

**US Army Corps  
of Engineers**  
Louisville District

---

# **Solicitation For**

## **Repair Aircraft Maintenance B1455 for MH-139, Maxwell AFB, AL**

**P2: 496395**

**Design-Bid-Build**

**Specifications - Vol 1 of 3  
Certified Final Design**

**29 December 2022  
W912QR23R0003**

**ARIMS: 200A  
Disposition: Maintain for 15yrs after construction**

<b>SOLICITATION, OFFER, AND AWARD</b> <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO.  W912QR23R0003	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED  29-Dec-2022	PAGE OF PAGES  1 OF 93
<b>IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.</b>				
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.		6. PROJECT NO.	
7. ISSUED BY CODE W912QR  U. S. ARMY ENGINEER DISTRICT, LOUISVILLE 600 DR. MARTIN LUTHER KING, JR. PLACE ROOM 821 LOUISVILLE KY 40202-2239  TEL: 502.315.7494 FAX:		8. ADDRESS OFFER TO <i>(If Other Than Item 7)</i> CODE  <div style="text-align: center; font-weight: bold; padding: 10px;">See Item 7</div> TEL: FAX:		
9. FOR INFORMATION CALL:	A. NAME LEVIR SPETH		B. TELEPHONE NO. <i>(Include area code) (NO COLLECT CALLS)</i> 502.315.6199	
SOLICITATION				
<b>NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".</b>				
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS <i>(Title, identifying no., date):</i>  Repair Aircraft Maintenance Bldg. 1455 for MH-139 Beddown at Maxwell AFB, AL.  Estimated Construction Cost is between \$5M and \$10M per FAR 36.204.  Funds are not presently available for this acquisition. No contract award will be made until appropriated funds are made available.  NAICS code 236220. Size Standard \$39,500,000. Please note that business size in the System for Award Management (SAM) is determined by the NAICS code. If the vendor size is not listed correctly for a particular NAICS code in SAM the business will be considered other than a small business.  This is a Full and Open procurement. In accordance with Federal Acquisition Regulation 19.1307, the project requires the HUBZone 10% price evaluation.  Central Contractor Registration and ORCA are now available through SAM, available at <a href="http://www.sam.gov">www.sam.gov</a> . Offerors must comply with the requirements of 52.204-7, 52.204-8, 52.232-33, and any other CCR/ORCA requirements in this solicitation through SAM.  PLEASE NOTE: SAM is completely free of charge for both registrants and users.				
11. The Contractor shall begin performance within <u>10</u> calendar days and complete it within <u>576</u> calendar days after receiving <input type="checkbox"/> award, <input checked="" type="checkbox"/> notice to proceed. This performance period is <input checked="" type="checkbox"/> mandatory, <input type="checkbox"/> negotiable. (See FAR 52.211-10 _____.)				
12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i>  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			12B. CALENDAR DAYS  10	
13. ADDITIONAL SOLICITATION REQUIREMENTS:  A. Sealed offers in original and _____ copies to perform the work required are due at the place specified in Item 8 by <u>02:00 PM</u> (hour) local time <u>10 Feb 2023</u> (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.  B. An offer guarantee <input type="checkbox"/> is, <input checked="" type="checkbox"/> is not required.  C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.  D. Offers providing less than <u>90</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.				

<b>SOLICITATION, OFFER, AND AWARD (Continued)</b> <i>(Construction, Alteration, or Repair)</i>										
<b>OFFER (Must be fully completed by offeror)</b>										
14. NAME AND ADDRESS OF OFFEROR <i>(Include ZIP Code)</i>					15. TELEPHONE NO. <i>(Include area code)</i>					
CODE                      FACILITY CODE					16. REMITTANCE ADDRESS <i>(Include only if different than Item 14)</i>  <b>See Item 14</b>					
					17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. <i>(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)</i>					
AMOUNTS		SEE SCHEDULE OF PRICES								
18. The offeror agrees to furnish any required performance and payment bonds.										
<b>19. ACKNOWLEDGMENT OF AMENDMENTS</b> <i>(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)</i>										
AMENDMENT NO.										
DATE										
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>					20B. SIGNATURE			20C. OFFER DATE		
<b>AWARD (To be completed by Government)</b>										
21. ITEMS ACCEPTED:										
22. AMOUNT		23. ACCOUNTING AND APPROPRIATION DATA								
24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i>				<b>ITEM</b>	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c)					
26. ADMINISTERED BY			CODE		27. PAYMENT WILL BE MADE BY:                      CODE					
<b>CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE</b>										
<input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>(Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.					<input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation, is hereby accepted as to the items listed. This award commences the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.					
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>					31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i>					
30B. SIGNATURE			30C. DATE		TEL:    EMAIL:			31B. UNITED STATES OF AMERICA BY		
								31C. AWARD DATE		

## Section 00 10 00 - Solicitation

SF1442 BLOCK 10 CONTINUATION

The solicitation will be available on the web only. Faxed, telephoned, or mailed requests for this solicitation will not be honored. To download the solicitation for this project, contractors are required to register at the Federal Contract Opportunities website at beta.SAM.gov. For a quick start guide use the following link:

<http://faextracts.s3.amazonaws.com/Documentation/Federal%20Hierarchy/QSG%20Opportunities%20Part%204%20of%204%20-%20Contractors.pdf>.

Amendments will be available from the website by download only.

Technical inquiries and questions relating to the proposal procedures or bonds are to be submitted via Bidder Inquiry in ProjNet at <http://projnet.org/projnet>. Please see Section 00 21 00, ProjNet Instructions for further guidance.

**All prospective offerors are advised and urged to attend the pre-proposal site visit that is detailed in FAR 52.236-27 Alternate I, Site Visit (Construction) and FAR 52.236-3, Site Investigation and Conditions**

**Affecting the Work.** During the site visit the prospective offerors survey the site and prepare possible inquiries to be entered in ProjNet to clarify any doubts, information or technical requirements provided in the solicitation documents. Sometimes, as a result of the pre-proposal site visit and subsequent bidder inquiries, there might be a need to extend the proposal submission date by way of amendment to the solicitation documents to give offerors sufficient time to address any changes made to the solicitation documents as a result.

The term bid and proposal are used interchangeably in industry and may be used interchangeably throughout this solicitation.

In preparing your proposal -----

1. Have you signed the offer? Are all blank spaces filled in?
2. If signing on behalf of your company, have you attached evidence of your authority to sign the offer?
3. Have you acknowledged receipt of all amendments?
4. Have you checked your offer for possible errors? Arithmetically?
5. Have you furnished all information required by the evaluation criteria and/or the specifications? (i.e. Past Performance Questionnaires (PPQs), Price Breakout Schedule, Reps and Certs, etc.)
6. Are you submitting your offer on time?

**ADDITIONAL INFORMATION:**

Central Contractor Registration and ORCA are now available through the System for Award Management (SAM), available at [www.sam.gov](http://www.sam.gov). Offerors must comply with the requirements of 52.204-7, 52.232-33, and any other CCR/ORCA requirements in this solicitation through SAM.

PLEASE NOTE: SAM is completely free of charge for both registrants and users.

Please note, page numbering in this document may not be accurate.

PRICE BREAKOUT SCHEDULE**PRICE BREAKOUT SCHEDULE****PROJECT:** Repair Aircraft Maintenance B1455 for MH-139**LOCATION:** Maxwell Air Force Base, AL**PROPOSER'S NAME:** \_\_\_\_\_**BASE PROPOSAL**

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Amount</u>
0001	Renovate B1455 for MH-139 (EEIC 52200)	JOB	\$ _____
0002	Sitework in support of B1455 Renovation (EEIC 52200)	JOB	\$ _____
0003	Construct Administrative Space Addition for MH-139 (EEIC 52900)	JOB	\$ _____
0004	Sitework to support Construction of Administrative Space Addition for MH-139 (EEIC 52900)	JOB	\$ _____
0005	Privatized Utility - Electrical	JOB	\$ <u>60,000</u>

---

**Subtotal** \$ \_\_\_\_\_
**OPTION ITEMS**


---

0006	Option #1 – Exterior Stair (EEIC 52200)	JOB	\$ _____
0007	Option #2 -- FF&E (EEIC 6390B)	JOB	\$ _____

---

**TOTAL BASE PROPOSAL + OPTION ITEMS** \$ \_\_\_\_\_

### Description of Base Proposal Items

- (a) **Item No. 0001, “Renovate B1455 for MH-139”:** includes all Base Proposal construction work on the existing Building 1455 within a line five feet outside of the building; except that work covered by Items No. 0002, No. 0003, No. 0004, No. 0005, No. 0006, and No. 0007.
- (b) **Item No. 0002, “Sitework in support of B1455 Renovation”:** includes all Base Proposal construction work associated with the renovation of the existing Building 1455 outside the five foot line, including electrical, communication, storm drainage, water distribution, pavements, and site lighting; except that work covered by Items No. 0001, No. 0003, No. 0004, No. 0005, No. 0006, and No. 0007.
- (c) **Item No. 0003, “Construct Administrative Space Addition for MH-139”:** includes all Base Proposal construction work for the new Administrative addition to Building 1455 within a line five feet outside of the building; except that work covered by Items No. 0001, No. 0002, No. 0004, No. 0005, No. 0006, and No. 0007.
- (d) **Item No. 0004, “Sitework to Support Construction of Administrative Space Addition for MH-139”:** includes all Base Proposal construction work associated with the new Administrative addition to Building 1455 outside the five foot line, including electrical, communication, storm drainage, water distribution, pavements, and site lighting; except that work covered by Items No. 0001, No. 0002, No. 0003, No. 0005, No. 0006, and No. 0007.
- (e) **Item No. 0005, Privatized Utility – Electrical:** includes all costs allocated to the privatized electrical utility work associated with and including the installation of the new transformer; except that work covered by Items No. 0001, No. 0002, No. 0003, No. 0004, No. 0006, and No. 0007.

### Description of Option Items

- (a) **Item No. 0006 “Option – Exterior Stair”:** includes all materials, plant, tools, labor costs, and other associated incidentals necessary to complete the procurement and installation of exterior stair as shown on the approved design drawings and specifications. Except that work covered by Items No. 0001, No. 0002, No. 0003, No. 0004, No. 0005, and No. 0007. This option may be exercised within 60 days after NTP.
- (b) **Item No. 0007 “Option – FF&E”:** includes all materials, plant, tools, labor costs, and other associated incidentals necessary to complete the procurement and installation of items shown on the approved design drawings and specifications. Except that work covered by Items No. 0001, No. 0002, No. 0003, No. 0004, No. 0005, and No. 0006. Contractor shall reference provided FF&E package for items to be purchased and installed as part of this line item. These items will be shown as labeled on drawings by option number. This option may be exercised within 415 days after NTP.

## Section 00 21 00 - Instructions

PROJNET INSTRUCTIONSOFFEROR'S QUESTIONS AND COMMENTS

Technical inquiries and questions relating to proposal procedures or bonds are to be submitted via Bidder Inquiry in ProjNet at <http://www.ProjNet.org/ProjNet>. As noted below, offerors shall not submit their proposals via ProjNet.

Offerors shall submit their proposals in accordance with the provisions stated in the solicitation.

To submit and review bid inquiry items, bidders will need to be a current registered user or selfregister into system.

The Solicitation Number is: **W912QR23R0003**

The Bidder Inquiry Key is: **T7MVJD-2VBGI5**

**Specific Instructions for ProjNet Bid Inquiry Access:**

1. From the ProjNet home page linked above, click on **Quick Add** on the upper right side of the screen.
2. Identify the Agency. This should be marked as **USACE**.
3. Key. Enter the **Bidder Inquiry Key** listed above.
4. Email. Enter the email address you would like to use for communication.
5. Select Continue. A page will then open stating a user account was not found and will ask you to create one using the provided form.
6. Enter your First Name, Last Name, Company, City, State, Phone, Email, Secret Question, Secret Answer, and Time Zone. Make sure to remember your Secret Question and Answer as they will be used from this point on to access the ProjNet system.
7. Select Add User. Once this is completed you are now registered within ProjNet and are currently logged into the system.

**Specific Instructions for Future ProjNet Bid Inquiry Access:**

1. For future access to ProjNet, you will not be emailed any type of password. You will utilize your Secret Question and Secret Answer to log in.
2. From the ProjNet home page linked above, click on **Quick Add** on the upper right side of the screen.
3. Identify the Agency. This should be marked as **USACE**.
4. Key. Enter the **Bidder Inquiry Key** listed above.
5. Email. Enter the email address you used to register previously in ProjNet.
6. Select Continue. A page will then open asking you to enter the answer to your SecretQuestion.
7. Enter your Secret Answer and click Login. Once this is completed you are now logged into the system.

From this page you may view all bidder inquiries or add an inquiry.

Bidders will receive an acknowledgement of their question via email, followed by an answer to their question after it has been processed by our technical team.

Offerors are requested to review the specification in its entirety and to review the Bidder Inquiry System for answers to questions prior to submission of a new inquiry.

The call center operates weekdays from 8AM to 5PM U.S. Central Time Zone (Chicago). The telephone number for the Call Center is 800-428-HELP.

Offers will NOT be publicly opened. Information concerning the status of the evaluation and/or award will NOT be available after receipt of proposals.

**NOTES:**

1. Offerors shall not submit their proposals via ProjNet, but in accordance with the provisions stated in the solicitation. Any questions regarding acceptable means of submitting offers shall be made directly to the Contract Specialist identified in the solicitation.
2. Government responses to technical inquiries and questions relating to proposal procedures or bonds that are submitted to ProjNet in accordance with the procedures above are not binding on the Government unless an amendment is issued on Standard Form 30. In the case of any conflicts, the solicitation governs. Any changes or revisions to the solicitation will be made by formal amendment. Government responses will be limited to: (a) Notice that an amendment will be issued; (b) Reference to an existing requirement contained in the solicitation; or (c) Notice that a response is not necessary.
3. The ability to enter technical inquiries and questions relating to proposal procedures or bonds will be disabled ten (10) calendar days prior to the closing date stated in the solicitation. No Government responses will be entered into the ProjNet system within five (5) calendar days prior to the closing date stated in the solicitation.



## ELECTRONIC PROPOSAL SUBMISSION

**Proposals:** ALL SUBMISSIONS TO THIS PROPOSAL ANNOUNCEMENT SHALL BE SUBMITTED ELECTRONICALLY THROUGH DOD SAFE. No paper copies, CD-ROMs or facsimile submissions will be accepted. Electronic Proposal Submission is required through the Army's Electronic File Sharing Service, DOD SAFE (<https://safe.apps.mil>). The DOD SAFE Application is used to send large files to individuals that would normally be too large to send via email. There are no user accounts for SAFE. Authentication is handled via email. Anyone has access to DOD SAFE, and the application is available for use by anyone. The SAFE "Getting Started Guide" has information on how to utilize the system (<https://safe.apps.mil/about.php>). Instructions for uploading are as follows:

1. Send an email to the Contracting Officer and Contract Specialist to receive the link to drop off your proposal. This will need to be completed five (5) business days prior to proposal due date.
  - a. Levi Speth, Contract Specialist at [Levi.R.Speth@usace.army.mil](mailto:Levi.R.Speth@usace.army.mil)
  - b. Marcel D. Hull, Contracting Officer at [Marcel.D.Hull@usace.army.mil](mailto:Marcel.D.Hull@usace.army.mil)
2. You will receive an email with the link to submit your drop-off. The link will be provided no later than two (2) business days prior to the proposal due date.
3. Short Note to the Recipients: Click the Add Files or Drag and Drop your files. For file description, enter  
**W912QR23R0003-FIRMNAME**
4. Click Upload button to send documents.
5. Guest users will need to check their email to verify their email address before the recipients will be notified. (Government-issued Common Access Cards (CACs) are not required).

**File Size Limitations:** Offerors are advised to follow the DOD SAFE instructions for uploading files. DOD SAFE supports delivery up to 8GB. If needed, Offerors are advised to break the files down into smaller sections in order to upload it to the system. In such cases, please divide the sections as logically as possible and be sure to clearly name the files as specified below.

**File Naming Convention:** To ensure your submission is received and processed appropriately, it is important that interested parties CAREFULLY ensure their electronic files adhere to the following naming convention:

- **W912QR23R0003-FIRMNAME-VOLUME I**
- **W912QR23R0003-FIRMNAME-VOLUME II**

Each file name shall begin with the solicitation number followed by the firm's name and a brief file description. Please see examples above.

**File Organization:** Although hard copies are not accepted, each file shall be clearly indexed, and logically assembled. Font size shall be 10 or larger. Pages shall be letter sized (larger page sizes (such as 11x17 fold-outs, etc.) will be counted as two pages. Proposals shall be in a narrative format, organized and titled so that each section of the proposal follows the order and format of the factors. Information presented should be organized so as to pertain to only the evaluation factor in the section that the information is presented. Information pertaining to more than one evaluation factor should be repeated in the each section for each factor.

**Upload Completion & Deadline:** Interested parties shall submit responses no later than the date specified on the solicitation document. The time & date of proposal receipt will be the upload completion delivery time & date recorded within DOD SAFE site. Do not assume that electronic submission will occur instantaneously. Large files (e.g. 10MB or more) will take some time to upload. Offerors should time their upload effort with prudence by not waiting until the last few minutes—this will allow for unexpected delays in the transmittal process. Offerors are

encouraged to keep a copy of the upload confirmation for their record. Submissions after the deadline will be considered late and will be processed in accordance with FAR 15.208.

**Electronic Files:** Files shall be in their native format (i.e. doc, xls, ppt, etc.), or if in pdf format, shall be in searchable text. Text and graphics portfolios of the electronic copies shall be in a format readable by Microsoft Office or Adobe applications. Data submitted in a spreadsheet format shall be readable by MS Excel (all cells and formulas should be unlocked).

Any information, presented in a proposal that the Offeror wants safeguarded from disclosure to other parties must be identified and labeled in accordance with the requirements of Provision “FAR 52.215-1, Instructions to Offerors – Competitive Acquisition (Jan 2017),” subparagraph (e), which is found in 00 21 00 Instructions of the RFP. The Government will endeavor to honor the restrictions against release requested by Offerors, to the extent permitted under United States law and regulations.

## CLAUSES INCORPORATED BY REFERENCE

52.204-7	System for Award Management	OCT 2018
52.204-16	Commercial and Government Entity Code Reporting	AUG 2020
52.204-22	Alternative Line Item Proposal	JAN 2017
52.215-1	Instructions to Offerors--Competitive Acquisition	NOV 2021
52.217-5	Evaluation Of Options	JUL 1990
252.215-7008	Only One Offer	JUL 2019
252.215-7013	Supplies and Services Provided by Nontraditional Defense Contractors.	JAN 2018

## CLAUSES INCORPORATED BY FULL TEXT

## 52.211-14 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE, EMERGENCY PREPAREDNESS, AND ENERGY PROGRAM USE (APR 2008)

Any contract awarded as a result of this solicitation will be a DO-C2 rated order certified for national defense, emergency preparedness, and energy program use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation. [Contracting Officer check appropriate box.]

(End of provision)

## 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm-Fixed Price contract resulting from this solicitation.

(End of provision)

## 52.222-5 CONSTRUCTION WAGE RATE REQUIREMENTS--SECONDARY SITE OF THE WORK (MAY 2014)

(a)(1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, of this solicitation.

(2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.

(b)(1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.

(2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of provision)

## 52.233-2 SERVICE OF PROTEST (SEP 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

U.S. Army Corps of Engineers – LRL  
Attn: Marcel Hull, Room 821  
600 Dr. Martin Luther King Jr. Place  
Louisville, KY 40202

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

## 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) – ALTERNATE I (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) An organized site visit has been scheduled for--  
**10 Jan 2023 at 0930 AM CT.**

No other site visit will be accommodated. There are no current COVID restrictions on Maxwell AFB, AL other than at the Commissary but however please have Face Masks available for each attendee in case the COVID Restrictions are revised.

(c) Additional details –

**Please contact Dan Corrigan at the email address or phone number provided below with the following information regarding personnel requesting access to enter Maxwell AFB for this Site Visit.**

Provide Names, Social Security Number, Date of Birth, Name of Employer, Driver's License Number and State of Issuance for each attendee to the noted POC by close of business **4 Jan. 2023**. Email is the preferred method of contact for this information. Visitors will need to process through the Visitor Center located on Maxwell Blvd. to be escorted on to the site.

**Only those providing personal information by 4 Jan. 2023 will be allowed on the Installation.**

It is recommended that individuals allow at least 30 minutes time for visitor passes to be processed for entry to the Installation.

Visitors will need to process through the Visitor Center Gate, and then be escorted to the site.

Point of Contact for submitting Base Access Request (**by COB 4 Jan 2023**):

Dan Corrigan: E-mail - [daniel.corrigan@usace.army.mil](mailto:daniel.corrigan@usace.army.mil); Phone: 502-315-6485 (O), 502-475-9804 (C)

(End of provision)

## 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<https://www.acquisition.gov/>

The full text of a DFARS provision may be accessed electronically at this/these address(es):

<https://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html>

(End of provision)

## 52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (NOV 2020)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of provision)

## 252.204-7019 NOTICE OF NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (MAR 2022)

## (a) Definitions.

Basic Assessment, Medium Assessment, and High Assessment have the meaning given in the clause 252.204-7020, NIST SP 800-171 DoD Assessments.

Covered contractor information system has the meaning given in the clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this solicitation.

(b) Requirement. In order to be considered for award, if the Offeror is required to implement NIST SP 800-171, the Offeror shall have a current assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) (see 252.204-7020) for each covered contractor information system that is relevant to the offer, contract, task order, or delivery order. The Basic, Medium, and High NIST SP 800-171 DoD Assessments are described in the NIST SP 800-171 DoD Assessment Methodology located at <https://www.acq.osd.mil/asda/dpc/cyber/safeguarding.html#nistSP800171>.

## (c) Procedures.

(1) The Offeror shall verify that summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) are posted in the Supplier Performance Risk System (SPRS) (<https://www.sprs.csd.disa.mil/>) for all covered contractor information systems relevant to the offer.

(2) If the Offeror does not have summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) posted in SPRS, the Offeror may conduct and submit a Basic Assessment to [webptsmh@navy.mil](mailto:webptsmh@navy.mil) for posting to SPRS in the format identified in paragraph (d) of this provision.

(d) Summary level scores. Summary level scores for all assessments will be posted 30 days post-assessment in SPRS to provide DoD Components visibility into the summary level scores of strategic assessments.

(1) Basic Assessments. An Offeror may follow the procedures in paragraph (c)(2) of this provision for posting Basic Assessments to SPRS.

(i) The email shall include the following information:

(A) Cybersecurity standard assessed (e.g., NIST SP 800-171 Rev 1).

(B) Organization conducting the assessment (e.g., Contractor self-assessment).

(C) For each system security plan (security requirement 3.12.4) supporting the performance of a DoD contract--

(1) All industry Commercial and Government Entity (CAGE) code(s) associated with the information system(s) addressed by the system security plan; and

(2) A brief description of the system security plan architecture, if more than one plan exists.

(D) Date the assessment was completed.

(E) Summary level score (e.g., 95 out of 110, NOT the individual value for each requirement).

(F) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(ii) If multiple system security plans are addressed in the email described at paragraph (d)(1)(i) of this section, the Offeror shall use the following format for the report:

System security plan	CAGE codes supported by this plan	Brief description of the plan architecture	Date of assessment	Total score	Date score of 110 will be achieved
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

(2) Medium and High Assessments. DoD will post the following Medium and/or High Assessment summary level scores to SPRS for each system assessed:

- (i) The standard assessed (e.g., NIST SP 800-171 Rev 1).
- (ii) Organization conducting the assessment, e.g., DCMA, or a specific organization (identified by Department of Defense Activity Address Code (DoDAAC)).
- (iii) All industry CAGE code(s) associated with the information system(s) addressed by the system security plan.
- (iv) A brief description of the system security plan architecture, if more than one system security plan exists.
- (v) Date and level of the assessment, i.e., medium or high.
- (vi) Summary level score (e.g., 105 out of 110, not the individual value assigned for each requirement).
- (vii) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(3) Accessibility.

- (i) Assessment summary level scores posted in SPRS are available to DoD personnel, and are protected, in accordance with the standards set forth in DoD Instruction 5000.79, Defense-wide Sharing and Use of Supplier and Product Performance Information (PI).
- (ii) Authorized representatives of the Offeror for which the assessment was conducted may access SPRS to view their own summary level scores, in accordance with the SPRS Software User's Guide for Awardees/Contractors available at [https://www.sprs.csd.disa.mil/pdf/SPRS\\_Awardee.pdf](https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf).
- (iii) A High NIST SP 800-171 DoD Assessment may result in documentation in addition to that listed in this section. DoD will retain and protect any such documentation as "Controlled Unclassified Information (CUI)" and intended for internal DoD use only. The information will be protected against unauthorized use and release, including through the exercise of applicable exemptions under the Freedom of Information Act (e.g., Exemption 4 covers trade secrets and commercial or financial information obtained from a contractor that is privileged or confidential).

(End of provision)

## Section 00 22 00 - Supplementary Instructions

EVALUATION CRITERIA

## PROCEDURES FOR SUBMITTAL OF OFFERS AND PROPOSAL EVALUATION CRITERIA

**1. Overview.**

- 1.1 The intent of this solicitation is to select one contractor for the Maxwell, AFB B.1455 Nose Bay Hangar Renovation project located in Alabama. The Government will evaluate the proposals in accordance with the criteria described herein, and award a firm fixed price contract to the responsible offeror whose proposal conforms with all the terms and conditions of the solicitation and whose proposal is determined to represent the overall best value to the Government, all factors considered.
- 1.2 The basis of award is the Best Value Trade-Off Process. The Contracting Officer will award a firm fixed price contract to the responsible offeror whom the Source Selection Authority determines conforms to the solicitation, is fair and reasonable, and offers the best overall value to the Government, all factors considered. The Government reserves the right to accept other than the lowest priced offer or to reject all offers.
- 1.3 Scope of project calls for the construction/renovation of the nose bay of Building 1455 and includes the adjacent administration area to accommodate the simulator mission. Current Square Footage is approximately 21,000 square feet. Renovations to Building 1455 involves the demolishing of the existing one-story storage area at the southeast corner of hangar area; renovating existing one-story storage area at northeast corner of hangar area into three multipurpose rooms; constructing an addition on east side of hangar area for mission planning and TSG (simulator maintenance) on the first floor; constructing two interior stairs and an elevator; constructing OFT computer rooms, and CPT and weapons procedural trainer (WPT) training rooms, as well as building support spaces; constructing a second floor with multipurpose, mission planning, EDS training rooms, TSG, as well as building support spaces and mechanical mezzanine(s); and constructing a building addition to the one-story portion of the building to accommodate all of the administrative position requirements. This project includes required cybersecurity. This project includes all mechanical, electrical, civil, and structural repairs for a complete and usable facility. Sustainable principles, to include life cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with UFC 1-200-02.
- 1.4 The target ceiling for contract award is \$8,500,000 based on the funds made available for this project. The Government cannot guarantee that additional funds will be available for award. Offerors are under no obligation to approach this ceiling.
- 1.5 Funds are not presently available for this acquisition. No contract award will be made until appropriated funds are made available.

**2. Submittal of offers.**

- 2.1 Offerors submitting proposals for this project should limit submissions to data essential for evaluation of proposals so that a minimum of time and monies will have been expended in preparing information required herein. However, in order to be effectively and equitably evaluated, the proposals must include information sufficiently detailed to clearly describe the offeror's capability for successfully completing the solicited project. Requirements stated in this Request for Proposal (RFP) are minimums. Proposals should follow in the order of sequence set forth in the RFP. Information provided out of sequence may not be evaluated and may result in the offeror's disqualification from award.



- 2.2 Offerors shall submit their proposals electronically in accordance with the Proposal Submission Instructions in Section 00 21 00 of the solicitation. Please follow the instructions precisely as proposals must complete the upload no later than the time and date specified in Block 13 of Standard Form 1442. NOTE: The Louisville District is in the Eastern Time Zone.
- 2.3 Offerors are required to submit a proposal consisting of the information identified in paragraphs 2.4 and 2.5 below. All proposal materials shall be submitted in binders with a table of contents and tabbed section dividers. The sections should parallel the submission requirements identified herein.
- 2.4 The complete Volume I shall be submitted electronically in accordance with the Proposal:
- Volume I – Factor I: Past Performance
  - Volume I – Factor II: Management Plan
  - Volume I – Factor III: Small Business Participation Plan (all offerors)
- 2.5 Volume II shall be submitted electronically in accordance with the Proposal Submission Instructions in Section 00 21 00 of the solicitation and shall include the following information:
- Volume II – Tab A: Standard Form 1442 and Price Breakout Schedule
  - Volume II – Tab B: Joint Venture Agreements
  - Volume II – Tab C: Evidence of Ability to Obtain Bonding and Proof of Financial Ability
  - Volume II – Tab D: Pre-Award Information
  - Volume II – Tab E: Subcontracting Plan (Large businesses required to submit)

### 3. Proposal Evaluation Process.

- 3.1. A Source Selection Evaluation Board (SSEB) comprised of representatives of the Corps of Engineers, User/Customer, and other required personnel will evaluate the proposals. Offerors are advised that the technical evaluation and rating of proposals will be conducted in strict confidence. Technical proposals will be reviewed and rated without knowledge of the price offered. The number and identities of offerors are not revealed to anyone not involved in the evaluation and award process or to other offerors. Proposals will be evaluated based on the factors described herein, and the basis of award is a Best Value Trade-Off, as stated above.
- 3.2 The evaluation process essentially consists of four parts: proposal compliance review and responsibility review, technical evaluation, price evaluation, and cost/technical trade-off analysis.
- 3.2.1 Proposal Compliance Review: This is an initial review to ensure that all required forms and certifications are complete and that the offeror is financially capable of sustaining performance under the contract and is able to obtain the required level of performance and payment bonds from an acceptable surety.
- 3.2.2 Technical Evaluation: The SSEB will evaluate and rate the Volume I proposals against the RFP requirements. Factor I – Past Performance will be rated using Tables 1 and 2 below. The rating will be based on overall confidence in performance, with the final confidence assessment rating based on the extent of recent, relevant past experience and the quality of the offeror's performance. Factor II – Management Plan will be rated using Table 3 below. Factor III – Small Business Participation Plan will be rated using Table 4 below.

- 3.2.3 Price Evaluation: The SSEB and Contracting Officer/SSA will evaluate price proposals independent of the technical evaluation. The SSEB will not have access to price information until completion of the technical evaluation.
- 3.2.4 Price/Technical Trade-off Analysis: After all above evaluations are complete, the Contracting Officer/SSA will compare the relative advantages and disadvantages of technical proposals and compare prices. The Source Selection Authority (SSA) will then consider all factors to select the proposal offering the best value to the Government.

