to 3 additional meetings as required by the COTR.

In addition to regular working meetings with the Authority offices and user groups, the Design Build Contractor shall anticipate providing a complete presentation for requirements and documents that will be used in procuring work to meet Authority needs and requirements.

The Design Build contractor will be responsible for the preparation of all documents, schedules, reports, calculations and construction in accordance with the requirements of the current edition of the Metropolitan Washington Airports Authority's Design Manual, its appendixes, and all applicable Codes and the 2015 Virginia Construction Code. If a new edition of the Design Manual is issued during the design of the project, the A/E will be responsible for incorporating the requirements of the new manual up to the 60% design submission.

Cost Proposal

Design Build cost proposals, with subtotals for labor and expenses shall clearly identify work elements required for the project and the level of effort and the cost associated with completing each element of design and construction.

Proposals should be formatted using Excel spreadsheets beginning with a rollup sheet that summarizes costs by phase and discipline, supported by supplemental sheets as needed to establish the basis for the proposed fees. Unit costs may include cents; however, line totals should be rounded to the nearest dollar.

- The form of the proposal shall be a lump sum amount for all professional services and related expenses required to perform the construction work.
- Payment of overtime and premiums; The Design Build contractor shall not be entitled to any premium costs for overtime worked without prior approval of the Contracting Officer.

Required Services / Deliverables

The Design Build contractor shall provide all conceptual, engineering, design, field and project management services including all required professional disciplines. The Design Build contractor shall provide a Statement of Understanding of the efforts necessary to successfully complete all the tasks described in the Statement of Work. The Design Build contractor shall indicate their technical methodology and expected levels of effort to satisfy the Statement of Work.

A. Drawings

The DESIGN Build contractor shall prepare all construction drawings as necessary to thoroughly define all project requirements. Drawings shall be prepared on CADD to the uniform standard policies and procedures for design and drafting work as established in the latest version of the Authority CADD Design Manual. Standard Authority title blocks and cover sheets shall be used. Drawing size shall be 22”X 34”. Drawings which are not fully legible when reduced to half size will not be accepted.

B. Specifications

The Design Build contractor shall prepare construction specifications that include project requirements.

- Design Build services required during design build include but are not limited to the following:
- Attend kick-off meeting
- Review existing facility documentation
- Review meetings with Authority offices
- Management Presentations

The Authority will assume full and complete ownership of all deliverables produced under this contract, including drawings, reports and all final documents.

Deliverables	60% Submittal	90% Submittal	Final Submittal	Remarks for Final Documents
Drawing - Half Size	15	15	2	Sign & Seal Final
Mylar-Full Size Title Sheet	N/A	N/A	1	Sign & Seal Final
Specifications	8	8	2	Sign & Seal Final
Design Report	14	14	2	Sign & Seal Final
Construction Schedules	6	6	2	Sign & Seal Final
Long Lead Items	3	6	2	Sign & Seal Final
CD's	8	8	2	Native & PDF Formats
Building Code Compliance and A/E Certification	N/A	N/A	Authority Design Manual Section II, 2.5.7	Sign & Seal Final [2]

Notes:

1. All drawings are to be fully legible when reduced to half size.
2. A/E required to submit: (3) sets of sign/sealed (Virginia) full size drawings; sign/sealed letters or forms related to Code Compliance for Construction Permit, in compliance with Building Codes Manual.

C. Environmental

The Design Build contractor shall provide all environmental services as necessary to comply with the permit office.

D. Unifier

The Metropolitan Washington Airports Authority has implemented Oracle Primavera Unifier (*Unifier*) as the Project Management/ Electronic Document Management System for Design Department Projects/Task Orders. *Unifier* will be used to ensure proper handling of incoming/outgoing documentation and sequential logging of incoming/outgoing correspondence to Design Consultants. Also, *Unifier* will be used for document review, project reporting, and ultimately, as the project archive. The process will be from start (NTP) to the completion of the Task Order contract.

It is mandatory that any design coordination and the transmittal of 'in progress' drawings and specifications be controlled, recorded, and monitored utilizing *Unifier* software.

The Project Team will have the facility to issue and receive documentation electronically. However, it must be noted that copies of certain documentation shall be issued, and signed, in hardcopy original form as described in the Scope of Work and Authority Design Manual.

The contractor is to allow within the Proposal technicians and document controllers to adequately manage electronic and hardcopy document management for the duration of the Task Order.

Project Schedule

NTP Design Build Construction Documents

Submittal of 60% Construction Documents 30 days from NTP

Authority Document review 7 days

Submittal of 90% Construction Documents 17 days

Authority Document review 7 days

Submittal of Final Construction Documents 14 days

Construction / Installation 40 days

Total Duration 115 days

Supplemental Information

1. The Project Name to appear on all contract documents is:
Live Fire Training Facility Improvements
2. The Project Drawing Number:
3. Signature block information:
Accepted by: Aaron Lee, Design Project Manager
Submitted by: Moe Wadda, Manager of Design
Approved by: Roger Natsuhara, Vice President for Engineering