#### 4. Proposal Information and Related Evaluation Factors.

- 4.1 Proposals will be evaluated in accordance with the factors and sub factors below, listed in relative order of importance. All evaluation factors, other than cost or price, when combined are considered approximately equal to price. The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

4.2	Volume I – Factor I – Past Performance	1 <sup>st</sup>
4.3	Volume I – Factor II – Management Plan	2 <sup>nd</sup>
4.4	Volume I – Factor III – Small Business Participation Plan	3 <sup>rd</sup>
4.5	Volume II – Price and Pro Forma Information	
	Tab A Standard Form 1442 and Price Breakout Schedule	Not Rated
	Tab B Joint Venture Agreement	Not Rated
	Tab C Evidence of Ability to Obtain Bonding and Proof of Financial Ability	Not Rated
	Tab D Pre-Award Information	Not Rated
	Tab E Subcontracting Plan	Acceptable / Unacceptable

## 4.6 Ratings

Evaluators will apply the adjectival rating for the definition that most closely matches the evaluation.

TABLE 1

Past Performance Relevancy Ratings	
Rating	Description
Very Relevant	Present/past performance effort involved essentially the same scope and magnitude of effort and complexities this solicitation requires.
Relevant	Present/past performance effort involved similar scope and magnitude of effort and complexities this solicitation requires.
Somewhat Relevant	Present/past performance effort involved some of the scope and magnitude of effort and complexities this solicitation requires.
Not Relevant	Present/past performance effort involved little or none of the scope and magnitude of effort and complexities this solicitation requires.

TABLE 2

Performance Confidence Assessments	
Rating	Description
Substantial Confidence	Based on the offeror's recent/relevant performance record, the Government has a high expectation that the offeror will successfully perform the required effort.
Satisfactory Confidence	Based on the offeror's recent/relevant performance record, the Government has a reasonable expectation that the offeror will successfully perform the required effort.
Neutral Confidence	No recent/relevant performance record is available or the offeror's performance record is so sparse that no meaningful confidence assessment rating can be reasonably assigned. The offeror may not be evaluated favorably or unfavorably on the factor of past performance.
Limited Confidence	Based on the offeror's recent/relevant performance record, the Government has a low expectation that the offeror will successfully perform the required effort.
No Confidence	Based on the offeror's recent/relevant performance record, the Government has no expectation that the offeror will successfully perform the required effort.

TABLE 3

Technical Assessment Ratings	
Adjectival Rating	Description
Outstanding	Proposal indicates an exceptional approach and understanding of the requirements and contains multiple strengths, and risk of unsuccessful performance is low.

Good	Proposal indicates a thorough approach and understanding of the requirements and contains at least one strength, and risk of unsuccessful performance is low to moderate.
Acceptable	Proposal meets requirements and indicates an adequate approach and understanding of the requirements, and risk of unsuccessful performance is no worse than moderate.
Marginal	Proposal has not demonstrated an adequate approach and understanding of the requirements, and/or risk of unsuccessful performance is high.
Unacceptable	Proposal does not meet the requirements of the solicitation, and thus, contains one or more deficiencies, and/or risk of unsuccessful performance is unacceptable. Proposal is unawardable.

TABLE 4

Small Business Ratings	
Rating	Description
Acceptable	Proposal clearly meets the minimum requirements of the solicitation.
Unacceptable	Proposal does not clearly meet the minimum requirements of the solicitation.

#### 4.7 Definitions

1. Deficiency. A material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level. See FAR 15.001.
2. Strength. An aspect of an offeror's proposal that has merit or exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance.
3. Significant Strength. An aspect of an offeror's proposal that has appreciable merit or appreciably exceeds specified performance or capability requirements in a way that will be appreciably advantageous to the Government during contract performance.
4. Weakness. A flaw in the proposal that increases the risk of unsuccessful contract performance. See FAR 15.001.
5. Significant Weakness. A flaw in the proposal that appreciably increases the risk of unsuccessful contract performance. See FAR 15.001.
6. Uncertainty. Any aspect of a non-cost/price factor proposal for which the intent of the offeror is unclear (e.g., more than one way to interpret the offer or inconsistencies in the proposal indicating that there may have been an error, omission, or mistake).
7. Clarification. Limited exchanges between the Government and offerors that may occur when award without discussions is contemplated. See FAR 15.306(a)(1).
8. Adverse Past Performance. Past performance information that supports a less than satisfactory rating from sources where the information is from other than formal rating systems such as "PPIRS" or "FAPPIS."

## **5.0 Volume I – Factor I: Past Performance**

### **5.1 Submission Requirements:**

- 5.1.1 Provide descriptions of up to three (3) projects substantially complete or completed by the Prime Contractor within the last five (5) years (from the solicitation issue date) that are similar to this project in size and scope. Projects completed more than five (5) years before the solicitation issue date may be considered for evaluation purposes but may lessen the overall relevancy rating for that project. Projects are considered substantially complete if enough work has been performed such that it demonstrates the ability to successfully complete all phases of the project. An Indefinite Delivery Indefinite Quantity (IDIQ) contract may be submitted only if a single task order could be considered similar to this project. Task orders may not be combined in order for the project to be considered similar.
- 5.1.2 Projects considered similar in size would be new construction and/or renovation of multi-story industrial spaces that include hangar, administrative areas, and/or storage areas of at least 15,000 SF.
- 5.1.3 Projects considered similar in scope to this project include renovation and/or new construction of multi-story industrial spaces that include hangar, administrative areas, and/or storage areas. Construction of pre-engineered buildings is not considered similar and does not count toward a project of similar scope or size.
- 5.1.4 The prime contractor must have self-performed at least 15 percent of the direct contract labor (including testing and layout personnel), exclusive of other general conditions or field overhead personnel, material, equipment, or subcontractors to be considered similar.
- 5.1.5 Additional consideration may be given for projects that contain the following features:
  - a) New Construction or – Renovation Construction or United States Army Corps of Engineers (USACE) or Naval Facilities Engineering Command (NAVFAC)
  - b) Previous experience with concurrent construction within an occupied facility
- 5.1.6 The following minimum information shall be provided for each project:
  - a) Project Title, Location, and Contract Number/Unique Identifier
  - b) Current percentage of construction complete and the date it was or will be complete
    - a. For projects that are not yet complete, provide description of work remaining to be completed.
  - c) Scope of the project, to include purpose/use of facility
  - d) Size of the project, differentiate square footage of new construction versus renovation if the project includes both
  - e) Portion and percentage of work that was self-performed
- 5.1.7 For this factor, also include any ratings, letters, awards, etc. that support past performance on these projects. Any of this information that is submitted shall clearly identify to which of the submitted projects it pertains. A sample Past Performance Questionnaire is attached for your convenience. If used, the Past Performance Questionnaire must be submitted by the offeror with the proposal submission and **not** sent directly to the agency from the reference. For each project, the offeror may provide information on problems encountered on the identified contracts and the offeror's respective corrective action.

**NOTE:** For purposes of evaluating past performance, the Prime Contractor is defined as the contractor identified in Block 14 of the Standard Form 1442. Projects performed by contractors other than the offeror, including, but not limited to, teaming partners, subcontractors, sister or parent companies, and affiliates will not be evaluated for past performance, unless those other contractors are part of a joint venture offeror as demonstrated by a signed joint venture agreement. If more than one contractor is listed in Block 14, then a

signed joint venture must be submitted with the proposal and the joint venture shall be registered as such in the System for Award Management (SAM). However, each party of the Joint Venture (JV) must submit their own Unique Entity Identifier Number (formerly known as DUNS) with the JV proposal. Projects performed by other contractors than the offeror, such as teaming partners or subcontractors, will not be evaluated for past performance, unless those other contractors are part of a JV offeror as demonstrated by a signed JV agreement. If the offeror represents the combining of two or more companies as a JV for the purpose of this RFP, each company in the JV may submit project examples, but the total submitted by the JV will not exceed three (3).

## 5.2 Evaluation Criteria:

- 5.2.1 The SSEB will first evaluate the relevancy of recent past performance identified in the proposal in response to paragraph 5.1 above. By using the criteria identified above, the SSEB will determine how relevant a past project is when compared to the scope, size, and magnitude of effort and complexities of the solicited project. A relevancy rating will be assigned to each submitted project using the Past Performance Relevancy Ratings table above.
- 5.2.2 The SSEB will next review how well the offeror performed on those projects. The Government reserves the right to check any or all cited references to verify supplied information and to assess owner satisfaction. The Government also reserves the right to not contact the provided references. In addition to the information submitted by the offeror, the Government reserves the right to review any other sources of relevant information for evaluating past performance, including projects other than those submitted by the offeror. The Government will, at a minimum, review past performance information retrieved through the Past Performance Information Retrieval System (PPIRS), including Contractor Performance Assessment Reporting System (CPARS), using all CAGE/Unique Entity Identifier numbers. Other sources may include, but are not limited to, past performance information retrieved from inquiries of owner representative(s), Federal Awardee Performance and Integrity Information System (FAPIIS), Electronic Subcontract Reporting System (eSRS), and any other known sources not provided by the offeror.
- 5.2.3 The SSEB will review all past performance information collected and determine the quality of the offeror's performance, general trends, and usefulness of the information and incorporate this information into the performance confidence assessment. The SSEB will assign a final, overall Performance Confidence rating, using the ratings in the Performance Confidence Assessment table above, based on the SSEB's assessment of (1) the degree of the offeror's recent, relevant experience, and (2) how well the offeror performed that experience.

## **6.0 Volume I – Factor II: Management Plan**

### 6.1 Submission Requirements:

Provide a management plan narrative for the project that describes how your labor, resources, designers, subcontractors, and material suppliers will be managed, supervised, coordinated, and used to ensure successful completion of the project. Additionally, the Management Plan shall include the following information:

- Identify significant and specific areas of risk and provide your plan for mitigating risk during contract performance.
- Describe your process for managing, coordinating, and tracking changes that arise during construction.
- Describe your process for construction and certification of Secure Spaces and experience in constructing Secure Spaces in past projects. Discuss your plans for coordinating, documenting,

and managing construction of Secure Space that will result in successful certification of the space for operation.

- Discuss the qualification of your on-site team – Contractor Quality Control (CQC) Manager and Superintendent (degrees, registration, number of years' experience, number of years' experience with current company) specifically. The on-site team discussed shall be used on the contract. No personnel substitutions or deviations from the level of qualifications proposed will be permitted after award unless approved in writing by the Contract Officer. Additional consideration may be given to on-site teams with prior successful experience in the local area.

**NOTE:** There is a page limit of ten (10) single sided, 8.5" x 11" pages, using a minimum font size of 10 and a minimum margin of one-half inch on all sides for the Management Plan

## 6.2 Evaluation Criteria:

Management Plan narratives will be evaluated based on the level of understanding of the work and the involvement the contractor will have in the management, oversight, control, and coordination of the work performed during construction of the project. Narratives that demonstrate a clear understanding of the project requirements and provide a thorough approach for successfully managing the solicited project may be rated more favorably by the SSEB.

## **7.0 Volume I – Factor III: Small Business Participation Plan**

### **7.1 Submission Requirements**

ALL OFFERORS ARE REQUIRED TO SUBMIT A SMALL BUSINESS PARTICIPATION PLAN. The Small Business Participation Plan shall be based on the offeror's best effort and is required to address each of the following areas individually:

- The extent to which the small business programs listed in FAR 19 (small business, small disadvantaged business, woman-owned small business, HubZone, service disabled veteran owned small business, etc.) are specifically identified in the Small Business Participation Plan;
- The extent of participation of such firms in terms of the value of the total acquisition in %'s for the base year and for each individual option year; the extent of commitment to use such firms (for example, enforceable commitments, i.e., teaming agreements signed, are to be considered more heavily than non-enforceable ones);
- The complexity and variety of the work small firms are to perform on this acquisition;
- The practicality of the Small Business Participation Plan, i.e., aggressive goals.

The Small Business Participation Plan shall be organized as follows:

(1) Prime Contractor type of business (check all that apply):

- ☐ Large
- ☐ Small (also check type of small business)
- ☐ Small Non-Disadvantaged Business
- ☐ Small Disadvantaged Business
- ☐ Woman-Owned Small Business
- ☐ HUBZone Small Business
- ☐ Veteran Owned Small Business
- ☐ Service Disabled, Veteran Owned Small Business

(2) Percentage of your participation as a prime contractor: \_\_\_\_\_ %



NOTE: Small Business primes' self-performance counts as Small Business Participation, and small business primes may achieve small business participation goals through their own performance/participation as a prime and/or through subcontracting to other small businesses.

- (3) Percentage of total contract value of subcontracts planned for:

	% of Total Contract Value
Large	%
Total Small	%
Small Non-Disadvantaged	%
Small Disadvantaged	%
Small Woman Owned	%
Small HUB Zone	%
Small Veteran Owned	%
Small Service Disabled Veteran Owned	%

Each percentage above shall be accompanied by detailed supporting documentation regarding individual commitments.

NOTE: The sum of the percentages of Small Non-Disadvantaged and Small Disadvantaged should equal the entries for the Total Small; however, the sum of all of the percentages need not equal 100% since the prime is not included and individual subcontractors may be counted towards more than one category.

- (4) List principal supplies/services (be specific) to be subcontracted to:

	Name of Company	Type of Service/Supply
Large		
Small Non-Disadvantaged		
Small Disadvantaged		
Small Woman Owned		
Small HUB Zone		
Small Veteran Owned		
Small Service Disabled Veteran Owned		

- (5) Prior Performance Information: Provide any information substantiating the offeror's track record of utilizing small business on past contracts.
- (6) For Large **and** Small Businesses provide descriptive information for all small business categories. Any information concerning long-term relationships with Small Business subcontractors, such as mentor-protégé relationships, should be provided.
- (7) Extent of Commitment: Provide documentation regarding enforceable commitments to utilize any small business category as defined in FAR Part 19 as subcontractors.
- (8) Small Business Subcontracting Plan: Each **Large Business Offeror** shall provide a Small Business Subcontracting Plan that contains all of the elements required by FAR Clause 52.219-9 Alt. II. This Plan **shall** be submitted separately from the Small Business Participation information required above which applies to both Large and Small Businesses. The Subcontracting Plan is not a requirement for evaluation in source selection but rather a requirement for award to a Large Business. The approved Small Business Subcontracting Plan will be incorporated into any resultant contract(s).

## 7.2 Evaluation Criteria:

### **ALL OFFERORS ARE REQUIRED TO SUBMIT A SMALL BUSINESS PARTICIPATION PLAN.**

The Small Business Participation Plan will be evaluated based on the offeror's best efforts, the level of small business commitment that is being demonstrated for the proposed acquisition, and the prior level of commitment to utilizing small businesses in performance of prior contracts. The Small Business Participation Plan must meet the minimum Total Small Business Participation goal of **20%** of the total contract value (through collective small business participation from any type of small business or sub-category small business).

Pursuant to DFARS PGI 215.304(c), the following elements will be considered in evaluating an offeror's Participation Plan:

- The extent to which such firms, as defined in FAR Part 19, are specifically identified in plans;
- The extent of commitment to use such firms (enforceable commitments will be weighted more heavily than non-enforceable ones);
- The complexity and variety of the work such firms are to perform;
- The realism of the plans;
- Past performance of offerors in complying with the requirements of the Subcontracting Plan Goals for such firms and monetary targets for participation;
- The extent of participation of such firms in terms of the proposed subcontracted value; and
- The extent to which the offeror provides detailed explanations/documentation supporting the proposed participation percentages, or lack thereof. The Department of Defense (DOD) has established small business goals to help ensure small business receives a fair proportion of DOD awards.

## **8.0 Volume II - Price and Proforma Information**

### **8.1 Tab A - Standard Form 1442 and Proposal Price Breakout Schedule.**

#### 8.1.1 Submission Requirements:

The offeror shall complete and submit Standard Form 1442 and Section 00 10 00, Proposal Price Breakout Schedule.

#### 8.1.2 Evaluation Criteria:

The price will be evaluated on base proposal plus all options. The price will be evaluated for fairness and reasonableness through the use of a price analysis. Price will also be checked for unbalancing of line items. Offerors are cautioned to distribute costs appropriately.

### **8.2 Tab B – Joint Venture Agreements**

#### 8.2.1 Submission Requirements:

Small business offerors (e.g., 8(a), HUBZone, SDVOSB) submitting a proposal as a JV or Mentor-Protégé shall submit evidence from the offeror's SBA Servicing Agency that the offeror has notified and discussed the proposed joint venture for this specific project with the appropriate SBA Representative or Business Opportunity Specialist. Joint Venture agreements and approved 8(a) Mentor-Protégé agreements must be submitted with the proposal.

#### 8.2.2 Evaluation Criteria:

Joint Venture Agreements and Mentor-Protégé agreements must comply with the relevant regulations in Title 13 of the Code of Federal Regulations. Failure to comply with these regulations could result in the offeror being found ineligible for award on an acquisition set-aside for small business concerns.

### **8.3 Tab C – Evidence of Ability to Obtain Bonding and Proof of Financial Ability**

#### **8.3.1 Submission Requirements:**

- A. Financial Capability. Submit Proof of Financial Ability (Most recent financial statement covering assets and liabilities). Include the name, address, and telephone number of offeror's banking institution.
- B. Bonding Capability. Submit information showing offeror's ability to be bonded for this project. Include the name, address, and telephone number of the offeror's bonding company.

#### **8.3.2 Evaluation Criteria:**

This information will be used for the purpose of completing the Pre-Award Survey and will not be rated. See FAR Part 28 for information related to bonds.

### **8.4 Tab D – Pre-Award Information**

#### **8.4.1 Submission Requirements:**

- A. The offeror shall submit one completed copy of Section 00 45 00, Representations and Certification.
- B. The offeror shall submit the following information:
  - a) Number of years the firm has been in business
  - b) Name, address, and telephone numbers of two credit/trade references
  - c) A list of present commitments, including the dollar value

#### **8.4.2 Evaluation Criteria:**

This information will be used for the purpose of completing the Pre-Award Survey and will not be rated.

### **8.5 Tab E - Subcontracting Plan**

#### **8.5.1 Submission Requirements:**

Large business offerors shall submit a Subcontracting Plan in accordance with FAR Clauses 52.219-8 and 52.219-9 Alt. II. To be acceptable, plans must adequately address the required statutory elements and provide sufficient information to enable the Contracting Officer to answer questions 1 through 13 of Appendix DD, Part 3, AFARS 5119.705. The offeror may use the attached sample sub- contracting plan as a starting point. Percentage goals apply to the total amount being subcontracted.

#### **8.5.2 Evaluation Criteria:**

Submitted information will be evaluated for acceptability in accordance with AFARS 5119.705. To be acceptable, subcontracting plans must:

- (a) Adequately address the required statutory elements.
- (b) Provide sufficient information to enable the Contracting Officer to answer affirmatively questions 1 through 13 of Appendix DD, Part 3 (AFARS 5119.705), a copy of which is attached.

(c) To be acceptable, subcontracting plans must meet all of the requirements outlined in Appendix DD, Part 3, AFARS 5119.705. If discussions with offerors are necessary, those areas where the plan is deficient will be reviewed with each offeror with the goal of correcting deficiencies.

**NAVFAC/USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)****CONTRACT INFORMATION (Contractor to complete Blocks 1-4)****1. Contractor Information**

Firm Name:

CAGE Code:

Address:

Unique Entity Identifier Number:

Phone Number:

Email Address:

Point of Contact:

Contact Phone Number:

**2. Work Performed as:** ☐ Prime Contractor ☐ Sub Contractor ☐ Joint Venture ☐ Other (Explain)

Percent of project work performed:

If subcontractor, who was the prime (Name/Phone #):

**3. Contract Information**

Contract Number:

Delivery/Task Order Number (if applicable):

Contract Type: ☐ Firm Fixed Price ☐ Cost Reimbursement ☐ Other (Please specify):

Contract Title:

Contract Location:

Award Date (mm/dd/yy):

Contract Completion Date (mm/dd/yy):

Actual Completion Date (mm/dd/yy):

Explain Differences:

Original Contract Price (Award Amount):

Final Contract Price (*to include all modifications, if applicable*):

Explain Differences:

**4. Project Description:**Complexity of Work ☐ High ☐ Med ☐ RoutineHow is this project relevant to project of submission? (*Please provide details such as similar equipment, requirements, conditions, etc.*)**CLIENT INFORMATION (Client to complete Blocks 5-8)****5. Client Information**

Name:

Title:

Phone Number:

Email Address:

**6. Describe the client's role in the project:****7. Date Questionnaire was completed (mm/dd/yy):****8. Client's Signature:**

NOTE: NAVFAC/USACE REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO USACE WITH THEIR

PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON USACE SOLICITATIONS. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

**ADJECTIVE RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE**

RATING	DEFINITION	NOTE
<b>(E) Exceptional</b>	Performance meets contractual requirements and exceeds many to the Government/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with few minor problems for which corrective actions taken by the contractor was highly effective.	An Exceptional rating is appropriate when the Contractor successfully performed multiple significant events that were of benefit to the Government/Owner. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
<b>(VG) Very Good</b>	Performance meets contractual requirements and exceeds some to the Government's/Owner's benefit. The contractual performance of the element or sub-element being assessed was accomplished with some minor problems for which corrective actions taken by the Contractor were effective.	A Very Good rating is appropriate when the Contractor successfully performed a significant event that was a benefit to the Government/Owner. There should have been no significant weaknesses identified.
<b>(S) Satisfactory</b>	Performance meets minimum contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the Contractor appear or were satisfactory.	A Satisfactory rating is appropriate when there were only minor problems, or major problems that the Contractor recovered from without impact to the contract. There should have been NO significant weaknesses identified. Per DOD policy, a fundamental principle of assigning ratings is that Contractors will not be assessed a rating lower than Satisfactory solely for not performing beyond the requirements of the contract.
<b>(M) Marginal</b>	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the Contractor has not yet identified corrective actions. The Contractor's proposed actions appear only marginally effective or were not fully implemented.	A Marginal rating is appropriate when a significant event occurred from which the Contractor had trouble overcoming and that impacted the Government/Owner.
<b>(U) Unsatisfactory</b>	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains serious problem(s) for which the Contractor's corrective actions appear or were ineffective.	An Unsatisfactory rating is appropriate when multiple significant events occurred from which the contractor had trouble overcoming and that impacted the Government/Owner. A singular problem, however, could be of such serious magnitude that it alone constitutes an Unsatisfactory rating.
<b>(N) Not Applicable</b>	No information or did not apply to your contract	Rating will be neither positive nor negative.

## TO BE COMPLETED BY CLIENT

PLEASE CIRCLE THE ADJECTIVE RATING THAT BEST REFLECTS  
YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE.

<b>1. QUALITY:</b>	
a) Quality of technical data/report preparation efforts	E   VG   S   M   U   N
b) Ability to meet quality standards specified for technical performance	E   VG   S   M   U   N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E   VG   S   M   U   N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E   VG   S   M   U   N
<b>2. SCHEDULE/TIMELINESS OF PERFORMANCE:</b>	
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below)</i>	E   VG   S   M   U   N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E   VG   S   M   U   N
<b>3. CUSTOMER SATISFACTION:</b>	
a) To what extent were the end users satisfied with the project?	E   VG   S   M   U   N
b) Contractor was reasonable and cooperative in dealing with your staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports; efforts to keep lines of communication open)	E   VG   S   M   U   N
c) To what extent was the contractor cooperative, businesslike, and concerned with the interests of the customer?	E   VG   S   M   U   N
d) Overall customer satisfaction	E   VG   S   M   U   N
<b>4. MANAGEMENT/ PERSONNEL/LABOR</b>	
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/or labor force?	E   VG   S   M   U   N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E   VG   S   M   U   N
c) Government Property Control	E   VG   S   M   U   N
d) Knowledge/expertise demonstrated by contractor personnel	E   VG   S   M   U   N
e) Utilization of Small Business concerns	E   VG   S   M   U   N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E   VG   S   M   U   N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution, and response to Government changes	E   VG   S   M   U   N
h) Effectiveness of overall management (including ability to effectively lead, manage, and control the program)	E   VG   S   M   U   N
<b>5. COST/FINANCIAL MANAGEMENT</b>	
a) Ability to meet the terms and conditions within the contractually agreed price(s)?	E   VG   S   M   U   N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability, or other factors that benefited the client	E   VG   S   M   U   N
c) If this is/was a Government cost type contract, please rate the Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-	E   VG   S   M   U   N

up documentation, monthly status reports/budget variance reports, compliance with established budgets, and avoidance of significant and/or unexplained variances (under runs or overruns)	
d) Is the Contractor's accounting system adequate for management and tracking of costs? <i>If no, please explain in Remarks section.</i>	Yes No
e) If a Government contract, has it been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes No
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	Yes No
<b>6. SAFETY/SECURITY</b>	
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, and respond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety, correction of noted deficiencies, etc.)	E VG S M U N
b) Contractor complied with all security requirements for the project and personnel security requirements.	E VG S M U N
<b>7. GENERAL</b>	
a) Ability to successfully respond to emergency and/or surge situations (including notifying the COR, PM, or Contracting Officer in a timely manner regarding urgent contractual issues).	E VG S M U N
b) Compliance with contractual terms/provisions <i>(explain if specific issues)</i>	E VG S M U N
c) Would you hire or work with this firm again? <i>(If no, please explain below)</i>	Yes No
d) In summary, provide an overall rating for the work performed by this Contractor.	E VG S M U N

**Please provide responses to the questions above (if applicable) and/or additional remarks. Furthermore, please provide a brief narrative addressing specific strengths, weaknesses, deficiencies, or other comments that may assist our office in evaluating performance risk (please attach additional pages if necessary):**



SUBCONTRACTING PLAN

**SMALL BUSINESS SUBCONTRACTING PLAN (SAMPLE)**

Federal Acquisition Regulation (FAR), paragraph 19.708(b)(1)) prescribes the use of the clause at FAR 52.219-9 entitled "Small Business Subcontracting Plan." The following is a suggested model for use when formulating such subcontracting plan. While this model plan has been designed to be consistent with FAR 52.219-9, other formats of a subcontracting plan may be acceptable. However, failure to include the essential information as exemplified in this model may be cause for either a delay in acceptance or the rejection of a bid or offer where the clause is applicable. Further, the use of this model is not intended to waive other requirements that may be applicable under FAR 52.219-9. "SUBCONTRACT," as used in this clause, means any agreement (other than one involving an employer-employee relationship) entered into by a federal government prime contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

**I. IDENTIFICATION DATA:**

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Date Prepared: \_\_\_\_\_ Solicitation Number: \_\_\_\_\_

Description: \_\_\_\_\_

Estimated Contract Dollar Value: \_\_\_\_\_

**II. TYPE OF PLAN (circle one)**

- A. Individual Plan (All elements developed specifically for this contract and applicable for the full term of this contract, including any option periods.)
- B. Master Plan (Goals developed for this contract; all other elements standard; must be renewed every three years)
- C. Commercial Plan Commercial products/service plan, including goals, covers the offeror's fiscal year and applies to the entire production of commercial items or delivery of services sold by either the entire company or a portion thereof (e.g., division, plant, or product line); this includes planned subcontracting for both commercial and Government business. In accordance with FAR 19.704(d), "A commercial plan (as defined in FAR 19.701) is the preferred type of subcontracting plan for contractors furnishing commercial items." (Contractor sells large quantities of off-the-shelf commodities to many Government agencies. Plans/goals negotiated by a lead agency on a company-wide basis rather than for individual contracts. Plan effective only during the year for which it is approved. The contractor must provide a copy of the lead agency approval.)

**III. GOALS:**

*(For information purposes only: FAR 19.704(a)(1) requires separate percentage goals for using Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns as subcontractors; and a statement of the total dollars planned to be subcontracted to Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns. NOTE: The dollar amounts planned for subcontracting must be expressed as percentages of total subcontracting dollars as shown below.)*

State separate dollar and percentage goals, expressed in terms of percentages of total subcontracting dollars, for the use of Large Business, Small Business, Veteran-Owned Small Business, Service Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, Woman-Owned Small Business, and Historically Black Colleges and Universities/Minority Institutions concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs in the following format. (For a contract with options, provide a separate statement for the basic contract and individual statements for each option year.)

- A. **BASE BID ONLY:** The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) and dollar amounts are applicable to the contract cited above or to the contract awarded under the solicitation cited. Total Base Bid is \$\_\_\_\_\_.

(i) Total estimated dollar value of all planned subcontracting for an individual contract plan; or the offerors total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan; i.e., the sum of a and b above: \$ (100 Percent) \$\_\_\_\_\_ and \_\_\_\_\_ %

(ii) Total estimated dollar value and percent of planned subcontracting with Small Business (including Veteran-Owned Small Business, Service Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, Woman-Owned Small Business, and Historically Black Colleges and Universities/Minority Institutions concerns): (% of "(i)") \$\_\_\_\_\_ and \_\_\_\_\_ %

(iii) Total estimated dollar value and percent of planned subcontracting with large businesses (all business concerns classified as "other than small"): (% of "(i)") \$\_\_\_\_\_ and \_\_\_\_\_ %

(iv) Total estimated dollar value and percent of planned subcontracting with Small Disadvantaged Business concerns (SDB): \$\_\_\_\_\_ and \_\_\_\_\_ % of total planned subcontracting dollars under this contract will be awarded to subcontractors who are small concerns owned and controlled by socially and economically disadvantaged individuals and appear on the Small Business Administration's list. (% of "(i)")

(v) Total estimated dollar value and percent of planned subcontracting with Women-Owned Small Business concerns (WOSB): \$\_\_\_\_\_ and \_\_\_\_\_ % of total planned subcontracting dollars under this contract will be awarded to subcontractors who are WOSB. (% of "(i)")

(vi) Total estimated dollar value and percent of planned subcontracting with Veteran-Owned Small Business concerns (VOSB): \$\_\_\_\_\_ and \_\_\_\_\_ % of total planned subcontracting dollars under this contract will be awarded to subcontractors who are VOSB. (% of "(i)")

(vii) Total estimated dollar value and percent of planned subcontracting with Service-Disabled Veteran-Owned Small Business concerns (SDVOSB): \$\_\_\_\_\_ and \_\_\_\_\_ % of total planned subcontracting dollars under this contract will be awarded to subcontractors who are SDVOSB. (% of "(i)")

(viii) Total estimated dollar value and percent of planned subcontracting with Historically Black Colleges and Universities/Minority Institutions (HBCU/MI): \$\_\_\_\_\_ and \_\_\_\_\_ % of total planned subcontracting dollars under this contract will go to HBCU's who are an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2, the term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986; or MI's who are an institution of higher education meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which, includes a Hispanic-serving institution of higher education as defined in Section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)). (% of "(i)")

(ix) Total estimated dollar value and percent of planned subcontracting with HUBZone Small Business concerns: \$ \_\_\_\_\_ and \_\_\_\_\_ % of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns located in a historically underutilized business zone which is an area located within one or more qualified census tracts, qualified non-metropolitan counties, or lands within the external boundaries of an Indian reservation and appear on the Small Business Administration's HUBZONE web site at [www.sba.gov/HUBZONE](http://www.sba.gov/HUBZONE). (% of "(i)")

The following principal products and/or services will be subcontracted under the Base Bid of this contract, and the distribution among Large Business, Small Business, Veteran-Owned Small Business, Service Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, Woman-Owned Small Business, and Historically Black Colleges and Universities/Minority Institutions is as follows: **(Check all that apply)**

[illegible]

(ATTACHMENT MAY BE USED IF ADDITIONAL SPACE IS REQUIRED)

- B. **OPTIONS:** You must include a separate goal for each option. See the attached Continuation Sheet for Paragraph A for each option.
- C. The following method was used in developing subcontract goals (i.e., Statement explaining how the product and service areas to be subcontracted were established, how the areas to be subcontracted to Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns were determined, and how Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns' capabilities were determined, to include identification of source lists utilized in making those determinations. Also a statement as to what efforts will be taken to improve on past goals and how SB and SDB firms will be included in areas without previous SB/SDB involvement).

---

---

---

---

- D. A description of the method used to identify potential **SOURCES** for solicitation purposes (e.g., whether you used existing company source lists, the System for Award Management (SAM)) of the Small Business

Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, disadvantaged, and women-owned small business trade associations. A firm may rely on the information contained in SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned, service-disabled veteran-owned, HUBZone small, small disadvantaged and women-owned small business source list. Use of SAM as its source list does not relieve a firm of its responsibilities e.g., outreach, assistance, counseling, and publicizing subcontracting opportunities) in this clause.

---

---

---

---

E. Indirect and overhead costs (check one): \_\_\_\_ HAVE \_\_\_\_ HAVE NOT been included in the goals specified in Paragraph A and Paragraph B.

F. If "HAVE" was selected in Paragraph E, explain the method used in determining the proportionate share of indirect and overhead cost to be allocated as subcontracts to Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns. (NOTE: Commercial Plans Must Include Indirect Costs).

---

---

---

---

#### IV. PROGRAM ADMINISTRATOR:

*(For information purposes only: FAR 19.704(a)(7) requires information about the company employee who will administer the subcontracting program. Please provide the name, title, address, telephone number, fax machine number, email address, position within the corporate structure, and the duties of that employee.)*

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Position: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone No: \_\_\_\_\_

Fax No: \_\_\_\_\_

Email Address: \_\_\_\_\_

This individual's specific duties, as they relate to the firm's subcontracting program, are as follows:  
General overall responsibility for this company's Small Business Program, the development, preparation and execution of individual subcontracting plans and for monitoring performance relative to contractual subcontracting requirements contained in this plan, including but not limited to:

A. Developing and maintaining offerors/bidders lists of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and

women-owned small business concerns from all possible sources. Our firm may rely on the information contained in the SBA Small Business Source System, as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business source list. The Small Business Administration's (SBA's) list of Small Disadvantaged Businesses and small HUBZone businesses can be accessed through [www.sam.gov](http://www.sam.gov). Select "Dynamic Small Business Search" to access the SBA small business source system.

- B. Ensuring that procurement packages are structured to permit Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns to participate to the maximum extent possible.
- C. Assuring inclusion of Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns in all solicitations for products or services that they are capable of providing.
- D. Reviewing solicitations to remove statements, clauses, etc., which may tend to restrict or prohibit Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business participation, including recommendations to set aside competitions for SDB's
- E. Ensuring periodic rotation of potential subcontractors on bidders' lists.
- F. Ensuring that the bid proposal review board documents its reasons for not selecting low bids submitted by Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns.
- G. Ensuring the establishment and maintenance of records of solicitations and subcontract award activity.
- H. Attending or arranging for attendance of company counselors at Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, etc.
- I. Conducting or arranging for conduct of motivational training for purchasing personnel pursuant to the intent of Public Laws 95-507, 99-661, and 100-180.
- J. Monitoring attainment of proposed goals.
- K. Preparing and submitting timely, required subcontract reports
- L. Coordinating contractor's activities during the conduct of compliance reviews by Federal agencies.
- M. Coordinating the conduct of contractor's activities involving its Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business subcontracting program.
- N. Ensuring Individual Subcontract Reports (ISRs) and Summary Subcontract Reports (SSRs) are submitted using eSRS (<http://www.esrs.gov>), following the instructions in the eSRS.
- O. Notifying the Contracting Officer or his representative in writing of any substitutions of firms that are not Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business for the firms listed in the subcontracting plan.

P. Additions to (or deletions from) the duties specified above are as follows:

---

---

---

---

---

**V. EQUITABLE OPPORTUNITY:**

*(For information purposes only: FAR 19-704(8) requires a description of the efforts the contractor will make to ensure that Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns will have an equitable opportunity to compete for subcontracts.)*

The following efforts will be taken to assure that Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns will have an equitable opportunity to compete for subcontracts, including items not traditionally awarded to SB or SDB firms:

A. Outreach efforts will be made by:

- (i) Contacts with minority and small business trade associations such as veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce.
- (ii) Contacts with business development organizations.
- (iii) Attendance at small and minority business procurement conferences and trade fairs.
- (iv) Sources will be requested from Small Business Administration's small business source system.
- (v) Reviews to determine the competence, ability, experience and capacity available from SB and SDB firms and providing technical assistance to same.
- (vi) Evaluations of our SB, SDB, WOSB, VOSB, SDVOSB and HUBZone award performance and program effectiveness against goals established company-wide.

B. The following internal efforts will be made to guide and encourage buyers:

- (i) Workshops, seminars and training programs will be conducted.
- (ii) Activities will be monitored to evaluate compliance with this subcontracting plan, evaluating SB, SDB, WOSB, VOSB, SDVOSB and HUBZone award performance and program effectiveness.
- (iii) Small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concern source lists, guides and other data identifying small, small disadvantaged and women-owned small business concerns will be maintained and utilized by buyers in soliciting subcontracts.
- (iv) Additions to (or deletion from) the above listed efforts are as follows:

---

---

---

---

---

**VI. FLOW DOWN CLAUSE:**

*(For information purposes only: FAR 19-704(a)(9) requires that your company include FAR 52.219-8, "Utilization of Small Business Concerns," in all subcontracts that offer further subcontracting opportunities. Your company must require all subcontractors, except small business concerns, that receive subcontracts in excess of \$700,000 (\$1,500,000 for construction) to adopt a plan that complies with the requirements of FAR 52.219-9, "Small Business Subcontracting Plan.")*

The offeror (contractor) agrees that the clause entitled "Utilization of Small Business Concerns" at FAR 52.219-8 will be included in all subcontracts that offer further subcontracting opportunities, and all subcontractors (except small business concerns) who receive subcontracts in excess of \$700,000 (\$1,500,000 for construction) will be required to adopt a subcontracting plan that complies with FAR 52.219-9. Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to subcontractors facilities to review applicable records and subcontracting program progress.

#### **VII. REPORTING AND COOPERATION:**

*(For information purposes only: FAR 19-704(a)(10) requires your company (i) cooperate in any studies or surveys as may be required, (ii) submit periodic reports which show compliance with the subcontracting plan; (iii) submit the Individual Subcontract Report (ISR), and the Summary Subcontract Report (SSR) using the Electronic Subcontracting Reporting System (eSRS);, (iv) ensure that subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS, (v) provide the prime contract number, DUNS number, and the e-mail address of the offeror's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs, and (vi) require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.)*

The offeror/contractor agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the offeror/contractor with the subcontracting plan and with the clause entitled "Utilization of Small Business Concerns," contained in the contract. The above reports will include submission of its Individual Subcontracting Report (ISR) and Summary Subcontract Report (SSR)

The offeror/contractor further agrees to ensure that its subcontractors agree to submission of ISRs and SSRs. **ISRs and SSRs shall be submitted via the Electronic Subcontracting Reporting System (eSRS) website [www.esrs.gov](http://www.esrs.gov)**

<b>Reporting Period</b>	<b>Report Due</b>	<b>Due Date</b>
Oct 1 - Mar 31	ISR/SF294	4/30
Apr 1 - Sept 30	ISR/SF294	10/30
Oct 1 – Mar 31	SSR/SF295	4/30 (for contracts with the DOD)
Apr 1 – Sept 30	SSR/SF295	10/30 (for contracts with DOD)
Oct 1 - Sept 30	SSR/SF295	10/30 (for civilian agencies)
Contract Completion	SSR/SF295	30 days after close of contractor's fiscal year (Commercial Plan)

#### **VIII. RECORDKEEPING:**

*(For information purpose only: FAR 19-704(a)(11) requires a list of the types of records your company will maintain to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan.)*

The offeror/contractor agrees that he will maintain at least the following types of records to document compliance with this subcontracting plan:

- A. Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concern source lists, guides and other data identifying SB/SDB concerns.
- B. Organizations contacted for Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business sources.
- C. On a contract-by-contract basis, records on all subcontract solicitations over \$150,000, indicating on each solicitation (i) whether small business concerns were solicited, and if not, why not; (ii) whether Veteran-Owned Small Business concerns were solicited, and if not, why not; (iii) whether Service-Disabled Veteran-Owned Small Business concerns were solicited, and if not, why not; (iv) whether HUBZone Small Business concerns were solicited, and if not, why not; (v) whether Small Disadvantaged business concerns were solicited, and if not, why not; (vi) whether Women-Owned Small Business concerns were solicited, and if not, why not; and (vii) reasons for the failure of solicited Small Business, Veteran-Owned Small Business, Service-Disabled Veteran-Owned Small Business, HUBZone Small Business, Small Disadvantaged Business, and Women-Owned Small Business concerns to receive the subcontract award.
- D. Records to support other outreach efforts: Contacts with veteran service organizations, Minority and Small Business Trade Associations, etc., and attendance at small and minority business procurement conferences and trade fairs.
- E. Records to support internal activities to guide and encourage buyers: Workshops, seminars, training programs, etc., monitoring activities to evaluate compliance.
- F. On a contract-by-contract basis, records to support subcontract award data to include name and address and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.
- G. Records to be maintained in addition to the above are as follows:

---

---

---

---

---

## IX. ASSURANCES

*(For information purpose only: FAR 19.704(a)(12-15) requires assurances from your company)*

- A. Assurances that the offeror will make a good faith effort to acquire articles, equipment, supplies, services, or materials, or obtain the performance of construction work from the small business concerns that the offeror used in preparing the bid or proposal, in the same or greater scope, amount, and quality used in preparing and submitting the bid or proposal. Responding to a request for a quote does not constitute use in preparing a bid or proposal. An offeror used a small business concern in preparing the bid or proposal if-
  - (i) The offeror identifies the small business concern as a subcontractor in the bid or proposal or associated small business subcontracting plan, to furnish certain supplies or perform a portion of the contract; or
  - (ii) The offeror used the small business concern's pricing or cost information or technical expertise in preparing the bid or proposal, where there is written evidence of an intent or understanding that



the small business concern will be awarded a subcontract for the related work if the offeror is awarded the contract;

- B. Assurances that the contractor will provide the contracting officer with a written explanation if the contractor fails to acquire articles, equipment, supplies, services or materials or obtain the performance of construction work as described in (a)(12) of this section. This written explanation will be submitted to the contracting officer within 30 days of contract completion; and
- C. Assurances that the contractor will not prohibit a subcontractor from discussing with the contracting officer any material matter pertaining to payment to or utilization of a subcontractor.
- D. Assurances that the offeror will pay its small business subcontractors on time and in accordance with the terms and conditions of the subcontract, and notify the contracting officer if the offeror pays a reduced or an untimely payment to a small business subcontractor (see [52.242-5](#)).

**X. SIGNATURES REQUIRED:**

**This subcontracting plan was SUBMITTED by:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Typed Name and Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

**Agency Small Business Review**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Typed Name and Title: \_\_\_\_\_

**U.S. Small Business Administration**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Typed Name and Title: \_\_\_\_\_

**Contracting Officer Approval:** \_\_\_\_\_ **Date:** \_\_\_\_\_

CONTINUATION OF PARAGRAPH A  
(SUBMIT ADDITIONAL OPTION PAGES FOR EACH OPTION)

The following principal products and/or services will be subcontracted under Option 1 of this contract, and the distribution among LB, SB, SDB, WOSB, VOSB, SDVOSB, HBCU/MI, and HUBZone SB is as follows: **(Check all that apply)**

[illegible]

Section 00 45 00 - Representations and Certifications

REPS & CERTS

REPRESENTATIONS AND CERTIFICATIONS

COMPANY NAME AND ADDRESS:

---

---

---

PHONE NUMBER: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

BUSINESS SIZE (select one):

Large Business \_\_\_\_ Small Business \_\_\_\_ HUBZone \_\_\_\_ 8A \_\_\_\_

Woman-Owned \_\_\_\_ Service-Disabled Veteran-Owned \_\_\_\_

CURRENTLY REGISTERED WITH SYSTEM FOR AWARD MANAGEMENT (SAM): YES \_\_\_\_ NO \_\_\_\_  
(Note: See FAR 52.204-7)

TAX IDENTIFICATION NUMBER (TIN): \_\_\_\_\_

UNIQUE ENTITY IDENTIFIER (previously DUNS Number): \_\_\_\_\_  
(Note: See FAR 52.204-7. Unique Entity Identifier is a 9 digit numeric code.)

CAGE CODE: \_\_\_\_\_  
(Note: See FAR 52.204-7)

CLAUSES INCORPORATED BY REFERENCE

52.236-28	Preparation of Proposals--Construction	OCT 1997
252.203-7005	Representation Relating to Compensation of Former DoD Officials	NOV 2011
252.225-7055	Representation Regarding Business Operations with the Maduro Regime	MAY 2022
252.225-7973 (Dev)	Prohibition on the Procurement of Foreign-Made Unmanned Aircraft Systems - Representation (DEVIATION 2020-O0015)	MAY 2020

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2022)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 236220.

(2) The small business size standard is \$39,500,000.

(3) The small business size standard for a concern that submits an offer, other than on a construction or service acquisition, but proposes to furnish an end item that it did not itself manufacture, process, or produce is 500 employees if the acquisition--

(i) Is set aside for small business and has a value above the simplified acquisition threshold;

(ii) Uses the HUBZone price evaluation preference regardless of dollar value, unless the offeror waives the price evaluation preference; or

(iii) Is an 8(a), HUBZone, service-disabled veteran-owned, economically disadvantaged women-owned, or women-owned small business set-aside or sole-source award regardless of dollar value.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7, System for Award Management, is not included in this solicitation, and the Offeror has an active registration in the System for Award Management (SAM), the Offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

(       ) Paragraph (d) applies.

(       ) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) 52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements--Representation. This provision applies to all solicitations.

(iv) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(v) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(vi) 52.204-26, Covered Telecommunications Equipment or Services--Representation. This provision applies to all solicitations.

(vii) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations--Representation.

(viii) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(ix) 52.209-11, Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.

(x) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(xi) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(xii) 52.219-1, Small Business Program Representations (Basic, Alternates I, and II). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(C) The provision with its Alternate II applies to solicitations that will result in a multiple-award contract with more than one NAICS code assigned.

(xiii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xiv) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xv) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xvi) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial products or commercial services.

(xvii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xviii) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.

(xix) 52.223-22, Public Disclosure of Greenhouse Gas Emissions and Reduction Goals--Representation. This provision applies to solicitations that include the clause at 52.204-7.)

(xx) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xxi) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225- 3.

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$92,319, the provision with its Alternate II applies.

(D) If the acquisition value is \$92,319 or more but is less than \$100,000, the provision with its Alternate III applies.

(xxii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xxiii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xxiv) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxv) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

X (i) 52.204-17, Ownership or Control of Offeror.

X (ii) 52.204-20, Predecessor of Offeror.

(iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

(iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

(v) 52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

(vi) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(viii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The Offeror has completed the annual representations and certifications electronically in SAM accessed through <https://www.sam.gov>. After reviewing the SAM information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [        offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change
-----	-----	-----	-----
-----	-----	-----	-----

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

#### 52.204-24 REPRESENTATION REGARDING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (NOV 2021)

The Offeror shall not complete the representation at paragraph (d)(1) of this provision if the Offeror has represented that it "does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument" in paragraph (c)(1) in the provision at 52.204-26, Covered Telecommunications Equipment or Services--Representation, or in paragraph (v)(2)(i) of the provision at 52.212-3, Offeror Representations and Certifications-Commercial Products and Commercial Services. The Offeror shall not complete the representation in paragraph (d)(2) of this provision if the Offeror has represented that it "does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services" in paragraph (c)(2) of the provision at 52.204-26, or in paragraph (v)(2)(ii) of the provision at 52.212-3.

(a) Definitions. As used in this provision-

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the meanings provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Prohibition.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Nothing in the prohibition shall be construed to--

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract or extending or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. Nothing in the prohibition shall be construed to--

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (<https://www.sam.gov>) for entities excluded from receiving federal awards for "covered telecommunications equipment or services."

(d) Representations. The Offeror represents that--

(1) It [ \_\_\_\_ ] will, [ \_\_\_\_ ] will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation. The Offeror shall provide the additional disclosure information required at paragraph (e)(1) of this section if the Offeror responds "will" in paragraph (d)(1) of this section; and

(2) After conducting a reasonable inquiry, for purposes of this representation, the Offeror represents that--

It [ \_\_\_\_ ] does, [ \_\_\_\_ ] does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror shall provide the additional disclosure information required at paragraph (e)(2) of this section if the Offeror responds "does" in paragraph (d)(2) of this section.

(e) Disclosures.



(1) Disclosure for the representation in paragraph (d)(1) of this provision. If the Offeror has responded "will" in the representation in paragraph (d)(1) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment--

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(ii) For covered services--

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(2) Disclosure for the representation in paragraph (d)(2) of this provision. If the Offeror has responded "does" in the representation in paragraph (d)(2) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment--

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(ii) For covered services--

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the PSC of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(End of provision)

52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (OCT 2018)

(a) Definitions. As used in this provision--

Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

Federal contracts and grants with total value greater than \$10,000,000 means--

- (1) The total value of all current, active contracts and grants, including all priced options; and
- (2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror ( ) has ( ) does not have current active Federal contracts and grants with total value greater than \$10,000,000.

(c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in--

(A) The payment of a monetary fine or penalty of \$5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIS as required through maintaining an active registration in the System for Award Management, which can be accessed via <https://www.sam.gov> (see 52.204-7).

(End of provision)

52.209-13 VIOLATION OF ARMS CONTROL TREATIES OR AGREEMENTS--CERTIFICATION (NOV 2021)

(a) This provision does not apply to acquisitions at or below the simplified acquisition threshold or to acquisitions of commercial products and commercial services as defined in Federal Acquisition Regulation 2.101.

(b) Certification. [Offeror shall check either (1) or (2).]

\_\_\_ (1) The Offeror certifies that--

(i) It does not engage and has not engaged in any activity that contributed to or was a significant factor in the President's or Secretary of State's determination that a foreign country is in violation of its obligations undertaken in any arms control, nonproliferation, or disarmament agreement to which the United States is a party, or is not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. The determinations are described in the most recent unclassified annual report provided to Congress pursuant to section 403 of the Arms Control and Disarmament Act (22 U.S.C. 2593a). The report is available at <https://www.state.gov/bureaus-offices/under-secretary-for-arms-control-and-international-security-affairs/bureau-of-arms-control-verification-and-compliance/>; and

(ii) No entity owned or controlled by the Offeror has engaged in any activity that contributed to or was a significant factor in the President's or Secretary of State's determination that a foreign country is in violation of its obligations undertaken in any arms control, nonproliferation, or disarmament agreement to which the United States is a party, or is not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. The determinations are described in the most recent unclassified annual report provided to Congress pursuant to section 403 of the Arms Control and Disarmament Act (22 U.S.C. 2593a). The report is available at <https://www.state.gov/bureaus-offices/under-secretary-for-arms-control-and-international-security-affairs/bureau-of-arms-control-verification-and-compliance/>; or

\_\_\_ (2) The Offeror is providing separate information with its offer in accordance with paragraph (d)(2) of this provision.

(c) Procedures for reviewing the annual unclassified report (see paragraph (b)(1) of this provision). For clarity, references to the report in this section refer to the entirety of the annual unclassified report, including any separate reports that are incorporated by reference into the annual unclassified report.

(1) Check the table of contents of the annual unclassified report and the country section headings of the reports incorporated by reference to identify the foreign countries listed there. Determine whether the Offeror or any person owned or controlled by the Offeror may have engaged in any activity related to one or more of such foreign countries.

(2) If there may have been such activity, review all findings in the report associated with those foreign countries to determine whether or not each such foreign country was determined to be in violation of its obligations undertaken in an arms control, nonproliferation, or disarmament agreement to which the United States is a party, or to be not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. For clarity, in the annual report an explicit certification of non-compliance is equivalent to a determination of violation. However, the following statements in the annual report are not equivalent to a determination of violation:

(i) An inability to certify compliance.

(ii) An inability to conclude compliance.

(iii) A statement about compliance concerns.

(3) If so, determine whether the Offeror or any person owned or controlled by the Offeror has engaged in any activity that contributed to or is a significant factor in the determination in the report that one or more of these foreign countries is in violation of its obligations undertaken in an arms control, nonproliferation, or disarmament agreement to which the United States is a party, or is not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. Review the narrative for any such findings reflecting a determination of violation or non-adherence related to those foreign countries in the report, including the finding itself, and to the extent necessary, the conduct giving rise to the compliance or adherence concerns, the analysis of compliance or adherence concerns, and efforts to resolve compliance or adherence concerns.

(4) The Offeror may submit any questions with regard to this report by email to [NDAA1290Cert@state.gov](mailto:NDAA1290Cert@state.gov). To the extent feasible, the Department of State will respond to such email inquiries within 3 business days.

(d) Do not submit an offer unless--

(1) A certification is provided in paragraph (b)(1) of this provision and submitted with the offer; or

(2) In accordance with paragraph (b)(2) of this provision, the Offeror provides with its offer information that the President of the United States has--

(i) Waived application under U.S.C. 2593e(d) or (e); or

(ii) Determined under 22 U.S.C. 2593e(g)(2) that the entity has ceased all activities for which measures were imposed under 22 U.S.C.2593e(b).

(e) Remedies. The certification in paragraph (b)(1) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly submitted a false certification, in addition to other remedies available to the Government, such as suspension or debarment, the Contracting Officer may terminate any contract resulting from the false certification.

(End of provision)

#### 252.204-7007 ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAY 2021)

Substitute the following paragraphs (b), (d) and (e) for paragraphs (b) and (d) of the provision at FAR 52.204-8:

(b)(1) If the provision at FAR 52.204-7, System for Award Management, is included in this solicitation, paragraph (e) of this provision applies.

(2) If the provision at FAR 52.204-7, System for Award Management, is not included in this solicitation, and the Offeror has an active registration in the System for Award Management (SAM), the Offeror may choose to use paragraph (e) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

☐ (i) Paragraph (e) applies.

☐ (ii) Paragraph (e) does not apply and the Offeror has completed the individual representations and certifications in the solicitation.

(d)(1) The following representations or certifications in the SAM database are applicable to this solicitation as indicated:

(i) 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation. Applies to all solicitations.

(ii) 252.216-7008, Economic Price Adjustment--Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

(iii) 252.225-7042, Authorization to Perform. Applies to all solicitations when performance will be wholly or in part in a foreign country.

(iv) 252.225-7049, Prohibition on Acquisition of Certain Foreign Commercial Satellite Services--Representations. Applies to solicitations for the acquisition of commercial satellite services.

(v) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of \$150,000 or more.

(vi) 252.229-7012, Tax Exemptions (Italy)--Representation. Applies to solicitations when contract performance will be in Italy.

(vii) 252.229-7013, Tax Exemptions (Spain)--Representation. Applies to solicitations when contract performance will be in Spain.

(viii) 252.247-7022, Representation of Extent of Transportation by Sea. Applies to all solicitations except those for direct purchase of ocean transportation services or those with an anticipated value at or below the simplified acquisition threshold.

(2) The following representations or certifications in SAM are applicable to this solicitation as indicated by the Contracting Officer:

X (i) 252.209-7002, Disclosure of Ownership or Control by a Foreign Government.

\_\_\_\_ (ii) 252.225-7000, Buy American--Balance of Payments Program Certificate.

\_\_\_\_ (iii) 252.225-7020, Trade Agreements Certificate.

\_\_\_\_ Use with Alternate I.

X (iv) 252.225-7031, Secondary Arab Boycott of Israel.

\_\_\_\_ (v) 252.225-7035, Buy American--Free Trade Agreements--Balance of Payments Program Certificate.

\_\_\_\_ Use with Alternate I.

\_\_\_\_ Use with Alternate II.

\_\_\_\_ Use with Alternate III.

\_\_\_\_ Use with Alternate IV.

\_\_\_\_ Use with Alternate V.

\_\_\_\_ (vi) 252.226-7002, Representation for Demonstration Project for Contractors Employing Persons with Disabilities.

\_\_\_\_ (vii) 252.232-7015, Performance-Based Payments--Representation.

(e) The Offeror has completed the annual representations and certifications electronically via the SAM website at <https://www.acquisition.gov/>. After reviewing the SAM database information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in FAR 52.204-8(c) and paragraph (d) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [Offeror to insert changes, identifying change by provision number, title, date \_\_\_\_]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR/DFARS provision No.	Title	Date	Change

Any changes provided by the Offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications located in the SAM database.

(End of provision)

#### 252.204-7008 COMPLIANCE WITH SAFEGUARDING COVERED DEFENSE INFORMATION CONTROLS (OCT 2016)

(a) Definitions. As used in this provision--

Controlled technical information, covered contractor information system, covered defense information, cyber incident, information system, and technical information are defined in clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting.

(b) The security requirements required by contract clause 252.204-7012 shall be implemented for all covered defense information on all covered contractor information systems that support the performance of this contract.

(c) For covered contractor information systems that are not part of an information technology service or system operated on behalf of the Government (see 252.204-7012(b)(2))--

(1) By submission of this offer, the Offeror represents that it will implement the security requirements specified by National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, "Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations" (see <http://dx.doi.org/10.6028/NIST.SP.800-171>) that are in effect at the time the solicitation is issued or as authorized by the contracting officer not later than December 31, 2017.

(2)(i) If the Offeror proposes to vary from any of the security requirements specified by NIST SP 800-171 that are in effect at the time the solicitation is issued or as authorized by the Contracting Officer, the Offeror shall submit to the Contracting Officer, for consideration by the DoD Chief Information Officer (CIO), a written explanation of—

(A) Why a particular security requirement is not applicable; or

(B) How an alternative but equally effective, security measure is used to compensate for the inability to satisfy a particular requirement and achieve equivalent protection.

(ii) An authorized representative of the DoD CIO will adjudicate offeror requests to vary from NIST SP 800-171 requirements in writing prior to contract award. Any accepted variance from NIST SP 800-171 shall be incorporated into the resulting contract.

(End of provision)

252.204-7016 COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES --  
REPRESENTATION (DEC 2019)

(a) Definitions. As used in this provision, covered defense telecommunications equipment or services has the meaning provided in the clause 252.204-7018, Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services.

(b) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (<https://www.sam.gov>) for entities excluded from receiving federal awards for “covered defense telecommunications equipment or services”.

(c) Representation. The Offeror represents that it [ ] does, [ ] does not provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

(End of provision)

252.204-7017 PROHIBITION ON THE ACQUISITION OF COVERED DEFENSE TELECOMMUNICATIONS  
EQUIPMENT OR SERVICES--REPRESENTATION (MAY 2021)

The Offeror is not required to complete the representation in this provision if the Offeror has represented in the provision at 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation, that it “does not provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.”

(a) Definitions. Covered defense telecommunications equipment or services, covered mission, critical technology, and substantial or essential component, as used in this provision, have the meanings given in the 252.204-7018 clause, Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services, of this solicitation.

(b) Prohibition. Section 1656 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits agencies from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) at <https://www.sam.gov> for entities that are excluded when providing any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless a waiver is granted.

(d) Representation. If in its annual representations and certifications in SAM the Offeror has represented in paragraph (c) of the provision at 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation, that it “does” provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument, then the Offeror shall complete the following additional representation:

The Offeror represents that it [ ] will [ ] will not provide covered defense telecommunications equipment or services as a part of its offered products or services to DoD in the performance of any award resulting from this solicitation.

(e) Disclosures. If the Offeror has represented in paragraph (d) of this provision that it “will provide covered defense telecommunications equipment or services,” the Offeror shall provide the following information as part of the offer:

(1) A description of all covered defense telecommunications equipment and services offered (include brand or manufacturer; product, such as model number, original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable).

(2) An explanation of the proposed use of covered defense telecommunications equipment and services and any factors relevant to determining if such use would be permissible under the prohibition referenced in paragraph (b) of this provision.

(3) For services, the entity providing the covered defense telecommunications services (include entity name, unique entity identifier, and Commercial and Government Entity (CAGE) code, if known).

(4) For equipment, the entity that produced or provided the covered defense telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known).

(End of provision)



Section 00 70 00 - Conditions of the Contract

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUN 2020
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	MAY 2014
52.203-6	Restrictions On Subcontractor Sales To The Government	JUN 2020
52.203-7	Anti-Kickback Procedures	JUN 2020
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	MAY 2014
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	MAY 2014
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	JUN 2020
52.203-13	Contractor Code of Business Ethics and Conduct	NOV 2021
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	JAN 2017
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-9	Personal Identity Verification of Contractor Personnel	JAN 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	JUN 2020
52.204-13	System for Award Management Maintenance	OCT 2018
52.204-18	Commercial and Government Entity Code Maintenance	AUG 2020
52.204-19	Incorporation by Reference of Representations and Certifications.	DEC 2014
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities	NOV 2021
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment	NOV 2021
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	NOV 2021
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	OCT 2018
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	NOV 2015
52.210-1	Market Research	NOV 2021
52.211-15	Defense Priority And Allocation Requirements	APR 2008
52.215-2	Audit and Records--Negotiation	JUN 2020
52.215-17	Waiver of Facilities Capital Cost of Money	OCT 1997
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns	OCT 2022
52.219-8	Utilization of Small Business Concerns	OCT 2018
52.219-9 Alt II	Small Business Subcontracting Plan (NOV 2021) Alternate II	NOV 2016
52.219-16	Liquidated Damages-Subcontracting Plan	SEP 2021
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards - Overtime Compensation	MAY 2018
52.222-6	Construction Wage Rate Requirements	AUG 2018
52.222-7	Withholding of Funds	MAY 2014
52.222-8	Payrolls and Basic Records	JUL 2021
52.222-9	Apprentices and Trainees	JUL 2005
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	MAY 2014

52.222-12	Contract Termination-Debarment	MAY 2014
52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	MAY 2014
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	MAY 2014
52.222-21	Prohibition Of Segregated Facilities	APR 2015
52.222-26	Equal Opportunity	SEP 2016
52.222-27	Affirmative Action Compliance Requirements for Construction	APR 2015
52.222-37	Employment Reports on Veterans	JUN 2020
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
52.222-50	Combating Trafficking in Persons	NOV 2021
52.222-54	Employment Eligibility Verification	DEC 2021
52.222-55	Minimum Wages for Contractor Workers Under Executive Order 14026	JAN 2022
52.222-62	Paid Sick Leave Under Executive Order 13706	JAN 2022
52.223-2	Affirmative Procurement of Biobased Products Under Service and Construction Contracts	SEP 2013
52.223-5	Pollution Prevention and Right-to-Know Information	MAY 2011
52.223-6	Drug-Free Workplace	MAY 2001
52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners.	JUN 2016
52.223-15	Energy Efficiency in Energy-Consuming Products	MAY 2020
52.223-17	Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts	AUG 2018
52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	JUN 2020
52.223-20	Aerosols	JUN 2016
52.223-21	Foams	JUN 2016
52.225-13	Restrictions on Certain Foreign Purchases	FEB 2021
52.227-1	Authorization and Consent	JUN 2020
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	JUN 2020
52.227-4	Patent Indemnity-Construction Contracts	DEC 2007
52.228-2	Additional Bond Security	OCT 1997
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.228-11 (Dev)	Individual Surety--Pledge of Assets (DEVIATION 2020-O0016)	FEB 2021
52.228-12	Prospective Subcontractor Requests for Bonds	MAY 2014
52.228-15 (Dev)	Performance and Payment Bonds-Construction. (Deviation 2020-O0016)	JUN 2020
52.229-3	Federal, State And Local Taxes	FEB 2013
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 2014
52.232-17	Interest	MAY 2014
52.232-23	Assignment Of Claims	MAY 2014
52.232-27	Prompt Payment for Construction Contracts	JAN 2017
52.232-33	Payment by Electronic Funds Transfer--System for Award Management	OCT 2018
52.232-39	Unenforceability of Unauthorized Obligations	JUN 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	NOV 2021
52.233-1	Disputes	MAY 2014
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004

52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13 Alt I	Accident Prevention (Nov 1991) - Alternate I	NOV 1991
52.236-14	Availability and Use of Utility Services	APR 1984
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21 Alt I	Specifications and Drawings for Construction (Feb 1997) - Alternate I	APR 1984
52.236-25	Requirements for Registration of Designers	JUN 2003
52.236-26	Preconstruction Conference	FEB 1995
52.242-5	Payments to Small Business Subcontractors	JAN 2017
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	JUN 2007
52.244-6	Subcontracts for Commercial Products and Commercial Services	JAN 2022
52.246-12	Inspection of Construction	AUG 1996
52.248-3 Alt I	Value Engineering-Construction (OCT 2020) - Alternate I	APR 1984
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (Apr 2012) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.203-7003	Agency Office of the Inspector General	AUG 2019
252.203-7004	Display of Hotline Posters	AUG 2019
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004	Antiterrorism Awareness Training for Contractors.	FEB 2019
252.204-7015	Notice of Authorized Disclosure of Information for Litigation Support	MAY 2016
252.204-7018	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services	JAN 2021
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Country that is a State Sponsor of Terrorism	MAY 2019
252.219-7003	Small Business Subcontracting Plan (DOD Contracts)	DEC 2019
252.222-7006	Restrictions on the Use of Mandatory Arbitration Agreements	DEC 2010
252.223-7004	Drug Free Work Force	SEP 1988
252.223-7006	Prohibition On Storage, Treatment, and Disposal of Toxic or Hazardous Materials	SEP 2014
252.223-7008	Prohibition of Hexavalent Chromium	JUN 2013

252.225-7012	Preference For Certain Domestic Commodities	MAR 2022
252.225-7048	Export-Controlled Items	JUN 2013
252.225-7052	Restriction on the Acquisition of Certain Magnets, Tantalum, and Tungsten.	OCT 2020
252.225-7056	Prohibition Regarding Business Operations with the Maduro Regime	MAY 2022
252.225-7972 (Dev)	Prohibition on the Procurement of Foreign-Made Unmanned Aircraft Systems (DEVIATION 2020-O0015)	MAY 2020
252.227-7022	Government Rights (Unlimited)	MAR 1979
252.227-7033	Rights in Shop Drawings	APR 1966
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	DEC 2018
252.232-7010	Levies on Contract Payments	DEC 2006
252.232-7017	Accelerating Payments to Small Business Subcontractors-- Prohibition on Fees and Consideration	APR 2020
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7005	Airfield Safety Precautions	DEC 1991
252.236-7013	Requirement for Competition Opportunity for American Steel Producers, Fabricators, and Manufacturers	JUN 2013
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	DEC 2012
252.244-7000	Subcontracts for Commercial Items	JAN 2021
252.247-7023	Transportation of Supplies by Sea	FEB 2019

#### CLAUSES INCORPORATED BY FULL TEXT

#### 52.204-21 BASIC SAFEGUARDING OF COVERED CONTRACTOR INFORMATION SYSTEMS (NOV 2021)

##### (a) Definitions. As used in this clause--

Covered contractor information system means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

Federal contract information means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public websites) or simple transactional information, such as necessary to process payments.

Information means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

Safeguarding means measures or controls that are prescribed to protect information systems.

##### (b) Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

(i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices

(including other information systems).

(ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.

(iii) Verify and control/limit connections to and use of external information systems.

(iv) Control information posted or processed on publicly accessible information systems.

(v) Identify information system users, processes acting on behalf of users, or devices.

(vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

(vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.

(viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.

(ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.

(x) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.

(xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.

(xii) Identify, report, and correct information and information system flaws in a timely manner.

(xiii) Provide protection from malicious code at appropriate locations within organizational information systems.

(xiv) Update malicious code protection mechanisms when new releases are available.

(xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

(2) Other requirements. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial products or commercial services, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

(End of clause)

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 576 calendar days after the date the contractor received the Administrative Notice to Proceed (NTP). The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$1,670.00 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within **\*See Price Breakout Schedule**. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (SEP 2021)

(a) Definitions. As used in this clause--

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern--

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (d) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(2) Affiliates, as used in this definition, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership,

common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

(b) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, upon occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts--

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, when the Contracting Officer explicitly requires it for an order issued under a multiple-award contract.

(d) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code(s) assigned to this contract. The small business size standard corresponding to this NAICS code(s) can be found at <https://www.sba.gov/document/support-table-size-standards>.

(e) The small business size standard for a Contractor providing an end item that it does not manufacture, process, or produce itself, for a contract other than a construction or service contract, is 500 employees if the acquisition--

(1) Was set aside for small business and has a value above the simplified acquisition threshold;

(2) Used the HUBZone price evaluation preference regardless of dollar value, unless the Contractor waived the price evaluation preference; or

(3) Was an 8(a), HUBZone, service-disabled veteran-owned, economically disadvantaged women-owned, or women-owned small business set-aside or sole-source award regardless of dollar value.

(f) Except as provided in paragraph (h) of this clause, the Contractor shall make the representation(s) required by paragraph (b) and (c) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause, or with its offer for an order (see paragraph (c) of this clause), that the data have been validated or updated, and provide the date of the validation or update.

(g) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (f) or (h) of this clause.

(h) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

(1) The Contractor represents that it [ ] is, [ ] is not a small business concern under NAICS Code 236220 assigned to solicitation number W912QR23R0003.

(2) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [ ] is, [ ] is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [ ] is, [ ] is not a women-owned small business concern.

(4) Women-owned small business (WOSB) concern eligible under the WOSB Program. [Complete only if the Contractor represented itself as a women-owned small business concern in paragraph (h)(3) of this clause.] The Contractor represents that--

(i) It [ ] is, [ ] is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (h)(4)(i) of this clause is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture.

[The Contractor shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture: .] Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(5) Economically disadvantaged women-owned small business (EDWOSB) concern. [Complete only if the Contractor represented itself as a women-owned small business concern eligible under the WOSB Program in (h)(4) of this clause.] The Contractor represents that--

(i) It [ ] is, [ ] is not an EDWOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (h)(5)(i) of this clause is accurate for each EDWOSB concern participating in the joint venture. [The Contractor shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture: .] Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

(6) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [ ] is, [ ] is not a veteran-owned small business concern.

(7) [Complete only if the Contractor represented itself as a veteran-owned small business concern in paragraph (h)(6) of this clause.] The Contractor represents that it [ ] is, [ ] is not a service-disabled veteran-owned small business concern.

(8) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that--

(i) It [ ] is, [ ] is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no



material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR part 126; and

(ii) It [ ] is, [ ] is not a HUBZone joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (h)(8)(i) of this clause is accurate for each HUBZone small business concern participating in the HUBZone joint venture. [The Contractor shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: .] Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

[Contractor to sign and date and insert authorized signer's name and title.]

(End of clause)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
29.9%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is the state of Alabama, County of Montgomery, City of Montgomery.

(End of provision)

#### 52.222-35 EQUAL OPPORTUNITY FOR VETERANS (JUN 2020)

(a) Definitions. As used in this clause--

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at Federal Acquisition Regulation (FAR) 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1303(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

#### 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUN 2020)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of the threshold specified in Federal Acquisition Regulation (FAR) 22.1408(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

#### 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (FEB 2021)

(a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety

Data Sheet submitted under this contract.

Material (if none, insert None)	Identification No.
_____	_____
_____	_____
_____	_____

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

52.225-9 BUY AMERICAN—CONSTRUCTION MATERIALS (NOV 2021)

(a) Definitions. As used in this clause--

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is--

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products.

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means--

(1) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both--

(i) An unmanufactured construction material mined or produced in the United States; or

(ii) A construction material manufactured in the United States, if--

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 55 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. Components of unknown origin are treated as foreign; or

(B) The construction material is a COTS item; or

(2) For construction material that consists wholly or predominantly of iron or steel or a combination of both, a

construction material manufactured in the United States if the cost of foreign iron and steel constitutes less than 5 percent of the cost of all components used in such construction material. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the construction material and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the construction material contains multiple components, the cost of all the materials used in such construction material is calculated in accordance with the definition of "cost of components".

Fastener means a hardware device that mechanically joins or affixes two or more objects together. Examples of fasteners are nuts, bolts, pins, rivets, nails, clips, and screws.

Foreign construction material means a construction material other than a domestic construction material.

Foreign iron and steel means iron or steel products not produced in the United States. Produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, from the initial melting stage through the application of coatings, except metallurgical processes involving refinement of steel additives. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

Steel means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the domestic content test of the Buy American statute is waived for construction material that is a COTS item, except that for construction material that consists wholly or predominantly of iron or steel or a combination of both, the domestic content test is applied only to the iron and steel content of the construction materials, excluding COTS fasteners. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial product or to the construction materials or components listed by the Government as follows:

\_\_\_ [Contracting Officer to list applicable excepted materials or indicate "none"]

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \*\
-----------------------------------	-----------------	----------	---------------------

Item 1:

Foreign construction material.... \_\_\_\_\_

Domestic construction material... \_\_\_\_\_  
Item 2:  
Foreign construction material... \_\_\_\_\_  
Domestic construction material... \_\_\_\_\_

[\* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued)].

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

(End of clause)

#### 52.225-10 NOTICE OF BUY AMERICAN REQUIREMENT--CONSTRUCTION MATERIALS (MAY 2014)

(a) Definitions. "Commercially available off-the-shelf (COTS) item," "construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American --Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American statute should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American statute before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American statute, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

52.228-14 IRREVOCABLE LETTER OF CREDIT (NOV 2014)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to 40 U.S.C. chapter 31, subchapter III, Bonds, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d)(1) Only federally insured financial institutions rated investment grade by a commercial rating service shall issue or confirm the ILC.

(2) Unless the financial institution issuing the ILC had letter of credit business of at least \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of at least \$25 million in the past year.

(3) The Offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institutions have the required credit rating as of the date of issuance of the ILC.



(4) The current rating for a financial institution is available through any of the following rating services registered with the U.S. Securities and Exchange Commission (SEC) as a Nationally Recognized Statistical Rating Organization (NRSRO). NRSRO's can be located at the Web site <http://www.sec.gov/answers/nrsro.htm> maintained by the SEC.

(e) The following format shall be used by the issuing financial institution to create an ILC:

\_\_\_\_\_  
[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date \_ \_ \_ \_

IRREVOCABLE LETTER OF CREDIT NO. \_\_\_\_

Account party's name \_\_\_\_ \_

Account party's address \_\_\_\_ \_

For Solicitation No. \_\_\_\_ \_ (for reference only)

TO: [ \_\_\_\_ U.S. Government agency]

[ \_\_\_\_ U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$ \_\_\_\_ . This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [ \_\_\_\_ issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on \_\_\_\_ , or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. \_\_\_\_ -- (Insert version in effect at the time of ILC issuance, e.g., "Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of \_\_\_\_ --[State of confirming financial institution, if any, otherwise State of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

\_\_\_\_\_

[ \_\_\_\_ Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

\_\_\_\_ [Confirming Financial Institution's Letterhead or Name and Address]

(Date) \_\_\_\_

Our Letter of Credit Advice Number \_\_\_\_

Beneficiary: \_\_\_\_ [U.S. Government agency]

Issuing Financial Institution: \_\_\_\_

Issuing Financial Institution's LC No.: \_\_\_\_

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by \_\_\_\_ [name of issuing financial institution] for drawings of up to United States dollars \_\_\_\_ /U.S. \$ \_\_\_\_ and expiring with our close of business on \_\_\_\_ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at \_\_\_\_ .

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. \_\_\_\_ -- (Insert version in effect at the time of ILC issuance, e.g., ``Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of \_\_\_\_ --[State of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

\_\_\_\_\_

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

\_\_\_\_\_  
[City, State]

(Date) \_\_\_\_

[Name and address of financial institution]

Pay to the order of \_\_\_\_ [Beneficiary Agency] \_\_\_\_ the sum of United States \_\_\_\_ This draft is drawn under Irrevocable Letter of Credit No. \_\_\_\_

\_\_\_\_ [Beneficiary Agency]

By: \_\_\_\_

(End of clause)

52.229-11 TAX ON CERTAIN FOREIGN PROCUREMENTS--NOTICE AND REPRESENTATION (JUN 2020)

(a) Definitions. As used in this provision--

Foreign person means any person other than a United States person.

Specified Federal procurement payment means any payment made pursuant to a contract with a foreign contracting party that is for goods, manufactured or produced, or services provided in a foreign country that is not a party to an international procurement agreement with the United States. For purposes of the prior sentence, a foreign country does not include an outlying area.

United States person as defined in 26 U.S.C. 7701(a)(30) means--

(1) A citizen or resident of the United States;

(2) A domestic partnership;

(3) A domestic corporation;

(4) Any estate (other than a foreign estate, within the meaning of 26 U.S.C. 701(a)(31)); and

(5) Any trust if--

(i) A court within the United States is able to exercise primary supervision over the administration of the trust; and

(ii) One or more United States persons have the authority to control all substantial decisions of the trust.

(b) Unless exempted, there is a 2 percent tax of the amount of a specified Federal procurement payment on any foreign person receiving such payment. See 26 U.S.C. 5000C and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.

(c) Exemptions from withholding under this provision are described at 26 CFR 1.5000C-1(d)(5) through (7). The Offeror would claim an exemption from the withholding by using the Department of the Treasury Internal Revenue Service Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available via the internet at [www.irs.gov/w14](http://www.irs.gov/w14). Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the 26 U.S.C. 5000C tax are adjudicated by the IRS as the 26 U.S.C. 5000C tax is a tax matter, not a contract issue. The IRS Form W-14 is provided to the acquiring agency rather than to the IRS.

(d) For purposes of withholding under 26 U.S.C. 5000C, the Offeror represents that--

(1) It ☐ is ☐ is not a foreign person; and

(2) If the Offeror indicates ``is" in paragraph (d)(1) of this provision, then the Offeror represents that--I am claiming on the IRS Form W-14 ☐ a full exemption, or ☐ partial or no exemption [Offeror shall select one] from the excise tax.

(e) If the Offeror represents it is a foreign person in paragraph (d)(1) of this provision, then--

(1) The clause at FAR 52.229-12, Tax on Certain Foreign Procurements, will be included in any resulting contract; and

(2) The Offeror shall submit with its offer the IRS Form W-14. If the IRS Form W-14 is not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent of each payment.

(f) If the Offeror selects ``is" in paragraph (d)(1) and ``partial or no exemption" in paragraph (d)(2) of this provision, the Offeror will be subject to withholding in accordance with the clause at FAR 52.229-12, Tax on Certain Foreign Procurements, in any resulting contract.

(g) A taxpayer may, for a fee, seek advice from the Internal Revenue Service (IRS) as to the proper tax treatment of a transaction. This is called a private letter ruling. Also, the IRS may publish a revenue ruling, which is an official interpretation by the IRS of the Internal Revenue Code, related statutes, tax treaties, and regulations. A revenue ruling is the conclusion of the IRS on how the law is applied to a specific set of facts. For questions relating to the interpretation of the IRS regulations go to <https://www.irs.gov/help/tax-law-questions>.

(End of provision)

#### 52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least 20 percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

#### 52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys.

(b) The Contractor shall make his own investigations as to weather conditions at the site. Data may be obtained from various National Weather Service offices located generally at airports of principal cities, the nearest to this project being: Birmingham, AL.

(c) Roads and railroads in the general area are shown on the drawings.

(d) Historical data for all areas may be obtained from:

U. S. Department of Commerce  
National Climatic Center  
Federal Building  
Asheville, N. C. 28801.

(End of clause)

#### 52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

#### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<https://www.acquisition.gov/>

The full text of any DFARS clauses and provisions may be accessed electronically at this/these address(es):

<https://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html>

(End of clause)

#### 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (NOV 2020)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

#### 252.204-7012 SAFEGUARDING COVERED DEFENSE INFORMATION AND CYBER INCIDENT REPORTING (DEC 2019)

(a) Definitions. As used in this clause--

Adequate security means protective measures that are commensurate with the consequences and probability of loss, misuse, or unauthorized access to, or modification of information.

Compromise means disclosure of information to unauthorized persons, or a violation of the security policy of a system, in which unauthorized intentional or unintentional disclosure, modification, destruction, or loss of an object, or the copying of information to unauthorized media may have occurred.

Contractor attributional/proprietary information means information that identifies the contractor(s), whether directly or indirectly, by the grouping of information that can be traced back to the contractor(s) (e.g., program description, facility locations), personally identifiable information, as well as trade secrets, commercial or financial information, or other commercially sensitive information that is not customarily shared outside of the company.

Controlled technical information means technical information with military or space application that is subject to controls on the access, use, reproduction, modification, performance, display, release, disclosure, or dissemination. Controlled technical information would meet the criteria, if disseminated, for distribution statements B through F using the criteria set forth in DoD Instruction 5230.24, Distribution Statements on Technical Documents. The term does not include information that is lawfully publicly available without restrictions.

Covered contractor information system means an unclassified information system that is owned, or operated by or for, a contractor and that processes, stores, or transmits covered defense information.

Covered defense information means unclassified controlled technical information or other information, as described in the Controlled Unclassified Information (CUI) Registry at <http://www.archives.gov/cui/registry/category-list.html>, that requires safeguarding or dissemination controls pursuant to and consistent with law, regulations, and Governmentwide policies, and is--

(1) Marked or otherwise identified in the contract, task order, or delivery order and provided to the contractor by or on behalf of DoD in support of the performance of the contract; or

(2) Collected, developed, received, transmitted, used, or stored by or on behalf of the contractor in support of the performance of the contract.

Cyber incident means actions taken through the use of computer networks that result in a compromise or an actual or potentially adverse effect on an information system and/or the information residing therein.

Forensic analysis means the practice of gathering, retaining, and analyzing computer-related data for investigative purposes in a manner that maintains the integrity of the data.

Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.

Malicious software means computer software or firmware intended to perform an unauthorized process that will have adverse impact on the confidentiality, integrity, or availability of an information system. This definition includes a virus, worm, Trojan horse, or other code-based entity that infects a host, as well as spyware and some forms of adware.

Media means physical devices or writing surfaces including, but is not limited to, magnetic tapes, optical disks, magnetic disks, large-scale integration memory chips, and printouts onto which covered defense information is recorded, stored, or printed within a covered contractor information system.

Operationally critical support means supplies or services designated by the Government as critical for airlift, sealift, intermodal transportation services, or logistical support that is essential to the mobilization, deployment, or sustainment of the Armed Forces in a contingency operation.

Rapidly report means within 72 hours of discovery of any cyber incident.

Technical information means technical data or computer software, as those terms are defined in the clause at DFARS 252.227-7013, Rights in Technical Data--Noncommercial Items, regardless of whether or not the clause is incorporated in this solicitation or contract. Examples of technical information include research and engineering data, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, technical orders, catalog-item identifications, data sets, studies and analyses and related information, and computer software executable code and source code.

(b) Adequate security. The Contractor shall provide adequate security on all covered contractor information systems. To provide adequate security, the Contractor shall implement, at a minimum, the following information security protections:

(1) For covered contractor information systems that are part of an information technology (IT) service or system operated on behalf of the Government, the following security requirements apply:

(i) Cloud computing services shall be subject to the security requirements specified in the clause 252.239-7010, Cloud Computing Services, of this contract.

(ii) Any other such IT service or system (i.e., other than cloud computing) shall be subject to the security requirements specified elsewhere in this contract.

(2) For covered contractor information systems that are not part of an IT service or system operated on behalf of the Government and therefore are not subject to the security requirement specified at paragraph (b)(1) of this clause, the following security requirements apply:

(i) Except as provided in paragraph (b)(2)(ii) of this clause, the covered contractor information system shall be subject to the security requirements in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, "Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations" (available via the internet at <http://dx.doi.org/10.6028/NIST.SP.800-171>) in effect at the time the solicitation is issued or as authorized by the Contracting Officer.

(ii)(A) The Contractor shall implement NIST SP 800-171, as soon as practical, but not later than December 31, 2017. For all contracts awarded prior to October 1, 2017, the Contractor shall notify the DoD Chief Information Officer (CIO), via email at [osd.dibcsia@mail.mil](mailto:osd.dibcsia@mail.mil), within 30 days of contract award, of any security requirements specified by NIST SP 800-171 not implemented at the time of contract award.

(B) The Contractor shall submit requests to vary from NIST SP 800-171 in writing to the Contracting Officer, for consideration by the DoD CIO. The Contractor need not implement any security requirement adjudicated by an authorized representative of the DoD CIO to be nonapplicable or to have an alternative, but equally effective, security measure that may be implemented in its place.

(C) If the DoD CIO has previously adjudicated the contractor's requests indicating that a requirement is not applicable or that an alternative security measure is equally effective, a copy of that approval shall be provided to the Contracting Officer when requesting its recognition under this contract.

(D) If the Contractor intends to use an external cloud service provider to store, process, or transmit any covered defense information in performance of this contract, the Contractor shall require and ensure that the cloud service provider meets security requirements equivalent to those established by the Government for the Federal Risk and Authorization Management Program (FedRAMP) Moderate baseline (<https://www.fedramp.gov/resources/documents/>) and that the cloud service provider complies with requirements in paragraphs (c) through (g) of this clause for cyber incident reporting, malicious software, media preservation and protection, access to additional information and equipment necessary for forensic analysis, and cyber incident damage assessment.

(3) Apply other information systems security measures when the Contractor reasonably determines that information systems security measures, in addition to those identified in paragraphs (b)(1) and (2) of this clause, may be required to provide adequate security in a dynamic environment or to accommodate special circumstances (e.g., medical devices) and any individual, isolated, or temporary deficiencies based on an assessed risk or vulnerability. These measures may be addressed in a system security plan.

(c) Cyber incident reporting requirement.

(1) When the Contractor discovers a cyber incident that affects a covered contractor information system or the covered defense information residing therein, or that affects the contractor's ability to perform the requirements of the contract that are designated as operationally critical support and identified in the contract, the Contractor shall--



(i) Conduct a review for evidence of compromise of covered defense information, including, but not limited to, identifying compromised computers, servers, specific data, and user accounts. This review shall also include analyzing covered contractor information system(s) that were part of the cyber incident, as well as other information systems on the Contractor's network(s), that may have been accessed as a result of the incident in order to identify compromised covered defense information, or that affect the Contractor's ability to provide operationally critical support; and

(ii) Rapidly report cyber incidents to DoD at <https://dibnet.dod.mil>.

(2) Cyber incident report. The cyber incident report shall be treated as information created by or for DoD and shall include, at a minimum, the required elements at <https://dibnet.dod.mil>.

(3) Medium assurance certificate requirement. In order to report cyber incidents in accordance with this clause, the Contractor or subcontractor shall have or acquire a DoD-approved medium assurance certificate to report cyber incidents. For information on obtaining a DoD-approved medium assurance certificate, see <https://public.cyber.mil/eca/>.

(d) Malicious software. When the Contractor or subcontractors discover and isolate malicious software in connection with a reported cyber incident, submit the malicious software to DoD Cyber Crime Center (DC3) in accordance with instructions provided by DC3 or the Contracting Officer. Do not send the malicious software to the Contracting Officer.

(e) Media preservation and protection. When a Contractor discovers a cyber incident has occurred, the Contractor shall preserve and protect images of all known affected information systems identified in paragraph (c)(1)(i) of this clause and all relevant monitoring/packet capture data for at least 90 days from the submission of the cyber incident report to allow DoD to request the media or decline interest.

(f) Access to additional information or equipment necessary for forensic analysis. Upon request by DoD, the Contractor shall provide DoD with access to additional information or equipment that is necessary to conduct a forensic analysis.

(g) Cyber incident damage assessment activities. If DoD elects to conduct a damage assessment, the Contracting Officer will request that the Contractor provide all of the damage assessment information gathered in accordance with paragraph (e) of this clause.

(h) DoD safeguarding and use of contractor attributional/proprietary information. The Government shall protect against the unauthorized use or release of information obtained from the contractor (or derived from information obtained from the contractor) under this clause that includes contractor attributional/proprietary information, including such information submitted in accordance with paragraph (c). To the maximum extent practicable, the Contractor shall identify and mark attributional/proprietary information. In making an authorized release of such information, the Government will implement appropriate procedures to minimize the contractor attributional/proprietary information that is included in such authorized release, seeking to include only that information that is necessary for the authorized purpose(s) for which the information is being released.

(i) Use and release of contractor attributional/proprietary information not created by or for DoD. Information that is obtained from the contractor (or derived from information obtained from the contractor) under this clause that is not created by or for DoD is authorized to be released outside of DoD--

(1) To entities with missions that may be affected by such information;

(2) To entities that may be called upon to assist in the diagnosis, detection, or mitigation of cyber incidents;

(3) To Government entities that conduct counterintelligence or law enforcement investigations;

(4) For national security purposes, including cyber situational awareness and defense purposes (including with Defense Industrial Base (DIB) participants in the program at 32 CFR part 236); or

(5) To a support services contractor ("recipient") that is directly supporting Government activities under a contract that includes the clause at 252.204-7009, Limitations on the Use or Disclosure of Third-Party Contractor Reported Cyber Incident Information.

(j) Use and release of contractor attributional/proprietary information created by or for DoD. Information that is obtained from the contractor (or derived from information obtained from the contractor) under this clause that is created by or for DoD (including the information submitted pursuant to paragraph (c) of this clause) is authorized to be used and released outside of DoD for purposes and activities authorized by paragraph (i) of this clause, and for any other lawful Government purpose or activity, subject to all applicable statutory, regulatory, and policy based restrictions on the Government's use and release of such information.

(k) The Contractor shall conduct activities under this clause in accordance with applicable laws and regulations on the interception, monitoring, access, use, and disclosure of electronic communications and data.

(l) Other safeguarding or reporting requirements. The safeguarding and cyber incident reporting required by this clause in no way abrogates the Contractor's responsibility for other safeguarding or cyber incident reporting pertaining to its unclassified information systems as required by other applicable clauses of this contract, or as a result of other applicable U.S. Government statutory or regulatory requirements.

(m) Subcontracts. The Contractor shall--

(1) Include this clause, including this paragraph (m), in subcontracts, or similar contractual instruments, for operationally critical support, or for which subcontract performance will involve covered defense information, including subcontracts for commercial items, without alteration, except to identify the parties. The Contractor shall determine if the information required for subcontractor performance retains its identity as covered defense information and will require protection under this clause, and, if necessary, consult with the Contracting Officer; and

(2) Require subcontractors to--

(i) Notify the prime Contractor (or next higher-tier subcontractor) when submitting a request to vary from a NIST SP 800-171 security requirement to the Contracting Officer, in accordance with paragraph (b)(2)(ii)(B) of this clause; and

(ii) Provide the incident report number, automatically assigned by DoD, to the prime Contractor (or next higher-tier subcontractor) as soon as practicable, when reporting a cyber incident to DoD as required in paragraph (c) of this clause.

(End of clause)

#### 252.204-7020 NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (MAR 2022)

(a) Definitions.

Basic Assessment means a contractor's self-assessment of the contractor's implementation of NIST SP 800-171 that--

(1) Is based on the Contractor's review of their system security plan(s) associated with covered contractor information system(s);

(2) Is conducted in accordance with the NIST SP 800-171 DoD Assessment Methodology; and

(3) Results in a confidence level of "Low" in the resulting score, because it is a self-generated score.

Covered contractor information system has the meaning given in the clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this contract.

High Assessment means an assessment that is conducted by Government personnel using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that--

(1) Consists of--

(i) A review of a contractor's Basic Assessment;

(ii) A thorough document review;

(iii) Verification, examination, and demonstration of a Contractor's system security plan to validate that NIST SP 800-171 security requirements have been implemented as described in the contractor's system security plan; and

(iv) Discussions with the contractor to obtain additional information or clarification, as needed; and

(2) Results in a confidence level of "High" in the resulting score.

Medium Assessment means an assessment conducted by the Government that--

(1) Consists of--

(i) A review of a contractor's Basic Assessment;

(ii) A thorough document review; and

(iii) Discussions with the contractor to obtain additional information or clarification, as needed; and

(2) Results in a confidence level of "Medium" in the resulting score.

(b) Applicability. This clause applies to covered contractor information systems that are required to comply with the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, in accordance with Defense Federal Acquisition Regulation System (DFARS) clause at 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this contract.

(c) Requirements. The Contractor shall provide access to its facilities, systems, and personnel necessary for the Government to conduct a Medium or High NIST SP 800-171 DoD Assessment, as described in NIST SP 800-171 DoD Assessment Methodology at <https://www.acq.osd.mil/asda/dpc/cp/cyber/safeguarding.html#nistSP800171>, if necessary.

(d) Procedures. Summary level scores for all assessments will be posted in the Supplier Performance Risk System (SPRS) (<https://www.sprs.csd.disa.mil/>) to provide DoD Components visibility into the summary level scores of strategic assessments.

(1) Basic Assessments. A contractor may submit, via encrypted email, summary level scores of Basic Assessments conducted in accordance with the NIST SP 800-171 DoD Assessment Methodology to [webptsmh@navy.mil](mailto:webptsmh@navy.mil) for posting to SPRS.

(i) The email shall include the following information:

(A) Version of NIST SP 800-171 against which the assessment was conducted.

(B) Organization conducting the assessment (e.g., Contractor self-assessment).

(C) For each system security plan (security requirement 3.12.4) supporting the performance of a DoD contract--

(1) All industry Commercial and Government Entity (CAGE) code(s) associated with the information system(s) addressed by the system security plan; and

(2) A brief description of the system security plan architecture, if more than one plan exists.

(D) Date the assessment was completed.

(E) Summary level score (e.g., 95 out of 110, NOT the individual value for each requirement).

(F) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(ii) If multiple system security plans are addressed in the email described at paragraph (b)(1)(i) of this section, the Contractor shall use the following format for the report:

System security plan	CAGE codes supported by this plan	Brief description of the plan architecture	Date of assessment	Total score	Date score of 110 will be achieved

(2) Medium and High Assessments. DoD will post the following Medium and/or High Assessment summary level scores to SPRS for each system security plan assessed:

(i) The standard assessed (e.g., NIST SP 800-171 Rev 1).

(ii) Organization conducting the assessment, e.g., DCMA, or a specific organization (identified by Department of Defense Activity Address Code (DoDAAC)).

(iii) All industry CAGE code(s) associated with the information system(s) addressed by the system security plan.

(iv) A brief description of the system security plan architecture, if more than one system security plan exists.

(v) Date and level of the assessment, i.e., medium or high.

(vi) Summary level score (e.g., 105 out of 110, not the individual value assigned for each requirement).

(vii) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(e) Rebuttals. (1) DoD will provide Medium and High Assessment summary level scores to the Contractor and offer the opportunity for rebuttal and adjudication of assessment summary level scores prior to posting the summary level scores to SPRS (see SPRS User's Guide [https://www.sprs.csd.disa.mil/pdf/SPRS\\_Awardee.pdf](https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf)).

(2) Upon completion of each assessment, the contractor has 14 business days to provide additional information to demonstrate that they meet any security requirements not observed by the assessment team or to rebut the findings that may be of question.

(f) Accessibility.

(1) Assessment summary level scores posted in SPRS are available to DoD personnel, and are protected, in accordance with the standards set forth in DoD Instruction 5000.79, Defense-wide Sharing and Use of Supplier and Product Performance Information (PI).

(2) Authorized representatives of the Contractor for which the assessment was conducted may access SPRS to view their own summary level scores, in accordance with the SPRS Software User's Guide for Awardees/Contractors available at [https://www.sprs.csd.disa.mil/pdf/SPRS\\_Awardee.pdf](https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf).

(3) A High NIST SP 800-171 DoD Assessment may result in documentation in addition to that listed in this clause. DoD will retain and protect any such documentation as "Controlled Unclassified Information (CUI)" and intended for internal DoD use only. The information will be protected against unauthorized use and release, including through the exercise of applicable exemptions under the Freedom of Information Act (e.g., Exemption 4 covers trade secrets and commercial or financial information obtained from a contractor that is privileged or confidential).

(g) Subcontracts.

(1) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items (excluding COTS items).

(2) The Contractor shall not award a subcontract or other contractual instrument, that is subject to the implementation of NIST SP 800-171 security requirements, in accordance with DFARS clause 252.204-7012 of this contract, unless the subcontractor has completed, within the last 3 years, at least a Basic NIST SP 800-171 DoD Assessment, as described in <https://www.acq.osd.mil/asda/dpc/cp/cyber/safeguarding.html#nistSP800171>, for all covered contractor information systems relevant to its offer that are not part of an information technology service or system operated on behalf of the Government.

(3) If a subcontractor does not have summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) posted in SPRS, the subcontractor may conduct and submit a Basic Assessment, in accordance with the NIST SP 800-171 DoD Assessment Methodology, to [webpmsmh@navy.mil](mailto:webpmsmh@navy.mil) for posting to SPRS along with the information required by paragraph (d) of this clause.

(End of clause)

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

**G-002**

(End of clause)

Section 00 73 00 - Supplementary Conditions

WAGE DETERMINATION

The decision of the Secretary of Labor, covering rates of wages, including fringe benefits to be paid laborers and mechanics performing work under this contract, is attached to this solicitation. The payment for all classes of laborers and mechanics actually employed to perform work under the contract will be specified in the following contract provisions: 52.222-4 "Contract Work Hours and Safety Standards -- Overtime Compensation"; 52.222-6 "Construction Wage Rate Requirements" (formerly named "Davis-Bacon Act"); and 52.222-10 "Compliance with Copeland Act Requirements.

Wage determination included is: AL20220093 (Building).

The Building wage decision applies to all construction interior work.

The work to be performed is located in the state of Alabama, Montgomery County

General Decision Number: AL20220093 12/23/2022

Superseded General Decision Number: AL20210093

State: Alabama

Construction Type: Building  
BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories)

County: Montgomery County in Alabama.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered	. Executive Order 14026	
into on or after January 30,	generally applies to the	
2022, or the contract is	contract.	
renewed or extended (e.g., an	. The contractor must pay	
option is exercised) on or	all covered workers at	
after January 30, 2022:	least \$15.00 per hour (or	
	the applicable wage rate	
	listed on this wage	
	determination, if it is	
	higher) for all hours	
	spent performing on the	
	contract in 2022.	
If the contract was awarded on	. Executive Order 13658	
or between January 1, 2015 and	generally applies to the	
January 29, 2022, and the	contract.	
contract is not renewed or	. The contractor must pay all	
extended on or after January	covered workers at least	
30, 2022:	\$11.25 per hour (or the	
	applicable wage rate listed	
	on this wage determination,	
	if it is higher) for all	
	hours spent performing on	
	that contract in 2022.	

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/18/2022
2	02/25/2022
3	03/18/2022
4	04/29/2022
5	12/23/2022



\* ASBE0078-001 09/30/2022

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 29.65	15.11

-----  
BOIL0108-001 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 30.49	23.13

-----  
ENGI0653-016 10/01/2016

	Rates	Fringes
POWER EQUIPMENT OPERATOR Crane.....	\$ 27.30	12.08

-----  
IRON0092-003 09/01/2021

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 30.05	13.13

-----  
PLUM0052-009 01/01/2021

	Rates	Fringes
PIPEFITTER.....	\$ 29.00	15.11

-----  
PLUM0119-001 07/22/2021

	Rates	Fringes
PLUMBER.....	\$ 30.45	12.56

-----  
\* SFAL0669-002 01/01/2022

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 28.33	20.86

-----  
\* SUAL2015-021 08/02/2017

	Rates	Fringes
BRICKLAYER.....	\$ 19.81	0.00
CARPENTER.....	\$ 16.84	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 17.16	0.73
ELECTRICIAN.....	\$ 19.39	3.91
IRONWORKER, REINFORCING.....	\$ 22.86	7.94
LABORER: Common or General.....	\$ 11.73 **	0.00
LABORER: Mason Tender - Brick...	\$ 11.00 **	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 12.16 **	0.00
LABORER: Pipelayer.....	\$ 12.58 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 16.69	0.00

OPERATOR: Bulldozer.....	\$ 16.37	0.00
OPERATOR: Forklift.....	\$ 20.69	0.00
OPERATOR: Grader/Blade.....	\$ 17.52	0.89
OPERATOR: Loader.....	\$ 14.69 **	0.00
OPERATOR: Roller.....	\$ 14.00 **	1.78
PAINTER (Brush and Roller).....	\$ 15.41	0.00
PAINTER: Spray.....	\$ 14.31 **	0.00
ROOFER.....	\$ 12.14 **	0.00
SHEET METAL WORKER, Includes HVAC Duct Installation.....	\$ 16.16	0.00
TILE SETTER.....	\$ 15.86	0.00
TRUCK DRIVER: Dump Truck.....	\$ 13.18 **	0.00

-----

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

-----

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate

(weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

---

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on

- a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## Maxwell AFB FY21 Repair Aircraft Maintenance B1455 for MH-139 Beddown

### SPECIFICATIONS SIGNATURE STAMPS



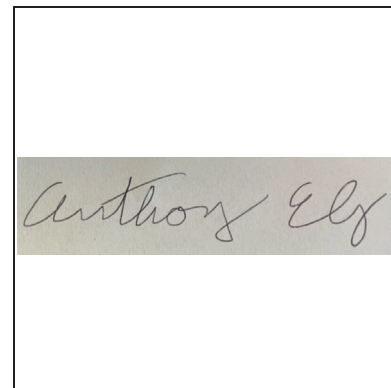
Civil Engineer - Jennifer Haynes



Telecommunication Engineer - Stephen A. Leffler



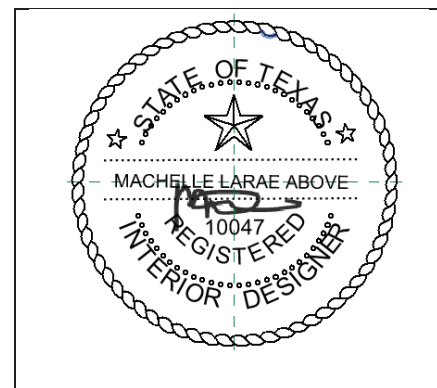
Architectural – Jerry Perry



Cybersecurity Engineer – Anthony Elg

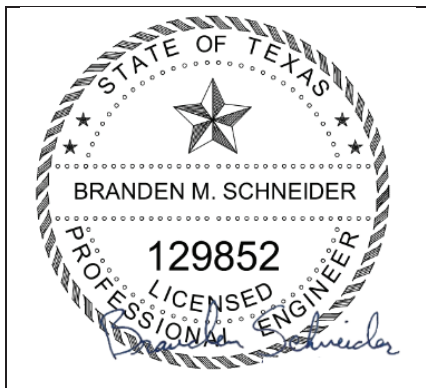


Structural Engineer – Alex Bannerot



Interior Design – Machele Above

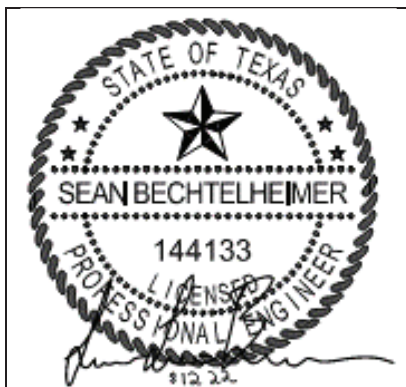
Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL



Mechanical Engineer – Branden M. Schneider



Electrical Engineer – Aaron McWhorter



Fire Protection Engineer – Sean Bechtelheimer

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## PROJECT TABLE OF CONTENTS

### VOLUME 1 - SPECIFICATIONS

#### **DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

00 80 00.00 06 SPECIAL PROVISIONS

#### **DIVISION 01 - GENERAL REQUIREMENTS**

01 11 00 SUMMARY OF WORK  
01 32 01.00 06 PROJECT SCHEDULE  
01 33 00 SUBMITTAL PROCEDURES  
01 35 26.00 06 GOVERNMENT SAFETY REQUIREMENTS  
01 42 00 SOURCES FOR REFERENCE PUBLICATIONS  
01 45 00.15 10 RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)  
01 45 04.10 06 CONTRACTOR QUALITY CONTROL  
01 45 35 SPECIAL INSPECTIONS  
01 46 00.00 06 TOTAL BUILDING COMMISSIONING  
01 50 00 TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS  
01 57 19.00 06 TEMPORARY ENVIRONMENTAL CONTROLS AND PERMITS  
01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL  
01 78 23 OPERATION AND MAINTENANCE DATA

### VOLUME 2 - SPECIFICATIONS

#### **DIVISION 02 - EXISTING CONDITIONS**

02 41 00 DEMOLITION  
02 82 00 ASBESTOS REMEDIATION  
02 83 00 LEAD REMEDIATION  
02 84 16 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBs  
AND MERCURY  
02 84 33 REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBs)

#### **DIVISION 03 - CONCRETE**

03 30 00 CAST-IN-PLACE CONCRETE

#### **DIVISION 04 - MASONRY**

04 20 00 UNIT MASONRY

#### **DIVISION 05 - METALS**

05 05 23.16 STRUCTURAL WELDING  
05 12 00 STRUCTURAL STEEL  
05 30 00 STEEL DECKS  
05 40 00 COLD-FORMED METAL FRAMING  
05 50 13 MISCELLANEOUS METAL FABRICATIONS  
05 51 00 METAL STAIRS  
05 52 00 METAL RAILINGS

#### **DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES**

06 10 00 ROUGH CARPENTRY  
06 41 16.00 10 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS  
06 61 16 SOLID SURFACING FABRICATIONS

#### **DIVISION 07 - THERMAL AND MOISTURE PROTECTION**

07 05 23 PRESSURE TESTING AN AIR BARRIER SYSTEM FOR AIR TIGHTNESS  
07 21 13 BOARD AND BLOCK INSULATION

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

07 21 16	MINERAL FIBER BLANKET INSULATION
07 22 00	ROOF AND DECK INSULATION
07 27 10.00 10	BUILDING AIR BARRIER SYSTEM
07 27 19.01	SELF-ADHERING AIR BARRIERS
07 27 36	SPRAY FOAM AIR BARRIERS
07 42 13.19	INSULATED CORE METAL WALL PANELS
07 54 23	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING
07 60 00	FLASHING AND SHEET METAL
07 81 00	SPRAY-APPLIED FIREPROOFING
07 92 00	JOINT SEALANTS

#### **DIVISION 08 - OPENINGS**

08 11 13	STEEL DOORS AND FRAMES
08 14 00	WOOD DOORS
08 31 00	ACCESS DOORS AND PANELS
08 34 73	SOUND CONTROL DOOR ASSEMBLIES
08 41 13	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS
08 71 00	DOOR HARDWARE
08 81 00	GLAZING
08 91 00	METAL WALL LOUVERS

#### **DIVISION 09 - FINISHES**

09 22 00	SUPPORTS FOR PLASTER AND GYPSUM BOARD
09 29 00	GYPSUM BOARD
09 30 10	CERAMIC, QUARRY, AND GLASS TILING
09 51 00	ACOUSTICAL CEILINGS
09 62 38	STATIC-CONTROL FLOORING
09 65 00	RESILIENT FLOORING
09 67 23.13	STANDARD RESINOUS FLOORING
09 68 00	CARPETING
09 69 13	RIGID GRID ACCESS FLOORING
09 84 20	ACOUSTICAL WALL PANELS
09 90 00	PAINTS AND COATINGS

#### **DIVISION 10 - SPECIALTIES**

10 14 00.20	INTERIOR SIGNAGE
10 21 13	TOILET COMPARTMENTS
10 22 39	FOLDING PANEL PARTITIONS
10 26 00	WALL AND DOOR PROTECTION
10 28 13	TOILET ACCESSORIES
10 44 16	FIRE EXTINGUISHERS
10 51 13	METAL LOCKERS

#### **DIVISION 12 - FURNISHINGS**

12 24 13	ROLLER WINDOW SHADES
----------	----------------------

#### **DIVISION 14 - CONVEYING EQUIPMENT**

14 24 23	HYDRAULIC PASSENGER ELEVATORS
----------	-------------------------------

#### **VOLUME 3 - SPECIFICATIONS**

#### **DIVISION 21 - FIRE SUPPRESSION**

21 13 13	WET PIPE SPRINKLER SYSTEMS, FIRE PROTECTION
----------	---

#### **DIVISION 22 - PLUMBING**



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

22 00 00 PLUMBING, GENERAL PURPOSE

**DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)**

23 05 48.19 SEISMIC BRACING FOR HVAC  
23 05 93.00 06 TESTING, ADJUSTING, AND BALANCING (TAB) OF HVAC  
23 07 00 THERMAL INSULATION FOR MECHANICAL SYSTEMS  
23 09 00 INSTRUMENTATION AND CONTROL FOR HVAC  
23 09 13 INSTRUMENTATION AND CONTROL DEVICES FOR HVAC  
23 09 23.01 LONWORKS DIRECT DIGITAL CONTROL FOR HVAC AND OTHER  
BUILDING CONTROL SYSTEMS  
23 11 20 FACILITY GAS PIPING  
23 21 23 HYDRONIC PUMPS  
23 23 00 REFRIGERANT PIPING  
23 25 00 CHEMICAL TREATMENT OF WATER FOR MECHANICAL SYSTEMS  
23 30 00 HVAC AIR DISTRIBUTION  
23 52 00 HEATING BOILERS  
23 64 10 WATER CHILLERS, VAPOR COMPRESSION TYPE  
23 64 26 CHILLED, CHILLED-HOT, AND CONDENSER WATER PIPING SYSTEMS  
23 81 23 COMPUTER ROOM AIR CONDITIONING UNITS

**DIVISION 25 - INTEGRATED AUTOMATION**

25 05 11.21 CYBERSECURITY FOR FACILITY-RELATED CONTROL SYSTEMS, FIRE  
AND LIFE SAFETY SYSTEMS  
25 05 11.23 CYBERSECURITY FOR FACILITY-RELATED CONTROL SYSTEMS, ENERGY  
MANAGEMENT CONTROL SYSTEM  
25 05 11.26 CYBERSECURITY FOR FACILITY-RELATED CONTROL SYSTEMS,  
UTILITY CONTROL SYSTEM  
25 10 10 UTILITY MONITORING AND CONTROL SYSTEM (UMCS) FRONT END AND  
INTEGRATION

**DIVISION 26 - ELECTRICAL**

26 20 00 INTERIOR DISTRIBUTION SYSTEM  
26 28 01.00 10 COORDINATED POWER SYSTEM PROTECTION  
26 41 00 LIGHTNING PROTECTION SYSTEM  
26 51 00 INTERIOR LIGHTING

**DIVISION 27 - COMMUNICATIONS**

27 10 00 BUILDING TELECOMMUNICATIONS CABLING SYSTEM  
27 51 16 PUBLIC ADDRESS SYSTEMS

**DIVISION 28 - ELECTRONIC SAFETY AND SECURITY**

28 31 76 INTERIOR FIRE ALARM AND MASS NOTIFICATION SYSTEM,  
ADDRESSABLE

**DIVISION 31 - EARTHWORK**

31 00 00.00 06 EARTHWORK RADON  
31 21 13 MITIGATION

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

**DIVISION 32 - EXTERIOR IMPROVEMENTS**

32 05 33	LANDSCAPE ESTABLISHMENT
32 11 23	AGGREGATE BASE COURSES
32 11 23.23	BASE COURSE DRAINAGE LAYERS
32 12 13	BITUMINOUS TACK AND PRIME COATS
32 12 16.16	ROAD-MIX ASPHALT PAVING
32 16 19	SIDEWALKS
32 31 13	CHAIN LINK FENCES AND GATES
32 92 23	SODDING

**DIVISION 33 - UTILITIES**

33 30 00	SANITARY SEWERAGE
33 40 00	STORM DRAINAGE UTILITIES
33 82 00	TELECOMMUNICATIONS OUTSIDE PLANT (OSP)

**ATTACHMENT**

TECHNICAL SCOPE AMRS METER SPECIFICATION

-- End of Project Table of Contents --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 00 80 00.00 06

## SPECIAL PROVISIONS

04/21

## PART 1 GENERAL

Attachments to this specification are as follows:

Construction Project Sign Details  
Project Submittal Register

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM C1153 (2015) Standard Practice for Location of  
Wet Insulation in Roofing Systems Using  
Infrared Imaging

U.S. ARMY (DA)

AR 530-1 Operation Security

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2014) Safety and Health Requirements  
Manual

ERDC/ITL TR-12-1 (2015) A/E/C Graphics Standard, Release 2.0

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1926.59 Hazard Communication

## 1.2 SUBMITTALS

Government approval/acceptance is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

Local Agency Check;

SF1413 Statement and Acknowledgement;

Radioactive Material/Equipment; G, RO

## SD-02 Shop Drawings

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Mechanical/Electrical Room Layout; G

#### SD-04 Samples

Equipment Warranty Identification Tags; G, RO

#### SD-05 Design Data

Progress Photographs; G

#### SD-07 Certificates

Warranty of Construction; G

NO ASBESTOS - CONTAINING MATERIAL (ACM) CERTIFICATION; G  
Construction Phase:

Certification for each individual product installed and identified to contain mineral fibers that no asbestos-containing materials were installed; G

Documentation to show that the products containing mineral fiber materials have been microscopically examined by an AIHA- or NVLAP-certified laboratory and the lab has determined that the material does not contain asbestos; G

Insurance; G

Sales and Use Tax; G

#### SD-11 Closeout Submittals

Preliminary (Working) As-Built Drawings; G,

Final As-Built Drawings; G,

CAD Working As-Built Drawings; G

Equipment-in-Place List;

Maintenance and Parts Data;

Warranty Management Plan; G

### 1.3 COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

Refer to clause 52.211-12 "LIQUIDATED DAMAGES" in Section 00 70 00 for the amount of Liquidated Damages for the project.

Refer to clause 52.211-10 "Commencement, Prosecution, and Completion of Work" in Section 00 70 00 for a notification of significant contract dates. After approval of the required bonds, the Government will issue an Administrative Notice-to-Proceed (NTP) to allow for preconstruction activities to be initiated in accordance with the contract requirements. The contract period of performance specified in Contract Clause 52.211-10 will begin upon issuance of the Administrative NTP. No physical on-site work will be permitted during the Administrative NTP period. All required preconstruction activities and submittals must be submitted and accepted by the Government, where applicable, within the Administrative NTP period (45 days or to be decided by PDT). The Government will issue a Construction NTP to allow commencement of all other contract work after the Administrative NTP period, or after the contractor's completion of all work specified in the Administrative NTP. Failure to complete all required preconstruction activities may result in the contract being terminated for default in accordance with Contract Clause 52.249-10 (Fixed-Price Construction).

1.3.1 Additional Requirements/Clarifications of Work Included Within the Contract

- a. The time stated in clause 52.211-10 "Commencement, Prosecution, and Completion of Work" in Section 00 70 00 for completion shall include installation of Government-furnished furniture, if required, as well as as-built drawings, O&M manuals, operational tests/reports/training/instructions, equipment lists.
- b. Those areas of the building receiving Government-furnished furniture and IT/Telecom equipment shall be made available for Government installation to begin no less than 90 calendar days prior to the contractor's accepted scheduled Construction Completion Date updated in accordance with clause 52.211-10 "Commencement, Prosecution, and Completion of Work" in Section 00 70 00. The Contractor shall participate in a Furniture Pre-Installation Building Inspection, Daily Furniture Installation Building Inspections, and a Final Furniture Installation Building Inspection along with the furniture installation supervisor and a Government representative.
- c. If the Contractor fails to meet the requirements in paragraph "Requirements for Completion of Designated Areas Prior to Furniture Installation", by the Contractor's accepted scheduled Furniture Installation Start Date, the Contractor shall pay separate liquidated damages to the Government in the amount of \$2,365 for each seven calendar days of the delay until the requirement is fulfilled. The liquidated damages contained in this paragraph are independent of and in addition to those references in clause 52.211-12 "Liquidated Damages - Construction" in Section 00 70 00. Changes to the Contractor's Scheduled Furniture Installation Start Date and Construction Completion Date must be received and accepted no later than forty-nine (49) calendar days prior to the Contractor's current Scheduled Furniture Installation Start Date in order to avoid liquidated damages associated with the furniture installation. Commencement of furniture installation on or after the Contractor's scheduled Furniture Installation Start Date prior to the fulfillment of these requirements does not relieve the Contractor of their liquidated damages obligation.

1.3.2 Requirements for Completion of Designated Areas Prior to Furniture Installation

- a. The Contractor is responsible for access to the building, security and ownership during the furniture and IT/Telecom equipment installation. Facility operation and maintenance during the furniture and IT/Telecom equipment installation is the responsibility of the Contractor.
- b. The Government will be installing IT/Telecom equipment, including the telephone switch and individual telephone sets, during the furniture installation period.
- c. The Contractor shall be responsible for coordination with its subcontractors and the Government furniture and IT/Telecom installation contractors, as necessary, to accommodate the furniture and IT/Telecom equipment installation.
- d. The exterior roads, parking areas, walks, and building entrances shall be sufficiently complete to support the delivery of furniture products by semi-tractor trailers and made available for use to the Government furniture and IT/Telecom installation contractors.
- e. All interior building finishes of areas receiving furniture, including all furniture entries, pathways, staging, and storage areas shall be complete. Completed building finishes shall include all flooring materials and base, interior walls, ceilings, lighting, HVAC systems and controls, doors, doorframes, and trim. All areas are to be

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

cleaned, vacuumed, and an initial waxing applied as appropriate for the installation of furniture.

- f. All utilities and systems serving the building shall be fully operational prior to furniture installation. The HVAC system(s) must be in operation, fully balanced and commissioned. The elevator(s) shall be operable and certified for use by the approving agency prior to the delivery of the furniture package and must be made available, at no additional cost, for use by the furniture and IT/Telecom equipment installation contractors.
  - g. The pre-final building punch inspections shall be performed and punch list items corrected by the Contractor prior to the Government Furniture and IT/Telecom installations.
  - h. During installation of the furniture and IT/Telecom, the Contractor shall participate in inspections as noted above in subparagraph (b) of the paragraph entitled "Additional Requirements/Clarifications of Work Included Within the Contract". Repairs to any damaged areas shall be performed at no additional cost to the Government by the appropriate party as determined by the Government during these inspections.
  - i. The Contractor shall be responsible for the electrical hookup of the power feed(s) and phone/data wiring to-as well as providing all data/com faceplates and jacks for-all powered modular systems furniture. This work shall be coordinated with the Government Furniture and IT/Telecom installation contractors to occur while they continue their installations.
  - j. The Contractor shall perform the final buffing and waxing of areas that are receiving furniture after the furniture and IT/Telecom installation contractors have indicated either installation in those areas is complete or that the final buffing and waxing shall be performed in certain areas prior to the placement of furniture. The final buffing and waxing of corridors and other areas not receiving furniture shall be performed by the Contractor after the furniture and IT/Telecom installation contractors have indicated installation is complete for the building.
  - k. After furniture and IT/Telecom installation by the Government, the Contractor shall perform a complete Final Cleaning in all impacted areas, as defined in the paragraph entitled "Final Cleaning" in this specification. Final Inspection and Acceptance may occur only after all furniture and IT/Telecom installation by the Government is complete.]
- 1.4 NOT USED
- 1.5 NOT USED
- 1.6 CONTRACT DRAWINGS AND SPECIFICATIONS

In addition to DFARS 252.236-7001 "Contract Drawings and Specifications" in Section 00 70 00 the following will apply:

- a. After Award or no later than Notice to Proceed (NTP), the Government will furnish the Contractor a compact disk containing all technical contract documents in electronic media only. This disk will include a complete set of drawing files and technical specification files which have all amendments included. The disk will contain drawing files in

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

PDF format along with technical specifications in PDF format. These PDF files are the contract documents that represent the construction requirements of the contract, and are being provided for the Contractor's use in printing paper copies of contract documents.

- b. In addition, native CAD files (this includes, but not limited to, all source files, models, custom fonts and linestyles, plot files, and images used to create the contract drawings) are provided in accordance with the "AS-BUILT DOCUMENTS" paragraph for the Contractor's use in maintaining and preparing as-built plans. If another CAD Program is used other than the Using Agency's System, all native CAD files that were generated with that software and all support files will also be included. Only native files are to be used for As-Built preparation and information.
- c. Native files are to be used for As-Built preparation only. The PDF files are the contract documents that represent the construction requirements of the contract.

## 1.7 AS-BUILT DOCUMENTS FOR DESIGN BID BUILD PROJECTS

### 1.7.1 General

This section covers the completion of [final as-built drawings](#), as a requirement of the contract. The Contractor is responsible for maintaining paper copy working as-built drawings during the construction phase. These paper copy drawings will be used by the Contractor to prepare, maintain and submit the final as-built drawings

#### 1.7.1.1 As-Built Drawings

An as-built drawing is a contract construction drawing revised to reflect the final as-built conditions of the project because of modifications, changes, corrections to the project design required during construction, submittals and extensions of design. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings that are revised to be used for the "RECORD DRAWING AS-BUILTS".

#### 1.7.1.2 Government-Furnished Files

- a. The Contractor will be provided electronic files at the beginning of construction for use during the construction phase which are to be maintained during construction for the preparation of as-builts. The Contractor shall be responsible to print two full size paper copies. The Contractor shall enter changes and corrections on two sets of paper full size construction plans on a weekly basis in accordance with Paragraph "Maintenance of Working As-Built Drawings" in this section.
- b. The Contractor is required to prepare final as-built drawings utilizing the native files provided by the Government. If translation is required, the original design models (BIM or CAD) shall be updated to As-Built conditions and then appropriately translated. Updating translated drawings will not be accepted. The contractor shall update the [CAD working as-built drawings](#), in accordance with paragraph "Maintenance of Working As-Built Drawings", on a quarterly basis and submit them to the COR for independent Government review. Both paper and electronic documents shall be available at all times and shall be provided promptly to the Contracting Officer's Representatives when

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

requested. The Contractor shall be responsible for backup of electronic files during construction and for controlling release of information.

#### 1.7.2 Withholding

Maintenance of working as-builts is considered part of the value of the facilities being constructed and will not be paid for as a separate line item. All costs in conjunction with periodic as-built maintenance and final preparation shall be considered a subsidiary obligation of the Contractor.

##### 1.7.2.1 Failure to Maintain

If the Contractor fails to maintain the working as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount up to 10% or which, in the Contracting Officer's judgment, represents the estimated cost of bringing the as-built documents up to date. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of working as-built documents. This includes conversion of submittals and other miscellaneous documents.

##### 1.7.2.2 As-Builts Prepared by Contractor

The Contractor is required to prepare and provide final as-built drawings. The Contractor shall include an activity in the cost-loaded schedule for the final As-Built drawing submittal in the amount defined in the following paragraph. See Section 01 32 01.00 06, PROJECT SCHEDULE, para "Basis for Payment and Cost Loading". This amount shall be withheld and not paid until the final As-Built drawing submittal has been accepted by the Government.

Withholding for the final as-built drawing submittal shall be in the amount of: 1% for contract awards less than \$5,000,000; \$50,000 for contracts awarded from \$5,000,000 to \$10,000,000; or \$100,000 for contracts awarded greater than \$10,000,000. Withholding shall be withheld until the final as-built drawing submittal has been approved and accepted by the Government.

#### 1.7.3 Maintenance of Working As-Built Drawings

The Contractor shall revise two (2) sets of paper drawings by red-line process to show the as-built conditions during the prosecution of the project. These as-built marked drawings shall be kept current on a weekly basis and available on the jobsite at all times. Changes in the work from the contract or additional information which is uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. Changes must be reflected on all sheets that the change affects. The working as-built marked drawings will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor before submission of each monthly pay estimate. The working as-built drawings shall show the following information if applicable to the project, but not be limited thereto:

- a. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, the as-built drawings shall show, by offset



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

dimensions to two permanently fixed surface features, the end of each run including each change in direction. Valves, splice boxes and similar appurtenances shall be located by dimensioning along the utility run from a reference point. The average depth below the surface of each run shall also be recorded.

- b. The location and dimensions of any changes within the building structure.
- c. The correct alignments, grade elevations, typical cross section, earthwork, structures or utilities if any changes were made from contract plans.
- d. Additional as-built information that exceeds the detail shown on the Contract Drawings. These as-built conditions include those that reflect structural details, fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations and layouts, equipment, sizes, mechanical and electrical room layouts and other extensions of design, that were not shown in the original contract documents because the exact details were not known until after the time of approved shop drawings. It is recognized that the shop drawing submittals (revised showing as-built conditions) will serve as the as-built record without actual incorporation into the contract drawings. The final as-built construction drawing shall reference the shop drawing file that includes the as-built information. In turn, the shop drawing shall reference the applicable construction as-built drawing. All such shop drawing submittals must include the paper copy and PDF of the drawings.
- e. The invert elevations and grades of any drainage structures or ditches installed or affected as part of the project construction.
- f. Changes or modifications which result from the final inspection.
- g. Contour map of the final borrow pit or spoil area with spot elevations as necessary if: borrow material is from sources on Government property; Government property is used as a spoil area; or, if excavated soil materials are placed in approved locations other than a landfill.
- h. Where contract drawings present options, only the option selected for construction shall be shown on the final as-built drawings.
- i. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarms, fire sprinklers, fire protection, fire detection and irrigation systems and other related systems in this project, shall be incorporated into the as-built drawings to include detailed information for all aspects of the systems including wiring, piping, and equipment drawings.
- j. Room numbers shown on the contract drawings are selected for design convenience and may not represent the actual numbers intended for use by the end user. Final as-built drawings shall reflect actual room numbers adopted by the end user.
- k. Contract modification (change order price) shall include the Contractor's cost to change working and final as-built drawings to reflect modifications and compliance with the following procedures (See "Markings and Indicators"):

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- (1) Directions in the modification for posting descriptive changes shall be followed.
- (2) A Revision Triangle shall be placed at the location of each deletion.
- (3) For new details or sections which are added to a drawing, a Revision Triangle shall be placed by the detail or section title.
- (4) For minor changes, a Revision Triangle shall be placed by the area changed on the drawing (each location).
- (5) For major changes to a drawing, a Revision Triangle shall be placed by the title of the affected plan, section, or detail at each location.
- (6) For changes to schedules or drawings, a Revision Triangle shall be placed either by the schedule heading or by the change in the schedule.

#### 1.7.4 Preliminary (Working) As-Built Drawings

Six (6) weeks before Contract Completion Date, the Contractor shall submit one (1) set of the original paper working as-built drawings to the Contracting Officer for review and approval. These working as-built marked drawings shall be neat, legible and accurate. The review by Government personnel will be expedited to the maximum extent possible. If upon review, the working as-built drawings are found to contain errors and/or omissions, they will be returned to the Contractor for corrections. The Contractor shall complete the corrections and return the working as-built marked drawings to the Contracting Officer within fourteen (14) calendar days. Upon approval, the working as-built drawings will be returned to the Contractor for use in preparation of final as-built drawings.

#### 1.7.5 Preparation of Final As-Built Drawings

The contract drawings shall be modified as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract drawings into agreement with approved working as-built drawings, adding such additional drawings as may be necessary.

These final as-built drawings are part of the permanent records of the project and the Contractor shall be responsible for the protection and safety thereof until returned to the Contracting Officer. Any drawings damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at no expense to the Government.

When electronic CAD files are a part of the as-built process, a set of files shall be provided to the Government as a part of the Final As-Built submittal for a review to verify the correctness of the as-built markups and that all changes have been incorporated into the electronic files. Should errors be determined, the Contractor shall update the files and provide a corrected set of files within fourteen (14) calendar days of receipt of comments. An independent Government review, by the Louisville district As-Built Coordinator (CELRL-CDM-Q), will be made on the accepted files to determine compliance with the As-Built requirements of this section, National CAD Standards, and the AEC CAD Standards; and to verify graphic changes were done properly in preparing the electronic files. This review will require submission of electronic files, containing all the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

files needed to reproduce the contract drawings, a full size set of contract drawings in PDF format, all shop drawings in PDF format, a scanned set of the paper markups and the paper markups. Upon receipt of any comments from this independent review, the contractor shall update the electronic files and provide a corrected set of files within fourteen (14) calendar days of receipt of the comments.

When BIM models are a part of the as-built process, the models shall be provided to the Government as a part of the Final As-Built submittal for a review to verify the correctness of the as-built markups and confirm that all changes have been incorporated into the models. Should errors be determined, the contractor shall update the files and provide a corrected set of files within fourteen (14) calendar days of receipt of comments. An independent Government review, by the Louisville district As-Built Coordinator (CELRL-CDM-Q), will be made on the accepted files to determine compliance to the As-Built requirements and to verify graphics changes were done properly. This review will require the electronic model files, all the files needed to reproduce the contract drawings, a full size set of contract drawings in PDF format and all the shop drawings in PDF format, a scanned set of the paper markups and the paper markups. Upon receipt of any comments from this independent review, the contractor shall update the electronic model files and provide a corrected set of files within fourteen (14) calendar days of receipt of the comments.

In the event the Contractor accomplishes additional work which changes the as-built conditions of the facility, after submission and approval of the working as-built drawings, the Contractor shall be responsible for the addition of these changes to the working as-built drawings and also to the final as-built documents and electronic models.

#### 1.7.6 Markings and Indicators

Changes shall be annotated in accordance with [ERDC/ITL TR-12-1](#) "A/E/C Graphics Standard\_Release 2.0" at the following locations:

- a. Bottom of the revised detail.
- b. Right hand and bottom border aligned with the revised detail.
- c. The revision block of the title block.

Separate markings shall be made for each modification negotiated into the contract.

#### 1.7.7 Construction Contract Specifications

Submit final PDF file record construction contract specifications, including revisions thereto, with submission of final as-built drawings.

#### 1.7.8 Preparation of Other As-Built Documents

All other non-electronic documents which may include, for example, design analysis, catalog cuts, or certification documents that are not available in native electronic format shall be scanned and provided in an organized manner in Adobe PDF format.

#### 1.7.9 Submittal of Final As-Built Documents

Within fourteen (14) calendar days of Final Acceptance meeting of the project, Final As-Built documents shall be provided to the Contracting Officer in the formats described in paragraph "Electronic File Use". The

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

final as-built document submittal shall also include the approved preliminary paper working as-built drawings.

#### 1.7.10 Partial Occupancy

For projects where portions of construction are to be occupied or activated before overall project completion, including portions of utility systems, as-built drawings for those portions of the facility being occupied or activated shall be supplied at the time the facility is occupied or activated. This same as-built information previously furnished must also be shown on the final set of as-built drawings at project completion.

#### 1.7.11 Electronic File Use

Only personnel proficient in the preparation of CAD drawings shall be employed to modify the electronic contract drawings or prepare additional new electronic drawings. Additions and corrections to the contract drawings shall be equal in quality to that of the originals. Line work, line weights, lettering, layering conventions, and symbols shall be the same as the original line work, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same guidance specified for original drawings. Three dimensional (3D) elements shall be placed in files in their proper locations when using 3D files with spatially correct elements. If the Designer of Record used a different software than that requested by the Using Agency, the Designer of Record's files will be used for as-built purposes and then translated and/or exported, by the Contractor, to the Using Agency's system. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CAD media files supplied by the Government. All work by the Contractor shall be done on files in the format in which they are provided. Translation of files to a different format, for the purpose of As-Built production, and then retranslating back to the format originally provided, will not be acceptable. The original electronic files provided by the Government will be provided in the format compatible with the Using Agency. The Using Agency uses Autodesk AutoCAD Release latest version CAD software system. The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make all required corrections, changes, additions, and deletions.

- a. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 5 mm 3/16 inch high. All other contract drawings shall be marked in the bottom right-hand corner of each drawing either "AS-BUILT" drawing denoting no revisions on the sheet, or "REVISED AS-BUILT" denoting one or more revisions. As-Built drawings shall be dated with the Contract Completion Date in the revision block.
- b. After receipt by the Contractor of the approved working as-built drawings and the original contract drawings files the Contractor shall, within sixty (60) calendar days, make the final as-built submittal. This submittal shall consist of 2 sets of completed final as-built drawings on separate media consisting of both CAD files (compatible with the Using Agency's system on electronic storage media identical to that supplied by the Government) and a full size set in PDF format and

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

the return of the approved marked up working as-built drawings. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any translations or adjustments necessary to accomplish this are the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with its CAD system. All paper drawings, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked drawings as specified shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.8 NOT USED

1.9 EQUIPMENT DATA, O&M, & REPAIR MANUALS WITH FIELD TRAINING REQUIREMENTS

1.9.1 Real Property Equipment

OPTION #1 Equipment-in-Place Data

Contractor shall be required to make an [Equipment-in-Place list](#) of all installed equipment furnished under this contract. This list shall include all information usually listed on manufacturer's name plate. The Form is part of SPECIAL PROVISIONS and is included following the SPECIAL PROVISIONS, so to positively identify the piece of property. The list shall also include the cost of each piece of installed property F.O.B. construction site. For each of the items which are specified herein to be guaranteed for a specified period from the date of acceptance thereof, the following information shall be given: The name, serial and model number address of equipment supplier, or manufacturer originating the guaranteed item. The Contractor's guarantee to the Government of these items will not be limited by the terms of any manufacturer's guarantee to the Contractor. Furnish the list in as one (1) reproducible and three (3) copies, and in electronic format on CD to the Contracting Officer thirty (30) calendar days before completion of any segment of the contract work which has an incremental completion date.

[Maintenance and Parts Data](#)

The Contractor will be required to furnish a brochure, catalog cut, parts list, manufacturer's data sheet or other publication which will show detailed parts data on all other equipment subject to repair and maintenance procedures not otherwise required in Operations and Maintenance Manuals specified elsewhere in this contract. Distribution of directives shall follow the same requirements as listed in paragraph above.

1.9.2 O&M and Repair Manuals

OPTION #1 Withholding & Copies

The Contractor shall provide 6 complete copies of the Equipment Operating, Maintenance, and Repair Manuals unless the Technical Specification indicates otherwise. The manuals shall be prepared electronically in PDF format containing bookmarks for each table of contents item. The PDF file shall be referenced in a separate column or linked worksheet in the equipment data excel spreadsheet. Separate manuals shall be provided for each utility system as defined per the Technical Specification. Operations and Maintenance manuals shall be accepted/approved before field training or ninety (90) calendar days before substantial completion (whichever occurs

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

earlier). An amount of \$10,000 shall be withheld until submittal and acceptance/ approval of O&M manuals is complete. A draft outline and table of contents shall be submitted for acceptance/ approval at 50% contract completion See paragraph "EQUIPMENT DATA, O&M, & REPAIR MANUALS WITH FIELD TRAINING REQUIREMENTS" for detail O&M and Repair Manual format.

### 1.9.3 Field Training

#### 1.9.3.1 Training Course

Contractor shall conduct a training course for the operating staff for each particular component and system. Where the training period is not identified by the technical specification, a minimum of 1 hour of training shall be provided for that component or system. Training shall only occur after the Manuals have been approved/ accepted by the Government and during normal working time, and shall start after the system or component is functionally completed. The field instructions shall cover all of the items contained in the Equipment Operating, Maintenance and Repair Manuals as identified per individual Technical Specifications. The training will include both classroom and "hands-on" training. The Contractor shall submit a lesson plan outlining the information to be discussed during training periods. This lesson plan will be submitted ninety (90) calendar days before contract completion and accepted/approved before the field training occurs. Training shall be documented by the Contractor and a list of attendees shall be furnished to the Government. Training audio/ video shall be digitally recorded on CDs or DVDs and shall be furnished to the Government within ten (10) calendar days following training.

#### 1.9.3.2 Training Recording

The Contractor shall provide all equipment, materials, and trained personnel required to visually and audibly record all site operations and maintenance (O&M) training sessions. The video technician/trainer shall be employed by a video production company that has been in business for a minimum of 2 years. The Contractor shall submit for acceptance by the Government, the resume of the technician/trainer and the video production company, and the proposed video format. The video format shall be one in wide use, and any software necessary to view the video shall be provided to the Government. Video shall be provided to the Government on DVD. Audio shall be adjusted, filtered or otherwise controlled to ensure the presenter can be understood at all times. Each system or piece of equipment shall be covered on a single DVD or set of DVDs, which shall be identified with a type written label showing the name of the project, equipment or system, and contract number. This same information shall be provided as an introduction on each DVD. When two or more DVDs are provided for a single system or piece of equipment, they shall be packaged as a set in an appropriate storage case. Provide three copies of each DVD(s) for each training session. Training DVDs shall be furnished to the Government within ten (10) working days following training.

### 1.10 AVAILABILITY OF UTILITIES

#### a. Availability and Use of Utility Services

The Government will furnish reasonable amounts of electricity within Building 1455 free of charge for the Contractor's use during construction. The contractor is responsible for maintaining all existing services and ensuring capacity of the service to safely provide the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

contractor's additional loads. The contractor is responsible for making all utility connections including but not limited to providing overhead or underground extensions, transformers, switchgear, overcurrent protection, anchors, making all connections and disconnections, and providing all appurtenances necessary for operation.

For electricity for the construction trailer or other site uses, the contractor is responsible for obtaining service from local private utility providers, making all utility connections including but not limited to providing transformers, meters, backflow preventer devices, and making all disconnections.

b. Additional Requirements

- (1) Drinking Water may not be obtained from existing outlets by Contractor personnel.
- (2) Existing Washing Facilities in the building may not be used by Contractor employees.

1.10.1 Alterations to Utilities

Where changes and relocations of utility lines are noted to be performed by others, the Contractor shall give the Contracting Officer at least thirty (30) calendar days written notice in advance of the time that the change or relocation is required. In the event that, after the expiration of thirty (30) calendar days after the receipt of such notice by the Contracting Officer, such utility lines have not been changed or relocated and delay is occasioned to the completion of the work under contract, the Contractor may be entitled to a time extension equal to the period of time lost by the Contractor after the expiration of said thirty (30) calendar day period.

1.10.2 Interruptions of Utilities

- a. No utility services shall be interrupted by the Contractor to make connections, to relocate, or for any purpose without approval of the Contracting Officer.
- b. Request for Permission to shut down services shall be submitted in writing to the Contracting Officer not less than seventeen (17) working days before date of proposed interruption. The request shall give the following information:
  - (1) Nature of Utility. (Gas, L.P. or H.P., Water, etc.)
  - (2) Size of line and location of shutoff.
  - (3) Buildings and services affected.
  - (4) Hours and date of shutoff.
  - (5) Estimated length of time services will be interrupted.
- c. Services shall not be shut off until receipt of approval of the proposed hours and date from the Contracting Officer.
- d. Shutoffs which will cause interruption of Government work operations as determined by the Contracting Officer shall be accomplished during regular non-work hours or on non-work days of the Using Agency without any additional cost to the Government.
- e. Operation of valves on water mains will be by persons of that utility. Where shutoff of water lines interrupts service to fire hydrants or

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

fire sprinkler systems, the Contractor shall arrange his operations and have sufficient material and personnel available to complete the work without undue delay or to restore service without delay in event of emergency.

- f. Flow in gas mains which have been shut off shall not be restored until the Government inspector has determined that all items serviced by the gas line have been shut off.

#### 1.11 NOT USED

#### 1.12 PERFORMANCE OF WORK BY THE CONTRACTOR

- a. The requirements found in Section 00 70 00, clause 52.236-1 "Performance of Work By the Contractor" apply.

The requirements found in Section 00 70 00, clause 52.219-14 "Limitations on Subcontracting" apply.

- b. For purposes of Section 00 70 00, clause 52.236-1, only, "WORK BY THE CONTRACTOR" is defined as prime Contractor direct contract labor (including testing and layout personnel), exclusive of other general condition or field overhead personnel, material, equipment, or subcontractors. The "TOTAL AMOUNT OF WORK" is defined as total direct contract labor (including testing and layout personnel), exclusive of other general condition or field overhead personnel, material, or equipment.

- c. Within seven calendar days after the award of any subcontract at any tier, either by himself or a subcontractor, the Contractor shall submit to the Contracting Officer a completed Standard Form [SF1413 Statement and Acknowledgement](https://www.gsa.gov/reference/forms#) (available at the GSA Forms Library, <https://www.gsa.gov/reference/forms#>). The form shall include the subcontractor's acknowledgement of the inclusion in his subcontract of the clauses in Section 00 70 00 of this contract entitled 52.222-4 "Contract Work Hours and Safety Standards - Overtime Compensation"; 52.222-8 "Payrolls and Basic Records"; 52.222-7 "Withholding of Funds"; 52.222-14 "Disputes Concerning Labor Standards"; 52.222-13 "Compliance with Construction Wage Rate Requirements and Related Regulations"; 52.222-6 "Construction Wage Rate Requirements" (formerly named "Davis-Bacon Act"); 52.222-9 "Apprentices and Trainees"; 52.222-10 "Compliance with Copeland Act Requirements"; 52.222-11 "Subcontracts (Labor Standards); 52.222-12 "Contract Termination - Debarment"; 52.222-15 "Certification of Eligibility". Nothing contained in this contract shall create any contractual relation between any subcontractor and the Government.

- d. Veterans Employment Emphasis for U.S. Army Corps of Engineers Contracts

In addition to complying with the requirements outlined in Subpart 22.13, provision 52.222-38, clause 52.222-35, clause 52.222-37, DFARS Subpart 22.13 and United States Department of Labor regulations, U.S. Army Corps of Engineers (USACE) contractors and subcontractors at all tiers are encouraged to promote the training and employment of U.S. veterans while performing under a USACE contract. While no set-aside, evaluation preference, or incentive applies to the solicitation or performance under the resultant contract, USACE contractors are encouraged to seek out highly qualified veterans to perform services under this contract. The following



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

resources are available to assist USACE contractors in their outreach efforts:

(1) U.S. Department of Labor Veterans' Employment and Training Service (VETS): <https://www.dol.gov/vets/>

(2) Federal veteran employment information:  
<https://www.fedshirevets.gov/>

(3) Veterans Opportunity to Work (VOW) Program:  
<https://benefits.va.gov/vow/>

(4) U.S. Army Warrior Transition Command Employment Index:  
<http://wct.army.mil/modules/employers/index.html>

(5) Hiring Our Heroes:  
<https://www.uschamberfoundation.org/hiring-our-heroes>

#### 1.13 SUPERINTENDENCE OF SUBCONTRACTORS

a. The Contractor shall be required to furnish the following, in addition to the superintendence required by clause 52.236-6 - "Superintendence By The Contractor" in Section 00 70 00.

(1) If more than 50 percent and less than 70 percent of the value of the contract work is subcontracted, one superintendent shall be provided at the site and on the Contractor's payroll to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

(2) If 70 percent or more of the value of the work is subcontracted, the Contractor shall be required to furnish two such superintendents to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

b. If the Contracting Officer, at any time after 50 percent of the subcontracted work has been completed, finds that satisfactory progress is being made, he may waive all or part of the above requirements for additional superintendence subject to the right of the Contracting Officer to reinstate such requirement if at any time during the progress of the remaining work he finds that satisfactory progress is not being made.

#### 1.14 IDENTIFICATION OF EMPLOYEES.

a. The Contractor shall be responsible for furnishing an identification badge/card to each employee prior to the employees work on-site, and for requiring each employee engaged on the work to display identification as may be approved and directed by the Contracting Officer. All prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of the employee.

b. The Contractor is required to provide a [Local Agency Check](#) for each individual that will be working on this contract.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.15 NO ASBESTOS - CONTAINING MATERIAL (ACM) CERTIFICATION

##### 1.15.1 Not Used

##### 1.15.2 Construction Phase

Before final payment to the contractor, the contractor's project engineer/manager will sign and submit to the Government, on the contracting firm's letterhead, a dated copy of the following statement:

I hereby certify that to the best of my knowledge no asbestos-containing material (ACM) was used as a building material during this project. Furthermore, I understand that the building owner presumes that all materials marked "May Contain mineral fibers" are considered asbestos unless I either:

- (1) Submit a certification for each individual product installed and identified to contain mineral fibers that no asbestos-containing materials were installed.
- (2) Submit documentation to show that the products containing mineral fiber materials have been microscopically examined by an AIHA- or NVLAP-certified laboratory and the lab has determined that the material does not contain asbestos.

#### 1.16 WARRANTY OF CONSTRUCTION

a. In addition to the requirements found in clause 52.246-21 "WARRANTY OF CONSTRUCTION" in Section 00 70 00 the following shall be included:

(1) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

As a part of the nine month warranty inspection, the Contractor shall conduct an infrared roof survey on any project involving a membrane roofing system. This survey will be conducted in accordance with ASTM C1153, "Standard Practice for Location of Wet Insulation in Roofing Systems Using Infrared Imaging". The Contractor shall be required to replace all damaged materials and to locate and repair sources of moisture penetration.

(2) Provide names, addresses, and telephone numbers of all subcontractors, equipment suppliers, or manufacturers with specific designation of their area of responsibilities if they are to be contacted directly on warranty corrections.

b. Warranty Management

##### (1) Warranty Management Plan

The Contractor shall develop a warranty management plan which shall contain information relevant to the clause "Warranty of Construction" in clause 52.246-21 in Section 00 70 00. At least thirty (30) calendar days before the planned pre-warranty conference, the Contractor shall submit the warranty management plan for Government approval. The warranty management plan shall include all required actions and

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

documents to assure that the Government receives all warranties to which it is entitled. The plan shall be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below shall include due date and whether item has been submitted or was accomplished. Warranty information made available during the construction phase shall be submitted to the Contracting Officer for approval prior to each monthly pay estimate. Approved information shall be assembled in a binder and shall be turned over to the Government upon acceptance of the work. The construction warranty period shall begin on the date of project acceptance and shall continue for the full product warranty period. A joint 4 month and 9 month warranty inspection shall be conducted, measured from time of acceptance, by the Contractor, Contracting Officer and the Customer Representative. Information contained in the warranty management plan shall include, but shall not be limited to, the following:

(a) Roles and responsibilities of all personnel associated with the warranty process, including points of contact and telephone numbers within the organizations of the Contractors, subcontractors, manufacturers or suppliers involved.

(b) Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.

(c) A list for each warranted equipment, item, and feature of construction or system indicating:

1. Name of item.
2. Model and serial numbers.
3. Location where installed.
4. Name and phone numbers of manufacturers or suppliers.
5. Names, addresses and telephone numbers of sources of spare parts.
6. Warranties and terms of warranty. This shall include one-year overall warranty of construction. Items which have extended warranties shall be indicated with separate warranty expiration dates.
7. Cross-reference to warranty certificates as applicable.
8. Starting point and duration of warranty period.
9. Summary of maintenance procedures required to continue the warranty in force.
10. Cross-reference to specific pertinent Operation and Maintenance manuals.
11. Organization, names and phone numbers of persons to call

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

for warranty service.

12. Typical response time and repair time expected for various warranted equipment.

(d) The Contractor's plans for attendance at the 4 and 9 month post-construction warranty inspections conducted by the Government.

(e) Procedure and status of tagging of all equipment covered by extended warranties.

(f) Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty and/or safety reasons.

c. Performance Bond

(1) The Contractor's Performance Bond will remain effective throughout the construction warranty period and warranty extensions.

(2) In the event the Contractor or his designated representative(s) fails to commence and diligently pursue any work required, and in a manner pursuant to the requirements thereof, the Contracting Officer shall have a right to demand that said work be performed under the Performance Bond by making written notice on the surety. If the surety fails or refuses to perform the obligation it assumed under the Performance Bond, the Contracting Officer shall have the work performed by others, and after completion of the work, may make demand for reimbursement of any or all expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.

(3) In the event sufficient funds are not available to cover the construction warranty work performed by the Government at the Contractor's expense, the Contracting Officer will have the right to recoup expenses from the bonding company.

(4) Following oral or written notification of required warranty repair work, the Contractor will respond as dictated by para. 1.16e "Contractor's Response to Warranty Service Requirements". Written verification will follow oral instructions. Failure of the Contractor to respond will be cause for the Contracting Officer to proceed against the Contractor as outlined in the paragraph 1.16c(2) and/or

(3) "Performance Bond" .(2)and/or (3) above.

d. Pre-Warranty Conference

Prior to contract completion and at a time designated by the Contracting Officer, the Contractor shall meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this clause. Communication procedures for Contractor notification of warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty shall be established/reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, the Contractor will furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue warranty work action on behalf of the Contractor. This point of

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

contact will be located within the local service area of the warranted construction, will be continuously available, and will be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of his responsibilities in connection with other portions of this provision.

e. Contractor's Response to Warranty Service Requirements.

Following oral or written notification by the Contracting Officer or an authorized representative of the installation designated in writing by the Contracting Officer, the Contractor shall respond to warranty service requirements in accordance with the "Warranty Service Priority List" and the three categories of priorities listed below. The Contractor shall submit a report on any warranty item that has been repaired during the warranty period. The report shall include the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframe specified, the Government will perform the work and backcharge the construction warranty payment item established.

(1) First Priority Code 1 Perform on-site inspection to evaluate situation, determine course of action, initiate work within 24 hours and work continuously to completion or relief.

(2) Second Priority Code 2 Perform on-site inspection to evaluate situation, determine course of action, initiate work within 48 hours and work continuously to completion or relief.

(3) Third Priority Code 3 All other work to be initiated within (5) five work days and work continuously to completion or relief.

(4) The "Warranty Service Priority List" is as follows:

Code 1 Air Traffic Control and Air Navigation Systems and Equipment.

Code 1 Air Conditioning System

- a. Hospital.
- b. Buildings with computer equipment.
- c. Commissary, Clubs and Main PX.
- d. Army Reserve Projects, Training Bldg. & OMS Administrative Areas of Bldg.
- e. Air Force Reserve Projects, Training Bldg, OMS Administrative Areas of Bldg, and Indoor Ranges.
- f. Barracks, mess halls, BOQ/BEQ (entire building down).
- g. Troop medical and dental.

Code 2 Air Conditioning Systems

- a. Recreational support.
- b. Air conditioning leak in part of building, if causing damage.
- c. Air conditioning system not cooling properly
- d. Admin buildings with ADP equipment not on priority list.

Code 1 Doors

- a. Overhead doors not operational.

Code 1 Electrical

- a. Power failure (entire area or any building operational after 1600 hours).

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- b. Traffic control devices.
- c. Security lights
- d. Smoke detectors and fire alarm systems

- Code 2     Electrical
- a. Power failure (no power to a room or part of building).
  - b. Receptacle and lights.
- Code 3     Electrical
- a. Street, parking area lights
- Code 1     Gas
- a. Leaks and breaks.
  - b. No gas to family housing unit or cantonment area.
- Code 1     Heat
- a. Hospital/Medical facilities.
  - b. Commissary, Clubs and Main PX.
  - c. Army Reserve Projects, Training Bldg & OMS Administrative Areas of Bldg.
  - d. Area power failure affecting heat.
- Code 2     Heat
- a. Medical storage.
  - b. Barracks.
  - c. Army Reserve Projects, Training Bldg & OMS Administrative Areas of Bldg.
- Code 3     Interior
- a. Floor damage
  - b. Paint chipping or peeling
- Code 1     Intrusion Detection Systems
- Finance, PX and Commissary, and high security areas.
- Code 2     Intrusion Detection Systems
- Systems other than those listed under Code 1.
- Code 1     Kitchen Equipment
- a. Dishwasher.
  - b. All other equipment hampering preparation of a meal.
- Code 2     Kitchen Equipment
- All other equipment not listed under Code 1.
- Code 2     Plumbing
- a. Flush valves not operating properly
  - b. Fixture drain, supply line commode, or water pipe leaking.
  - c. Commode leaking at base.
- Code 3     Plumbing
- a. Leaking faucets
- Code 1     Refrigeration
- a. Commissary.
  - b. Mess Hall, Army Reserve Projects.
  - c. Cold Storage.
  - d. Hospital.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

e. Medical storage.

Code 2 Refrigeration  
Mess hall - other than walk-in refrigerators and freezers.

Code 1 Roof Leaks  
Temporary repairs will be made where major damage to property is occurring.

Code 2 Roof Leaks  
Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 1 Sprinkler System  
All sprinkler systems, valves, manholes, deluge systems, and air systems to sprinklers.

Code 1 Swimming Pools  
Chlorine leaks or broken pumps.

Code 1 Tank Wash Racks (Bird Baths)  
All systems which prevent tank wash.

Code 1 Water (Exterior)  
Normal operation of water pump station.

Code 2 Water (Exterior)  
No water to facility.

Code 1 Water, Hot (and Steam)  
a. Hospitals and Mess Halls.  
b. Army Reserve Projects, Training Bldg & OMS Bldg.  
c. BOQ, BEQ, barracks (entire building).  
d. Medical and dental.

Code 2 Water, Hot  
No hot water in portion of building listed under Code 1 (items a through c)

(5) Should parts be required to complete the work and the parts are not immediately available, the Contractor shall have a maximum of 12 hours after arrival at the job site to provide the Contracting Officer or an authorized representative of the installation designated in writing by the Contracting Officer, with firm written proposals for emergency alternatives and temporary repairs for Government participation with the Contractor to provide emergency relief until the required parts are available on site for the Contractor to perform permanent warranty repair. The Contractors proposals shall include a firm date and time that the required parts shall be available on site to complete the permanent warranty repair. The Contracting Officer or an authorized representative of the installation designated in writing by the Contracting Officer, will evaluate the proposed alternatives and negotiate the alternative considered to be in the best interest of the Government to reduce the impact of the emergency condition. Alternatives considered by the Contracting Officer or an authorized representative of the installation designated in writing by the Contracting Officer will include the alternative for the Contractor to "Do Nothing" while waiting until the required parts are available to

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

perform permanent warranty repair. Negotiating a proposal which will require Government participation and the expenditure of Government funds shall constitute a separate procurement action by the using service.

f. **Equipment Warranty Identification Tags**

(1) The Contractor at the time of installation shall provide warranty identification tags on all Contractor and Government furnished equipment which he has installed.

(a) The tags shall be suitable for interior and exterior locations, resistant to solvents, abrasion, and to fading caused by sunlight, precipitation, etc. These tags shall have a permanent pressure-sensitive adhesive back, and they shall be installed in a position that is easily (or most easily) noticeable. Contractor furnished equipment that has differing warranties on its components will have each component tagged.

(b) Sample tags shall be submitted for Government review and approval. These tags shall be filled out representative of how the Contractor will complete all other tags.

(c) Tags for Warrantied Equipment: The tag for this equipment shall be similar to the following. Exact format and size will be as approved.

<b>EQUIPMENT WARRANTY CONTRACTOR FURNISHED EQUIPMENT</b>	
MFG NAME	MODEL NO.
SERIAL NO.	
CONTRACT NO.	
CONTRACTOR NAME	
CONTRACTOR WARRANTY EXPIRES	
MFG WARRANTY (IES) EXPIRE	

<b>EQUIPMENT WARRANTY GOVERNMENT FURNISHED EQUIPMENT</b>	
MFG NAME	MODEL NO.
SERIAL NO.	
CONTRACT NO.	
CONTRACTOR NAME	
CONTRACTOR WARRANTY EXPIRES	
MFG WARRANTY (IES) EXPIRE	

(d) If the manufacturer's name (MFG), model number and serial number are on the manufacturer's equipment data plate and this data plate is easily found and fully legible, this information



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

need not be duplicated on the equipment warranty tag. The Contractor warranty expires (warranty expiration date) and the final manufacturer's warranty expiration date will be determined as specified by clause 52.246-21 "WARRANTY OF CONSTRUCTION" in Section 00 70 00.

(2) Execution. The Contractor will complete the required information on each tag and install these tags on the equipment by the time of and as a condition of final acceptance of the equipment.

(3) Payment. The work outlined above is a subsidiary portion of the contract work, and has a value to the Government approximating 5% of the value of the Contractor furnished equipment. The Contractor will assign a value of that amount in the breakdown for progress payments mentioned in the clause 52.232-5 "Payments Under Fixed-Price Construction Contracts" in Section 00 70 00.

(4) Equipment Warranty Tag Replacement. The Contractor's warranty with respect to work repaired or replaced shall run for one year from the date of repair or replacement. Such activity shall include an updated warranty identification tag on the repaired or replaced equipment. The tag shall be furnished and installed by the Contractor, and shall be identical to the original tag, except that the Contractor's warranty expiration date will be one year from the date of acceptance of the repair or replacement.

#### 1.17 SALVAGE MATERIALS AND EQUIPMENT

The Contractor shall maintain adequate property control records for all materials or equipment specified in UFGS Section 02 41 00 DEMOLITION AND DECONSTRUCTION to be salvaged. These records may be in accordance with the Contractor's system of property control, if approved by the property administrator. The Contractor shall be responsible for the adequate storage and protection of all salvaged materials and equipment and shall replace, at no cost to the Government, all salvage materials and equipment which are broken or damaged during salvage operations as the result of his negligence, or while in his care.

#### 1.18 NOT USED

#### 1.19 PROJECT SIGN

a. General. The Contractor shall furnish and erect at the location directed one project sign. The sign shall be lettered on one side only and shall conform to the details shown as an attachment at the end of this specification section.

Project nomenclature shall be: Repair Aircraft Maintenance B1455 for MH-139 Beddown

Architect-Engineer name shall be: Jacobs Engineering

Sponsor name shall be: 908 PIO/Global Hawk

b. Materials.

Sign Panels can be constructed using either of the materials below:

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

(1) The sign panels shall be constructed of good sound materials suitable for the purpose. Lumber shall be salt treated softwood of No. 2 grade or better. Sizes shown are nominal. Plywood shall be 1/2-inch, B-B, marine grade and with dimensional lumber uprights and bracing. Screws shall be of commercial quality and of sizes shown.

(2) The sign Panels shall be fabricated using premium, furniture-grade exterior plywood laminated on both sides with factory-baked polyester painted aluminum surfaces and with dimensional lumber uprights and bracing. Screws shall be commercial quality and of the sizes shown.

c. Maintenance. The signs shall be maintained in good condition until completion of the contract, shall remain the property of the Contractor, and shall be removed from the site upon completion of work under the contract.

d. Logos. The Corps of Engineers and the local sponsor or CFSC logo will be provided by the Contracting Officer. All legends shall be provided in the sizes and styles as specified by the graphic formats shown at the end of this section.

e. Painting. The sign and posts shall be given one prime coat and two finish coats of gloss exterior-type enamel paint, either as specified in the Base Architectural Compatibility Guide or as approved by the COR.

Paint colors shall be as follow:

Black - Federal Standard 595a Color Number 27038  
White - Federal Standard 595a Color Number 27875  
Red - PANTONE 032

f. Payment. No separate payment will be made for furnishing and erecting the project sign(s) as specified and costs thereof shall be considered a subsidiary obligation of the Contractor.

#### 1.20 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the clause 52.249-10 "Default (Fixed-Price Construction)" in Section 00 70 00. In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

Indicate the location of the National Weather Service office closest to the site. See: <https://www.weather.gov/srh/nws/offices> The Contractor shall make his own investigations and determinations as to weather conditions at the site. Data may be obtained from various National Weather Service offices located generally at airports of principal cities, the nearest to this project being: Birmingham, AL.

The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

The following schedule of monthly anticipated adverse weather delays is

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY  
WORK DAYS BASED ON FIVE (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
6	5	5	6	6	4	5	4	4	4	4	6

Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated listed above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the clause 52.249-10 "Default (Fixed-Price Construction)" in Section 00 70 00.

1.21 INTERFERENCE WITH TRAFFIC AND PUBLIC AND PRIVATE PROPERTY

a. The Contractor at all times shall dispose his plant and conduct the work in such manner as to cause as little interference as possible with private and public travel. Damage (other than that resulting from normal wear and tear) to roads, shall be repaired to as good a condition as they were prior to the beginning of work and to the satisfaction of the Contracting Officer.

b. The Contractor shall provide and maintain as may be required by the State of Alabama, Department of Transportation, County of Montgomery, City of Montgomery. Contractor shall provide proper barricades, fences, danger signals and lights, provide a sufficient number of watchmen, and take such other precautions as may be necessary to protect life, property and structures, and shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence in accordance with clause 52.236-7 Permits and Responsibilities, in Section 00 70 00.

c. It is the Contractor's responsibility to coordinate the submittal of all Notices to Airman (NOTAM) with the installation and airfield managers prior to and during Construction as necessary to not impede current airfield operations.

1.22 AIRSPACE/FAA FORM 7460-1

As described in Title 14 of the Code of Federal Regulations, part 77, when construction within 20,000 feet of an active runway or use equipment in construction which will penetrate a 100 to 1 slope from the nearest point of the runway, among other defined circumstances, notice to the Federal Aviation Administration (FAA) is required for all temporary construction

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

cranes and permanent structures. The Contractor is responsible for ensuring that FAA Form 7460-1 is completed and submitted to the FAA at least 45 calendar days prior to the start of any construction and approved prior to the start of the project by the Regional FAA Office. Form 7460-1 should be submitted as an On-Airport case. The FAA Form 7460-1 can be submitted to electronically at <https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp>. Copies of all FAA 7460-1 submittals and determination letters will be required to be coordinated with and submitted to the Contracting Officer.

1.23 NOT USED

1.24 COMPLIANCE WITH POST/BASE REGULATIONS

a. The site of the work is on a military reservation and all rules and regulations issued by the Commanding Officer covering general safety, security, sanitary requirements, pollution control and traffic regulations, shall be observed by the Contractor. Information regarding these requirements may be obtained by contacting the Contracting Officer, who will provide such information or assist in obtaining same from appropriate authorities.

b. Contractor personnel shall park only in areas authorized by the Contracting Officer.

1.25 COST PRINCIPLES AND PROCEDURES FOR MODIFICATION

Cost principles and procedures for any modifications processed under this contract will follow all applicable contract clauses, laws, regulations, policies, and guidance. See, for example: FAR Part 31, FAR Part 15, and EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule (region dependent on project location), available at <https://publications.usace.army.mil>.

1.26 ENGLISH-SPEAKING REPRESENTATIVE

At all times when any performance of the work at any site is being conducted by any employee of the Contractor or his subcontractors, the Contractor shall have a representative present at each site who has the capability of receiving instructions in the English language, fluently speaking the English language and explaining the work operations to persons performing the work, in the language that those performing the work are capable of understanding. The Contracting Officer shall have the right to determine whether the proposed representative has sufficient technical bilingual capabilities, and the Contractor shall immediately replace any individual not acceptable to the Contracting Officer.

1.27 SALES and USE TAX

Some states have tax exemptions for certain aspects of work when done for the federal government and the Contractor shall check with the state where the project is located for more information. If a sales tax exemption is applicable, the contractor is responsible for obtaining any required exemption certification.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.28 CONTRACTOR SECURITY TRAINING/FACILITY ACCESS REQUIREMENTS

a. All contractor employees, to include subcontractor employees, shall be briefed on the local iWATCH program (training standards provided by the requiring activity ATO) by the contractor and all associated subcontractors. This local developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. The training shall be completed within seven (7) calendar days after commencing work on the site with the results reported to the COR NLT seven (7) calendar days after completion of training.

b. All contractor employees, to include subcontractor employees, shall comply with applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative). The contractor shall also provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by clause 52.243-4 - "Changes" in Section 00 70 00 of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.

c. Per AR 530-1, Operations Security, all contractor employees and associated subcontractor employees must complete Level 1 OPSEC Training within thirty (30) calendar days of commencing work. Additionally, all contractor employees and associated subcontractor employees must complete annual OPSEC awareness training.

d. Refer to clause 52.222-54: "Employment Eligibility Verification" in Section 00 70 00 for e-Verify requirements.

#### 1.29 INSURANCE--WORK ON A GOVERNMENT INSTALLATION

In addition to the requirements of clause 52.228-5 "Insurance - Work on a Government Installation" found in Section 00 70 00 the following shall be provided:

- a. Coverage complying with State laws governing insurance requirements, such as those requirements pertaining to Workman's Compensation and Occupational Disease Insurance. Employer's Liability Insurance shall be furnished in limits of not less than \$100,000.00 except in states with exclusive or monopolistic funds.
- b. Comprehensive Automobile Liability Insurance for both bodily injury and property damage, shall be furnished in limits of not less than \$200,000.00 per person, \$500,000.00 per accident for bodily injury, and \$20,000.00 per accident for property damage. When the Financial Responsibility or Compulsory Insurance Law of the State, requires higher limits, the policy shall provide for coverage of at least those higher limits.
- c. Within seven calendar days after the award of contract, the Contractor shall submit to the Contracting Officer Evidence of Insurance for all insurance coverages. Dates of coverage shall be entered into RMS and

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

maintained thru the contract duration. If and when new insurance is obtained because of expiration or renewal, new certificates shall be submitted to the Contracting Officer within seven days of obtainment and the new coverage information and dates entered into RMS.

#### 1.30 AVAILABILITY OF SAFETY AND HEALTH REQUIREMENTS MANUAL (EM 385-1-1)

As covered by clause 52.236-13 Alt. I "Accident Prevention" in Section 00 70 00, compliance with **EM 385-1-1** is a requirement for this contract. Copies may be downloaded from the following website:  
<https://www.publications.usace.army.mil/USACE-Publications/Engineer-Manuals/>

#### 1.31 NOT USED

#### 1.32 RADIOACTIVE MATERIAL/EQUIPMENT

All equipment (e.g. nuclear density gauges) or items containing radioactive material brought onto any military or private installation must be licensed by the Nuclear Regulatory Commission, and or State/Local authorities having jurisdiction. Some locations are considered a non-agreement sites with respect to reciprocity with State permits and special permitting may be required prior to accessing the site with the equipment. Be aware that there may be several week review and processing periods that vary from location to location. Permitting for each site must be evaluated, with a copy of any obtained permit or license submitted to the Contracting Officer and uploaded into RMS.

#### 1.33 CONSTRUCTION HAZARD COMMUNICATION

The Contractor is required to comply with the requirements of the OSHA Hazard Communication Standard in alignment with the Globally Harmonized System (GHS) (**29 CFR 1926.59**). This standard is designed to inform workers of safe and appropriate methods of working with hazardous substances in the workplace. The standard has five requirements, and every hazardous or potentially hazardous substance used or stored in the work area is subject to all five. They are:

(1) Hazard Classification. Any company which produces or imports a chemical or compound must conduct a hazard classification of the substance to determine its potential health or physical hazard. The hazard evaluation consists of an investigation of all the available scientific evidence about the substance. The Contractor is required to assure that all producers (manufacturer/distributors) have performed these classifications and transmit the required information with any hazardous materials being used or stored on the project site. From the hazard classification, a substance may be classified as a health hazard or a physical hazard. These classifications are then further broken down into hazard categories according to the severity of the effect:

Health Hazards	Physical Hazards
Carcinogens	Combustible liquids
Irritants	Compressed gases

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Health Hazards	Physical Hazards
Sensitizers	Explosives
Corrosives	Flammables
Toxic substances	Organic peroxides
Highly toxic substances	Unstable substances
Substances harmful to specific organs or parts of the body	Water-reactive substances

(2) Warning Labels. If a chemical is hazardous or potentially hazardous, the producer or importer must affix a label to every container of that chemical before it leaves his facility. The Contractor must assure these labels are attached and legible. The label must identify the hazard symbol/pictograms, signal words, hazard statements, product name or identifier (identify hazardous ingredients, where appropriate), precautionary statements and pictograms, supplier identification, and supplemental information. If the hazardous substance is transferred to another container, that container must then be labeled, tagged, or marked with the name of the chemical and the appropriate hazard warning. Warning labels shall be replaced immediately if they are defaced or removed.

(3) Safety Data Sheets. The producer or importer must also supply a safety data sheet (SDS) that follows the 16 heading format as defined by GHS. The Contractor must keep these available in the work area where the substance is used, so that the people using the substance can easily review important safety and health information, such as:

- (i) Emergency procedures for leaks, spills, fire and first aid.
- (ii) Precautions necessary for use, handling, and storage.
- (iii) Useful facts about the substance's physical or chemical properties.
- (iv) Regulatory information and any other pertinent information including information on preparation and revision of the SDS.

(4) Work Area Specific Training. Because of hazardous substance may react differently depending on how it is used or the environment of the work area, the Contractor must conduct work area specific training; special training which takes the Contractor's operations, environment, and work policies into consideration. Work area training presents:

The hazardous substances which are present in the work place and the hazards they pose.

Ways to protect against those hazards, such as protective equipment, emergency procedures, and safe handling.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Where the SDS's are kept, and an explanation of the labeling system.

Where the Contractor's written Hazard Communication Program is located.

(5) The Written Hazard Communication Program. In accordance with OSHA and the EM 385-1-1 requirements, the Contractor must prepare a written Hazard Communication Program. This document will be included in the Contractor's Accident Prevention Plan. This document states the hazardous or toxic agent inventory, how the Contractor plans to ensure that hazardous materials are appropriately labeled, how and where SDS's will be maintained, and how employees will be provided with specific information and training.

#### 1.34 MECHANICAL/ELECTRICAL ROOM LAYOUT

Detailed mechanical/electrical room layout drawings shall be submitted for approval in accordance with Section 01 33 00 SUBMITTAL PROCEDURES. Layout drawings shall show location and maintenance clearances for all mechanical/electrical room equipment, and all utility runs/chases for mechanical, electrical, telephone and other similar systems. Drawings shall be submitted at the same time as the submittals for the equipment to be located within the mechanical/electrical room.

#### 1.35 RED ZONE MEETING

Approximately sixty (60) calendar days prior to Contract Required Completion Date, the Contractor and the Government's project delivery team will conduct what is known as the Red Zone Meeting to discuss the close-out process, to schedule the events and review responsibilities for actions necessary to produce a timely physical, as well as fiscal, project close-out. The Red Zone meeting derives its name from the football term used to describe the team effort to move the ball the last 20 yards into the end zone. The close-out of a construction project sometimes can be equally as hard and most definitely requires the whole team's efforts.

#### 1.36 PARTNERING

In order to most effectively accomplish this contract, the Government proposes to form a partnership with the Contractor to develop a cohesive building team. It is anticipated that this partnership would involve Project Delivery Team members from the Corps of Engineers, Program Sponsor, facility user representatives, the Contractor, primary subcontractors, and the designers. The partnership will draw upon the strength of each organization in an effort to achieve a project that is without any safety mishaps, conforms to the Contract, stays within budget and on schedule.

The Government encourages partnering to be initiated near the beginning of the Contract and endure through the life of the Contract. This partnership would be bilateral in membership and participation will be completely voluntary.

#### 1.37 PROGRESS PHOTOGRAPHS

Monthly digital photography shall be performed between the first and fifth of each month, delivered no later than the 10th of each month taken as described herein. A minimum of six views from different positions shall be taken as directed to show, inasmuch as possible, work accomplished during



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

the previous month, and a minimum of six views shall be taken of the completed work. Additional views and positions may be required by the Contracting Officer to depict the work done.

Digital photographs shall be at least 4 megapixels and in JPEG format, uploaded to RMS no later than 48 hours following obtainment of photography.

Digital photographs are required to be furnished to the COR. The Contractor shall furnish digital photographs on CD and hard copy depicting the progress of the work during construction and after final inspection by the Contracting Officer of the conditions at the completion of the contract.

Each CD and photograph shall be identified with the date made, contract title and number, location of work, as well as a brief description of work depicted.

No separate payment will be made for these services and all costs in connection thereto shall be considered a subsidiary obligation of the Contractor.]

#### 1.38 DAMAGE TO WORK

##### Version 1

The responsibility for damage to any part of the permanent work shall be as set forth in clause 52.236-7 "Permits And Responsibilities" in Section 00 70 00. Except as herein provided, damage to all work (including temporary construction), utilities, materials, equipment and plant shall be repaired to the satisfaction of the Contracting Officer at the Contractor's expense, regardless of the cause of such damage.

#### 1.39 NOT USED

#### 1.40 NOT USED

#### 1.41 NOT USED

#### 1.42 NOT USED

#### 1.43 NOT USED

#### 1.44 NOT USED

#### 1.45 FINAL CLEANING

Clean the premises in accordance with clause 52.236-12 "Cleaning Up" in Section 00 70 00 and additional requirements state here. Remove stains, foreign substances, and temporary labels from surfaces. Vacuum carpet and soft surfaces. Clean equipment and fixtures to a sanitary condition. Clean or replace filters of operating equipment if cleaning is not possible or practicable. Remove debris from roofs, drainage systems, gutters, and downspouts. Sweep paved areas and rake clean landscaped areas. Remove waste, surplus materials, and rubbish from the site. Remove all temporary structures, barricades, project signs, fences and construction facilities. A list of completed clean-up items shall be submitted on the day of final inspection.

#### 1.46 BASIS FOR SETTLEMENT OF PROPOSALS

See FAR Section 31.105(d)(2)(i) for establishing the cost of construction

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

equipment.

1.47 NOT USED

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

-- End of Section --

The use of signs to identify Corps managed or supervised design, construction, and rehabilitation projects - both for military and civil works - is an important part of efforts to keep the public informed of Corps work. For this purpose, a construction project sign package has been adopted. This package consists of two signs: one for project identification and the other to show on-the-job safety performance of the contractor.

These two signs are to be displayed side by side and mounted for reading by passing viewers. Exact placement location will be designated by the contracting officer's representative.

The panel sizes and graphic formats have been standardized for visual consistency throughout all Corps operations.

Panels are fabricated using HDO plywood or aluminum with dimensional lumber uprights and bracing. The sign faces are nonreflective vinyl.

All legends are to be die-cut or computer-cut in the sizes and typefaces specified and applied to the white panel background following the graphic formats shown on pages 16-2 thru 16-4. The Communication Red panel on the left side of the construction project sign with Corps Signature (reverse version) is screen-printed onto the white background.

Displays of the signs are shown on the following pages. Mounting and fabrication details are provided on page 16-5.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Following are two samples of the Construction Project Identification sign showing how this panel is adaptable for use to identify either Civil or Military works projects. The graphic format for this 4'x 6' sign panel follows the legend guidelines and layout as specified below. The large 4'x 4' section of the panel on the right is to be white with black legend. The 2'x 4' section of the sign on the left

with the full Corps Signature (reverse version) is to be screen-printed Communication Red on the white background. The designation of a sponsor in the area indicated is optional with Military or Civil Works construction signs. Signs may list one sponsoring entity. If agreement on a sponsor designation cannot be achieved, the area should be left blank.

This sign is to be placed with the Safety Performance sign shown on the following page. Mounting and fabrication details are provided on page 16-4.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

## ATTACHMENT A: Example Graphic of Signage with Dimensions for MILCON project



ATTACHMENT B: Example Graphic of Signage with Dimensions for Civil Works Project



Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the Construction Project Identification sign specified on page 16-2.

The graphic format, color, size and typeface used on the sign are to be reproduced exactly as specified below. The

title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

Safety record numbers are mounted on individual metal plates and are screw-

mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with 8" (outside diameter) Safety Green first aid logo.  
Color: To match Pantone system 347  
Typeface: 3" Helvetica Bold  
Color: Black

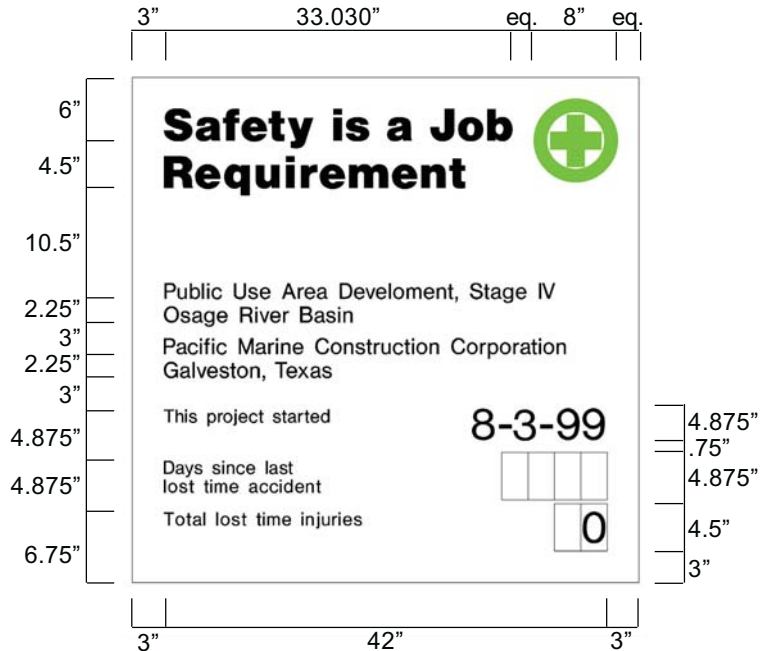
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.  
Color: Black  
Typeface: 1.5" Helvetica Regular  
Maximum line length: 42"

Legend Group 3: One- to two-line identification: name of prime contractor and city, state address. Color: Black  
Typeface: 1.5" Helvetica Regular  
Maximum line length: 42"

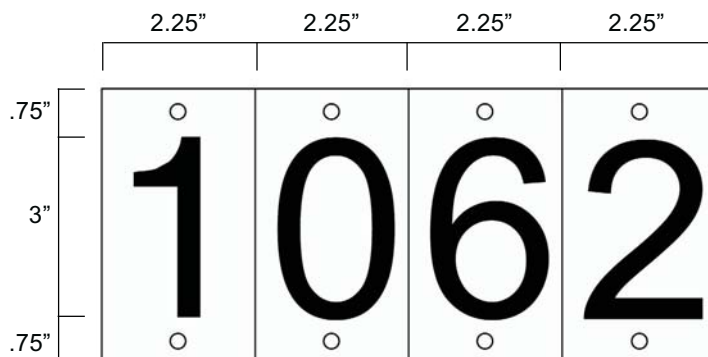
Legend Group 4: Standard safety record captions as shown.  
Color: Black  
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.  
Color: Black  
Typeface: 3" Helvetica Regular  
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4'x4'	4"x4"	HDO-3	48"	WH/BK-SG



All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer representative and shall conform to the size, format, and typographic standards shown on pages 16-2 thru 16-4. Detailed specifications

for HDO plywood panel preparation are provided in Appendix B.

For additional information on the proper method to prepare sign panel graphics, contact the district Sign Program Manager.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white nonreflective vinyl film with positionable adhesive backing.

All graphics except for the Communication Red background with Corps Signature on the project sign are to be die-cut or computer-cut nonreflective vinyl, prespaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16-2 and 16-3.

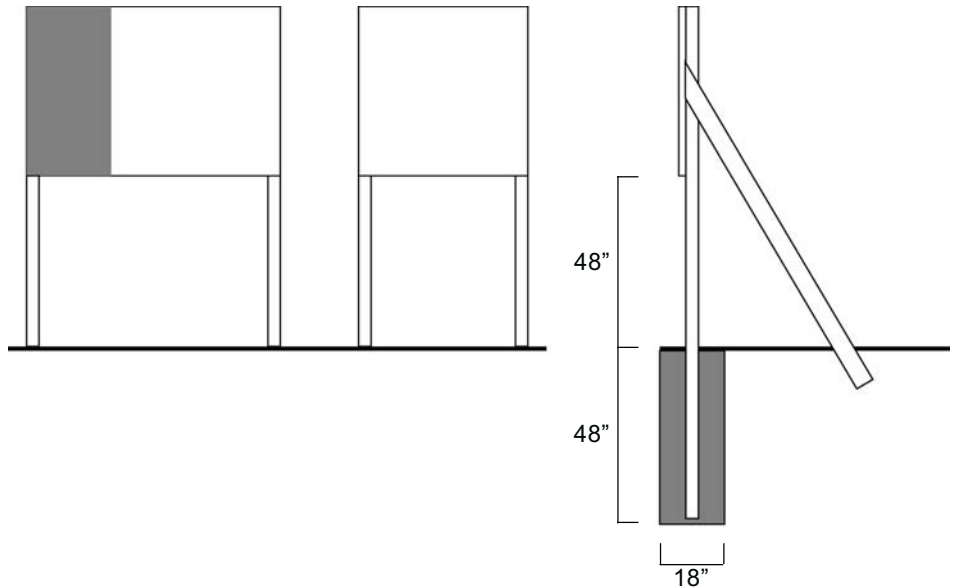
The 2'x 4' Communication Red panel (to match Pantone system 032) with full Corps Signature (reverse version) is to be screen-printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards.

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.



#### Construction Project Identification Sign Legend Group 1: Corps Relationship

1. \_\_\_\_\_
2. \_\_\_\_\_

#### Legend Group 2: Division/District Name

1. \_\_\_\_\_
2. \_\_\_\_\_

#### Legend Group 2a: Military/Civil Works Sponsor

1. \_\_\_\_\_
2. \_\_\_\_\_

#### Legend Group 3: Project Title

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

#### Legend Group 4: Facility Name

1. \_\_\_\_\_
2. \_\_\_\_\_

#### Legend Group 5: Contractor/A&E

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

#### Legend Group 5b: Contractor/A&E

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

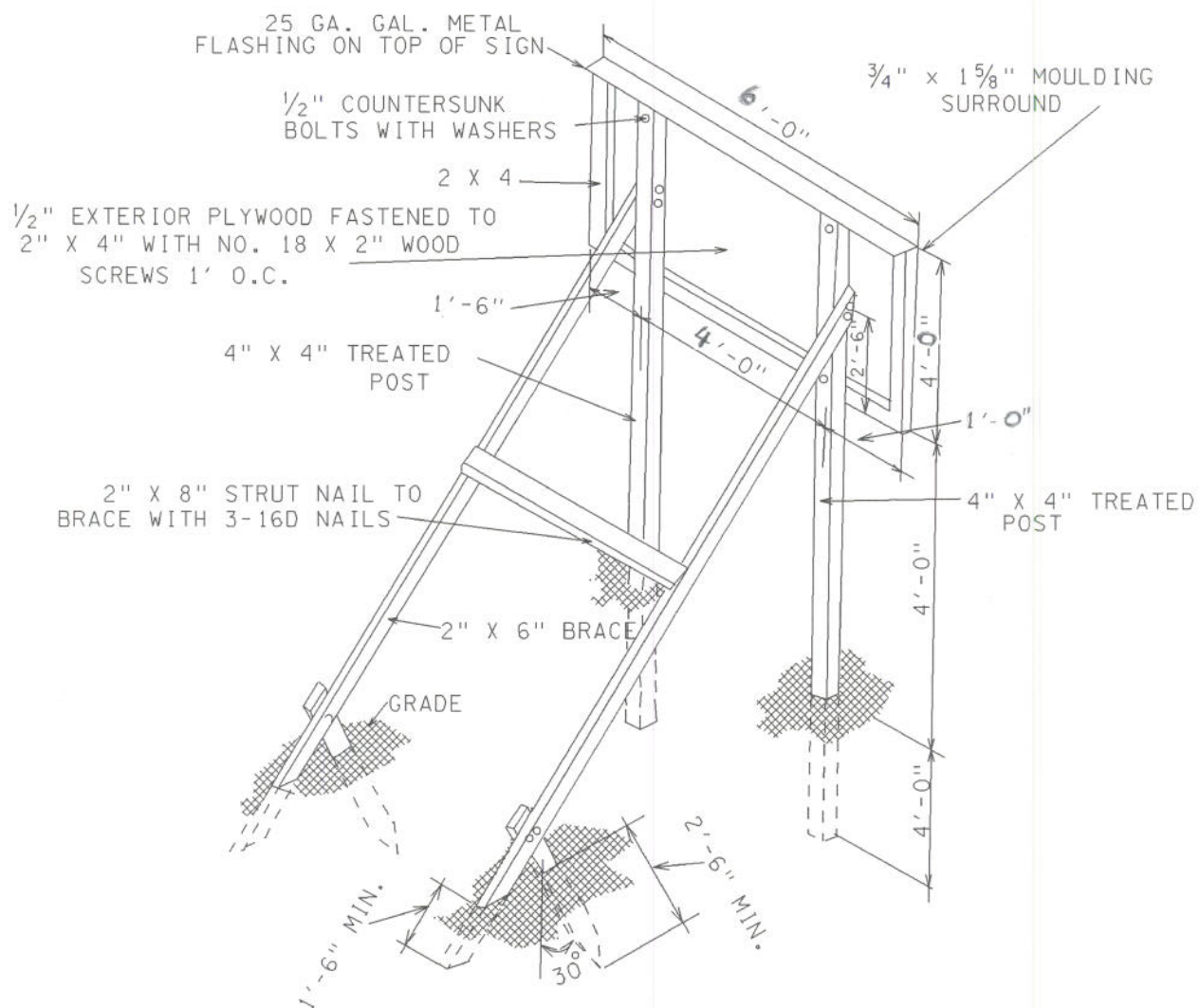
#### Safety Performance Sign

##### Legend Group 2: Project Title

1. \_\_\_\_\_
2. \_\_\_\_\_

##### Legend Group 3: Contractor/A&E

1. \_\_\_\_\_
2. \_\_\_\_\_



CONSTRUCTION SIGN ISOMETRIC  
ERECTION DETAILS



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT OR CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		00 80 00.00 06	SD-01 Preconstruction Submittals														
			Local Agency Check	1.14													
			SF1413 Statement and Acknowledgement	1.12													
			Radioactive Material/Equipment	1.32	G, RO												
			SD-02 Shop Drawings														
			Mechanical/Electrical Room Layout	1.34	G												
			SD-04 Samples														
			Equipment Warranty Identification Tags	1.16	G, RO												
			SD-05 Design Data														
			Progress Photographs	1.37	G												
			SD-07 Certificates														
			Warranty of Construction	1.16	G												
			NO ASBESTOS - CONTAINING MATERIAL (ACM) CERTIFICATION	1.15	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		00 80 00.00 06	Certification for each individual product installed and identified to contain mineral fibers that no asbestos-containing materials were installed	1.15.2	G												
			Documentation to show that the products containing mineral fiber materials have been microscopically examined by an AIHA- or NVLAP-certified laboratory and the lab has determined that the material does not contain asbestos	1.15.2	G												
			Insurance	1.29	G												
			Sales and Use Tax	1.27	G												
			SD-11 Closeout Submittals														
			Preliminary (Working) As-Built Drawings	1.7.4	G												
			Final As-Built Drawings	1.7.1	G												
			CAD Working As-Built Drawings	1.7.1.2	G												
			Equipment-in-Place List	1.9.1													
			Maintenance and Parts Data	1.9.1													
			Warranty Management Plan	1.16	G												
		01 11 00	SD-01 Preconstruction Submittals														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 11 00	Salvage Plan		G												
		01 32 01.00 06	SD-01 Preconstruction Submittals														
			Preliminary Project Schedule	3.4.1	G												
			Project Schedule	3.4	G												
			SD-05 Design Data														
			Narrative Report	3.5.2													
			Schedule Reports	3.5.4													
			Periodic Schedule Updates	3.4.4	G												
		01 33 00	SD-01 Preconstruction Submittals														
			Submittal Register	1.7	G												
		01 35 26.00 06	SD-01 Preconstruction Submittals														
			Accident Prevention Plan (APP)	1.7													
			Fatigue Management Plan	1.7													
			Bloodborne Pathogen Plan	1.7													
			Exposure Control Plan	1.7													
			Automatic External Defibrillator (AED) Program	1.7													
			Site Layout Plan	1.7													
			Access/Haul Road Plan	1.7													
			Hearing Conservation Program	1.7													
			Respiratory Protection Plan	1.7													
			Health Hazard Control Program	1.7													
			Hazard Communication Program	1.7													
			Process Safety Management Plan	1.7													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASS OR A/E REVIEW ATTORNEY	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 35 26.00 06	Lead Compliance Plan & Specifications	1.7													
			Asbestos Abatement Plan & Specifications	1.7													
			Radiation Safety Program	1.7													
			Abrasive Blasting Plan	1.7													
			Heat Stress Monitoring Plan	1.7													
			Cold Stress Monitoring Plan	1.7													
			Indoor Air Quality Management Plan	1.7													
			Mold Remediation Plan	1.7													
			Chromium (VI) Exposure Evaluation	1.7													
			Crystalline Silica Assessment	1.7													
			Lighting Plan for Night Operations	1.7													
			Traffic Control Plan	1.7													
			Fire Prevention Plan	1.7													
			Wild Land Fire Management Plan	1.7													
			Arc Flash Hazard Analysis	1.7													
			Assured Equipment Grounding Control Program (AEGCP)	1.7													
			Hazardous Energy Control Plan	1.7													
			Standard Pre-Lift Plan (LHE)	1.7													
			Critical Lift Plan - LHE	1.7													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 35 26.00 06	Naval Architectural Analysis-LHE (Floating)	1.7													
			Floating Plant Inspection and Certification	1.7													
			Severe Weather Plan for Marine Activities	1.7													
			Emergency Plan for Marine Activities	1.7													
			Man Overboard/Abandon Ship Procedures	1.7													
			Float Plan for Launches, Motorboats, Skiffs	1.7													
			Fall Protection and Prevention Plan	1.7													
			Demolition/Renovation Plan (to include engineering survey)	1.7													
			Rope Access Work Plan	1.7													
			Excavation/Trenching Plan	1.7													
			Fire Prevention & Protection Plan for Underground Construction	1.7													
			Compressed Air Plan for Underground Construction	1.7													
			Erection and Removal Plan for Formwork and Shoring	1.7													
			PreCast Concrete Plan	1.7													
			Lift-Slab Plans	1.7													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 35 26.00 06	Masonry Bracing Plan	1.7													
			Steel Erection Plan	1.7													
			Explosives Safety Site Plan (ESSP)	1.7													
			Blasting Plan	1.7													
			Dive Operations Plan	1.7													
			Safe Practices Manual for Diving Activities	1.7													
			Emergency Management Plan for Diving	1.7													
			Tree Felling/Maintenance Program	1.7													
			Aircraft/Airfield Construction Safety & Phasing Plan (CSPP)	1.7													
			Aircraft/Airfield Safety Plan Compliance Document (SPCD)	1.7													
			Site Safety and Health Plan (HTRW)	1.7													
			Confined Space Entry Procedures	1.7													
			Confined Space Program	1.7													
			Activity Hazard Analysis (AHA)	1.8	G RO												
			Site Safety and Health Officer Qualifications(SSHO)	1.5.1.1	G RO												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 35 26.00 06	Proof of qualification for Crane Operators	1.12.7	G RO												
			Critical Lift Plan	1.12.7	G RO												
			SD-06 Test Reports														
			Reports	1.12													
			Accident Reports	1.12.1													
			Monthly Exposure Reports	1.12.3													
			Crane Reports	1.12.5													
			Regulatory Citations and Violations	1.12.4													
			SD-07 Certificates														
			Confined Space Entry Permit	1.12.8													
			Hot work permit	1.13													
			Crane Certificate of Compliance	1.12.6													
		01 45 04.10 06	SD-01 Preconstruction Submittals														
			Construction Quality Control Plan	3.3	G RO												
		01 45 35	SD-01 Preconstruction Submittals														
			Written NDT Practices	3.1.2													
			SD-06 Test Reports														
			Daily Reports	3.1.2													
			Biweekly Reports	3.1.1													
			SD-07 Certificates														
			AISC Certified Steel Fabricator	2.1													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 45 35	Steel Joist Institute Membership	2.1													
			Certificate of Compliance	2.1													
			Special Inspector	1.5	G												
			Qualification Records	3.1.2													
			SD-11 Closeout Submittals														
			Interim Report	3.1.2	G												
			Comprehensive Final Report	3.1.2	G												
		01 46 00.00 06	SD-01 Preconstruction Submittals														
			Commissioning Specialists	1.4	G DO												
			Commissioning Specialists	1.4.4	G DO												
			Project Schedule	1.9	G DO												
			SD-06 Test Reports														
			Construction Phase	3.2.3	G DO												
			Commissioning Plan														
			Building Envelope Inspection	3.2.6.2	G DO												
			Checklists														
			Building Envelope Inspection	3.2.6.2	G DO												
			Checklists														
			Pre-Functional Checklists	3.2.6.3	G DO												
			PVT Procedures	3.2.6.5	G DO												
			PVT Report	3.2.6.5	G DO												
			Issues Log	1.7													
			Trend Log Report	3.2.6.6													
			Post-Construction Trend Log	3.9.1													
			Report														
			Commissioning Report	3.8	G DO												



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION REVIEWER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 46 00.00 06	Post-Construction Commissioning Report	3.9	G DO												
			Post-Construction Commissioning Report	3.9	G DO												
			SD-07 Certificates														
			Certificate of Readiness	1.8	G DO												
			SD-10 Operation and Maintenance Data														
			Systems Training	3.3	G DO												
			Training Plan	3.4	G RO												
			Training Attendance Rosters	3.4	G RO												
			Systems Manual	3.5	G DO												
			Post-Construction Systems Manual	3.9	G DO												
			Post-Construction Systems Manual	3.9	G DO												
			Maintenance and Service Life Plans	3.6	G DO												
		01 50 00	SD-01 Preconstruction Submittals														
			Construction Site Plan	1.3	G												
			Traffic Control Plan	3.3.1	G												
			Haul Road Plan	2.2.1	G												
			Contractor Computer Cybersecurity Compliance Statements	1.6.1.4	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 50 00	Contractor Temporary Network Cybersecurity Compliance Statements	1.6.6	G												
			SD-06 Test Reports														
			Backflow Preventer Tests	3.4													
			SD-07 Certificates														
			Backflow Tester	1.4.1													
			Backflow Preventers	1.4													
		01 57 19.00 06	SD-01 Preconstruction Submittals														
			Preconstruction Survey	1.6.1													
			Solid Waste Management Permit	1.11	G												
			Regulatory Notifications	1.6.2	G												
			Environmental Protection Plan	1.7	G												
			Dirt and Dust Control Plan	1.7.9.1	G												
			Employee Training Records	1.6.5	G												
			Environmental Manager	1.6.4	G												
			Qualifications														
			SD-06 Test Reports														
			Laboratory Analysis	3.7.1.1.2													
			Solid Waste Management Report	3.7.2.1	G												
			SD-07 Certificates														
			Employee Training Records	1.6.5	G												
			SD-11 Closeout Submittals														
			Waste Determination	3.7.1	G												
			Documentation														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 57 19.00 06	Disposal Documentation for Hazardous and Regulated Waste	3.7.4.6	G												
			Assembled Employee Training Records	1.6.5	G												
			Solid Waste Management Permit	1.11	G												
			Solid Waste Management Report	3.7.2.1	G												
			Hazardous Waste/Debris Management	3.7.4.1	G												
			Regulatory Notifications	1.6.2	G												
			Sales Documentation	3.7.2.1	G												
			Contractor Certification	3.7.2.1													
		01 74 19	SD-01 Preconstruction Submittals														
			Construction Waste Management Plan	1.7	G												
			SD-06 Test Reports														
			Quarterly Reports	1.9.2													
			SD-11 Closeout Submittals														
			Final Construction Waste Diversion Report	1.10	S												
		01 78 23	SD-10 Operation and Maintenance														
			Data														
			O&M Database	1.4	G												
			Training Plan	3.1.1	G												
			Training Outline	3.1.3	G												
			Training Content	3.1.2	G												
			SD-11 Closeout Submittals														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 78 23	Training Video Recording	3.1.4	G												
			Validation of Training Completion	3.1.6	G												
		02 41 00	SD-01 Preconstruction Submittals														
			Demolition Plan	1.2.2													
			Existing Conditions	1.10													
			SD-07 Certificates														
			Notification	1.6													
			SD-11 Closeout Submittals														
			Receipts	3.3.4													
		02 82 00	SD-03 Product Data														
			Amended Water	1.2.2	G												
			Safety Data Sheets (SDS) for All Materials	1.3.9	G												
			Encapsulants	2.1	G												
			Respirators	3.1.2.1	G												
			Local Exhaust Equipment	3.1.7	G												
			Pressure Differential Automatic Recording Instrument	3.1.7	G												
			Vacuums	3.1.8	G												
			Glovebags	3.1.10	G												
			SD-06 Test Reports														
			Air Sampling Results	1.5.5	G												
			Pressure Differential Recordings for Local Exhaust System	1.5.6	G												
			Clearance Sampling	3.2.13.5	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02 82 00	Asbestos Disposal Quantity Report	3.3.3.2	G												
			SD-07 Certificates														
			Employee Training	1.3.4	G												
			Notifications	1.3.5	G												
			Respiratory Protection Program	1.3.7	G												
			Asbestos Hazard Abatement Plan	1.3.10	G												
			Testing Laboratory	1.3.11	G												
			Landfill Approval	1.3.12	G												
			Delivery Tickets	1.3.12	G												
			Waste Shipment Records	1.3.12	G												
			Transporter Certification	1.3.13	G												
			Medical Certification	1.3.14	G												
			Private Qualified Person Documentation	1.5.1	G												
			Designated Competent Person	1.5.2	G												
			Worker's License	1.5.3	G												
			Contractor's License	1.5.4	G												
			Federal, State or Local Citations on Previous Projects	1.5.7	G												
			Encapsulants	2.1	G												
			Equipment Used to Contain Airborne Asbestos Fibers	3.1	G												
			Water Filtration Equipment	3.1.3.3	G												
			Vacuums	3.1.8	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02 82 00	Ventilation Systems	3.1.8	G												
			SD-11 Closeout Submittals														
			Permits	1.3.5	G												
			Notifications	1.3.5	G												
			Respirator Program Records	1.3.7.1	G												
			Rental Equipment	1.7.1	G												
		02 83 00	SD-01 Preconstruction Submittals														
			Competent Person	1.5.1.1	G												
			Training Certification	1.5.1.2	G												
			Occupational and Environmental Assessment Data Report	1.5.2.3	G												
			Medical Examinations	1.5.2.4	G												
			Lead Waste Management Plan	1.5.2.8	G												
			Lead Compliance Plan	1.5.2.2	G												
			Lead Compliance Plan	3.1.1.6	G												
			Written Evidence of TSD	3.5.2.1	G												
			Approval														
			SD-03 Product Data														
			Respirators	1.6.1	G												
			Vacuum Filters	1.6.4	G												
			Negative Air Pressure System	1.6.7	G												
			Materials and Equipment	2.1	G												
			Expendable Supplies	2.1.1	G												
			Local Exhaust Equipment	3.1.1.5	G												
			Pressure Differential Automatic Recording Instrument	3.1.1.5	G												

## SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW ACTION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02 83 00	Pressure Differential Log	3.1.1.6	G												
			SD-06 Test Reports														
			Occupational and Environmental	1.5.2.3	G												
			Assessment Data Report														
			Sampling Results	1.5.2.3	G												
			Pressure Differential Recordings	1.5.3	G												
			For Local Exhaust System														
			SD-07 Certificates														
			Testing Laboratory	1.5.1.3	G												
			SD-11 Closeout Submittals														
			Hazardous Waste Manifest	3.5.2.1	G												
			Turn-In Documents or Weight	3.5.2.1	G												
			Tickets														
		02 84 16	SD-07 Certificates														
			Qualifications of CIH	1.8.1	G												
			Training Certification	1.8.1	G												
			PCB and Lamp Removal Work	1.8.2	G												
			Plan														
			PCB and Lamp Disposal Plan	1.8.3	G												
			SD-11 Closeout Submittals														
			Transporter Certification	3.5.2	G												
			Certification of Decontamination	3.2.4													
			Certificate of Disposal and/or	3.5.2.1													
			recycling														
		02 84 33	SD-07 Certificates														
			Training certification	1.7.1													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02 84 33	Qualifications of CIH	1.7.2													
			PCB Removal Work Plan	1.7.3													
			PCB Disposal Plan	1.7.4													
			Notification	1.7.5													
			Transporter Certification	3.8													
			Certification of Decontamination	3.5.4													
			Post Cleanup Sampling	3.5.5													
			Certificate of Disposal	3.8.1													
		03 30 00	SD-01 Preconstruction Submittals														
			Concrete Curing Plan	1.6.3.1													
			Quality Control Plan	1.6.5	G												
			Quality Control Personnel	1.6.6	G												
			Certifications														
			Quality Control Organizational	1.6.6													
			Chart														
			Laboratory Accreditation	1.6.8	G												
			Form Removal Schedule	1.6.2.1	G												
			Maturity Method Data	3.3.8													
			SD-02 Shop Drawings														
			Formwork	1.6.2.1													
			Reinforcing Steel	1.6.2.2	G												
			SD-03 Product Data														
			Joint Sealants	2.4.4													
			Joint Filler	2.4.3													
			Formwork Materials	2.1													
			Recycled Aggregate Materials	2.3.3.2													



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		03 30 00	Cementitious Materials	2.3.1													
			Vapor Retarder	2.4.5													
			Concrete Curing Materials	2.4.1													
			Reinforcement	2.6													
			Admixtures	2.3.4													
			Mechanical Reinforcing Bar	2.6.2													
			Connectors														
			Waterstops	2.2.2													
			Biodegradable Form Release	2.2.3													
			Agent														
			Pumping Concrete	1.6.3.2													
			Finishing Plan	1.6.3.3													
			Nonshrink Grout	2.4.2													
			SD-05 Design Data														
			Concrete Mix Design	1.6.1.1	G												
			SD-06 Test Reports														
			Concrete Mix Design	1.6.1.1	G												
			Fly Ash	1.6.4.1													
			Pozzolan	1.6.4.1													
			Slag Cement	1.6.4.2													
			Aggregates	1.6.4.3													
			Tolerance Report	3.10.2.1													
			Compressive Strength Tests	3.14.3.3	G												
			Unit Weight of Structural	3.14.3.5													
			Concrete														
			Chloride Ion Concentration	3.14.3.6													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		03 30 00	Air Content	3.14.3.4													
			Slump Tests	3.14.3.1													
			Water	2.3.2													
			SD-07 Certificates														
			Reinforcing Bars	2.6.1													
			Welder Qualifications	1.9													
			VOC Content for Form Release	1.6.3.4													
			Agents, Curing Compounds, and														
			Concrete Penetrating Sealers														
			Safety Data Sheets	1.6.3.5													
			Field Testing Technician and	1.6.6.2													
			Testing Agency														
			SD-08 Manufacturer's Instructions														
			Joint Sealants	2.4.4													
			Curing Compound	2.4.1													
		04 20 00	SD-02 Shop Drawings														
			Cut CMU	3.3.4.1	G												
			Detail Drawings	3.4.1.1	G												
			SD-03 Product Data														
			Hot Weather Procedures	1.5.1	G												
			Cold Weather Procedures	1.5.2	G												
			Clay or Shale Brick	2.2.2	G												
			Cement	2.2.3.2.1	G												
			Cementitious Materials	2.4.1.1	G												
			SD-04 Samples														
			Clay or Shale Brick	2.2.2	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		04 20 00	Concrete Masonry Units (CMU)	2.2.3.2	G												
			Admixtures for Masonry Mortar	2.4.1.4	G												
			Anchors, Ties, and Bar	2.6.2	G												
			Positioners														
			Joint Reinforcement	2.6.3	G												
			Clay Masonry Expansion-Joint	2.6.6	G												
			Materials														
			SD-05 Design Data														
			Masonry Compressive Strength	2.1.2	G												
			Fire-Rated Concrete Masonry	2.2.3.3													
			Units														
			SD-06 Test Reports														
			Efflorescence Test	2.2.2.1.3													
			Fire-Rated Concrete Masonry	2.2.3.3													
			Units														
			Field Testing of Mortar	3.6.1.1													
			Field Testing of Grout	3.6.1.2													
			Prism Tests	3.6.1.4													
			Single-Wythe Masonry Wall	3.6.1.5													
			Water Penetration Test														
			SD-07 Certificates														
			Clay or Shale Brick	2.2.2													
			Concrete Masonry Units (CMU)	2.2.3.2													
			Cementitious Materials	2.4.1.1													
			Admixtures for Masonry Mortar	2.4.1.4													
			Admixtures for Grout	2.4.2.2													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		04 20 00	Anchors, Ties, and Bar Positioners	2.6.2													
			Joint Reinforcement	2.6.3													
			SD-08 Manufacturer's Instructions														
			Admixtures for Masonry Mortar	2.4.1.4													
			Admixtures for Grout	2.4.2.2													
			SD-10 Operation and Maintenance Data														
			Take-Back Program	3.8													
		05 05 23.16	SD-01 Preconstruction Submittals														
			Welding Quality Assurance Plan	3.2	G												
			SD-03 Product Data														
			Welding Procedure Qualifications	1.3	G												
			Welder, Welding Operator, and Tacker Qualification	1.3.4													
			Previous Qualifications	1.3.2													
			Pre-Qualified Procedures	1.3.3	G												
			Welding Electrodes and Rods	2.2													
			SD-06 Test Reports														
			Nondestructive Testing	3.3													
			Weld Inspection Log	3.2													
			SD-07 Certificates														
			Certified Welding Procedure Specifications (WPS)	1.3.1													
			Certified Brazing Procedure Specifications (BPS)	1.3.1													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 05 23.16	Certified Procedure Qualification Records (PQR)	1.3.1													
			Certified Welder Performance Qualifications (WPQ)	1.3.1													
			Certified Brazier Performance Qualifications (BPQ)	1.3.1													
			Certified Welding Inspector Nondestructive Testing Personnel	1.3.5 1.3.5													
		05 12 00	SD-01 Preconstruction Submittals Erection and Erection Bracing Drawings		G												
			SD-02 Shop Drawings Fabrication Drawings	1.4.2	G												
			SD-03 Product Data Shop Primer Welding Electrodes and Rods Non-Shrink Grout Tension Control Bolts Recycled Content for Structural Steel Recycled Content for Structural Steel Tubing Recycled Content for Steel Pipe	2.6.2 2.4.1 2.4.2 2.3.3 2.2.1 2.2.2 2.2.3	     S S S												
			SD-05 Design Data														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR S I F I C A T I O N R E V I E W R	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 12 00	Design Calculations for Steel Connections	1.4.3	G												
			Shoring and Temporary Bracing	1.4.2	G												
			SD-06 Test Reports														
			Class B Coating	2.6.2													
			Bolts, Nuts, and Washers	2.3													
			Weld Inspection Reports	3.7.1.2													
			Bolt Testing Reports	3.7.2.1													
			Embrittlement Test Reports	3.7.3													
			SD-07 Certificates														
			Steel	2.2													
			Bolts, Nuts, and Washers	2.3													
			Galvanizing	2.5													
			AISC Structural Steel Fabricator	1.3													
			Quality Certification														
			AISC Structural Steel Erector	1.3													
			Quality Certification														
			Welding Procedures and	1.4.4.1													
			Qualifications														
			Welding Electrodes and Rods	2.4.1													
			Certified Welding Inspector	3.7.1.1													
			NDT Technician	3.7.1.2													
			Welding Procedure Specifications	3.4													
			(WPS)														
		05 30 00	SD-02 Shop Drawings														
			Fabrication Drawings	1.3.5	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 30 00	SD-03 Product Data														
			Accessories	2.2													
			Deck Units	2.1													
			Galvanizing Repair Paint	2.1.5													
			Mechanical Fasteners	2.2.17													
			Touch-Up Paint	2.1.5													
			Welding Equipment	1.3.3													
			Welding Rods and Accessories	1.3.3													
			Recycled Content of Steel	2.1	S												
			Products														
			SD-04 Samples														
			Metal Roof Deck Units	2.1.1													
			Flexible Closure Strips	2.2.4													
			SD-05 Design Data														
			Deck Units	2.1	G												
			SD-07 Certificates														
			Powder-Actuated Tool Operator	1.3.2													
			Welder Qualifications	1.3.3													
			Welding Procedures	1.3.3													
			Fire Safety	1.3.4.1													
			Wind Storm Resistance	1.3.4.2													
			Manufacturer's Certificate	1.3.1													
			Stud Manufacture's Certification	2.2.12													
			Stud Manufacture's Test Reports	2.2.12													
		05 40 00	SD-02 Shop Drawings														
			Framing Components	1.6.1	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 40 00	SD-03 Product Data														
			Studs, Joists	2.1													
			Recycled Content of Steel	2.1	S												
			Products														
			SD-05 Design Data														
			Metal Framing Calculations	1.6.2	G												
			SD-07 Certificates														
			Load-Bearing Cold-Formed Metal	1.4													
			Framing														
			Welds	3.2.1													
		05 50 13	SD-02 Shop Drawings														
			Expansion Joint Covers	2.4	G												
			Floor Gratings	2.5	G												
			Angles and Plates	2.7	G												
			SD-03 Product Data														
			Expansion Joint Covers	2.4	G												
			Floor Gratings	2.5	G												
			Downspout Terminations	2.6	G												
			Recycled Content	2.1	S												
			SD-04 Samples														
			Expansion Joint Covers	2.4													
			Certificates of Compliance	2.1	G												
		05 51 00	SD-02 Shop Drawings														
			Iron and Steel Hardware	2.1	G												
			Steel Shapes, Plates, Bars, and	2.1	G												
			Strips														



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 51 00	Metal Stair System	2.2.1	G												
			SD-03 Product Data														
			Structural Steel Plates, Shapes, and Bars	2.4.1	G												
			Structural Steel Tubing	2.4.2	G												
			Hot-Rolled Carbon Steel Sheets and Strips	2.4.5	G												
			Cold-Finished Steel Bars	2.4.4	G												
			Hot-Rolled Carbon Steel Bars	2.4.3	G												
			Cold-Rolled Carbon Steel Sheets	2.4.6	G												
			Galvanized Carbon Steel Sheets	2.4.7	G												
			Cold-Drawn Steel Tubing	2.4.8	G												
			Gray Iron Castings	2.4.9	G												
			Malleable Iron Castings	2.4.10	G												
			Concrete Inserts	2.3.2	G												
			Protective Coating	2.2.3	G												
			Steel Pan Stairs	2.2.2	G												
			Steel Stairs	2.3.1	G												
			SD-07 Certificates														
			Welding Procedures	1.3.1	G												
			Welder Qualification	1.3.1	G												
			SD-08 Manufacturer's Instructions														
			Structural Steel Plates, Shapes, and Bars	2.4.1	G												
			Structural Steel Tubing	2.4.2	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 51 00	Hot-Rolled Carbon Steel Sheets and Strips	2.4.5	G												
			Cold-Finished Steel Bars	2.4.4	G												
			Hot-Rolled Carbon Steel Bars	2.4.3	G												
			Cold-Rolled Carbon Steel Sheets	2.4.6	G												
			Galvanized Carbon Steel Sheets	2.4.7	G												
			Cold-Drawn Steel Tubing	2.4.8	G												
			Gray Iron Castings	2.4.9	G												
			Malleable Iron Castings	2.4.10	G												
			Protective Coating	2.2.3	G												
		05 52 00	SD-02 Shop Drawings														
			Fabrication Drawings	1.2.1	G												
			Iron and Steel Hardware	3.2	G												
			Steel Shapes, Plates, Bars and Strips	3.2	G												
			SD-03 Product Data														
			Structural-Steel Plates, Shapes, and Bars	2.2.1	G												
			Structural-Steel Tubing	2.2.2	G												
			Cold-Finished Steel Bars	2.2.4	G												
			Hot-Rolled Carbon Steel Bars	2.2.3	G												
			Cold-Drawn Steel Tubing	2.2.5	G												
			Concrete Inserts	2.2.7	G												
			Protective Coating	2.1.3	G												
			Steel Railings and Handrails	2.2.8	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		05 52 00	Anchorage and Fastening Systems	1.2.1	G												
			SD-07 Certificates														
			Welding Procedures	1.4.1	G												
			Welder Qualification	1.4.2	G												
			SD-08 Manufacturer's Instructions														
			Installation Instructions	3.2													
		06 10 00	SD-06 Test Reports														
			Preservative-treated	1.4.3													
			SD-07 Certificates														
			Certificates of Grade	1.9.1													
			Preservative Treatment	1.7													
		06 41 16.00 10	SD-02 Shop Drawings														
			Shop Drawings	2.11	G AE												
			Installation	3.1													
			SD-03 Product Data														
			Wood Materials	2.1													
			Wood Finishes	2.9													
			Finish Schedule	2.11.8.3													
			Certification	1.5.2													
			SD-04 Samples														
			Plastic Laminates	2.3	G AE												
			Cabinet Hardware	2.6	G AE												
			SD-07 Certificates														
			Quality Assurance	1.5													
			Laminate Clad Casework	2.9													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION						CONTRACTOR											
Repair Aircraft Maintenance B1455 for MH-139																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		06 41 16.00 10	Laminate Clad Casework	3.1													
			SD-11 Closeout Submittals														
			LEED Documentation	1.3													
		06 61 16	SD-02 Shop Drawings														
			Detail Fabrication Drawings	1.4.2	G AE												
			Installation	3.1	G												
			SD-03 Product Data														
			Solid Polymer	2.1.1	G												
			Indoor air quality for solid surface	2.2.2	S												
			seam and sealant products														
			SD-04 Samples														
			Material	2.1	G AE												
			Counter Tops	2.3.5	G AE												
			SD-06 Test Reports														
			Test Report Results	2.1.1													
			SD-07 Certificates														
			Qualifications	1.4.1													
			Indoor Air Quality for solid	2.1.1	S												
			surface fabrication products														
			SD-10 Operation and Maintenance														
			Data														
			Solid Polymer	2.1.1	G												
		07 05 23	SD-01 Preconstruction Submittals														
			Work Plan	1.4	G												
			SD-03 Product Data														
			Thermal Imaging Camera	2.2	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 05 23	SD-07 Certificates														
			Pressure Test Agency	1.6.2.1													
			Thermographer Qualifications	1.6.2.2													
			Test Instruments	1.6.3													
			Date Of Last Calibration	1.6.3													
			SD-06 Test Reports														
			Pressure Test Procedures	3.5	G												
			Air Leakage Test Report	1.6.4	G												
			Air Leakage Test Report	3.5.7	G												
			Diagnostic Test Report	1.6.4	G												
			Diagnostic Test Report	3.6.5	G												
		07 21 13	SD-03 Product Data														
			Manufacturer's Standard Details	1.3	G												
			Board Insulation	2.1	G												
			Pressure Sensitive Tape	2.3	G												
			Protection Board or Coatings	1.4	G												
			Accessories	2.5	G												
			SD-07 Certificates														
			Board Insulation	2.1	G												
			Special Warranties	1.8	G												
			Special Warranties	1.8	G												
			SD-08 Manufacturer's Instructions														
			Board Insulation	2.1													
			Adhesive	2.5.1													
		07 21 16	SD-03 Product Data														
			Insulation	2.1													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 21 16	Insulation	3.2.1													
			Accessories	2.4													
			SD-07 Certificates														
			Indoor Air Quality for Adhesives	2.4.1													
			SD-08 Manufacturer's Instructions														
			Insulation	2.1													
			Insulation	3.2.1													
		07 22 00	SD-02 Shop Drawings														
			Insulation Board Layout	1.3	G												
			Verification of Existing Conditions	1.3	G												
			SD-03 Product Data														
			Insulation	2.1	G												
			Cover Board	1.4	G												
			Fasteners	2.6	G												
			SD-06 Test Reports														
			Flame Spread Rating	1.8.1	G												
			SD-07 Certificates														
			Installer Qualifications	1.6	G												
			Certificates Of Compliance For	1.6	G												
			Felt Materials														
			Indoor Air Quality For Insulation	2.1.2													
			SD-08 Manufacturer's Instructions														
			Fasteners	2.6	G												
			Insulation	2.1	G												
		07 27 10.00 10	SD-02 Shop Drawings														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 27 10.00 10	Air Barrier System Shop Drawings	2.1	G												
			SD-03 Product Data														
			Air Barrier System Product Data	2.1	G												
			SD-04 Samples														
			Material Samples For Air Barrier System	2.1	G												
			SD-06 Test Reports														
			Testing and Inspection	3.1.2	G												
			SD-07 Certificates														
			Air Barrier Inspector	1.7	G												
		07 27 19.01	SD-01 Preconstruction Submittals														
			Qualifications of Manufacturer	1.8.1	G												
			Qualifications of Installer	1.8.2	G												
			SD-02 Shop Drawings														
			Self-adhering Air Barrier	1.4	G												
			SD-03 Product Data														
			Self-adhering Air Barrier	1.4	G												
			Primers, Adhesives, and Mastics	2.2	G												
			Safety Data Sheets	1.4.2	G												
			SD-04 Samples														
			Self-adhering Air Barrier	1.4	G												
			SD-06 Test Reports														
			Field Peel Adhesion Test	1.6	G												
			Flame Propagation of Wall Assemblies	1.4.4	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 27 19.01	Flame Spread and Smoke Developed Index Ratings	1.4.4	G												
			Site Inspections and Testing	3.4.1	G												
			SD-07 Certificates														
			Self-adhering Air Barrier	1.4	G												
			SD-08 Manufacturer's Instructions														
			Self-adhering Air Barrier	1.4	G												
			Primers, Adhesives, and Mastics	2.2	G												
		07 27 36	SD-01 Preconstruction Submittals														
			Qualification of Manufacturer	1.10.1	G												
			Qualification of Installer	1.10.2	G												
			Quality Control Plan	1.11	G												
			Safety Plan	1.11	G												
			Fire Prevention Plan	1.9.1	G												
			Respirator Plan	1.9.2	G												
			SD-02 Shop Drawings														
			Spray Foam Air Barrier	1.5													
			Foam Air Barrier System	1.11	G												
			SD-03 Product Data														
			Closed Cell	2.1.2	G												
			Transition Membrane	2.2	G												
			Primers, Adhesives, and Mastics	2.3	G												
			Sealants	2.5	G												
			Safety Data Sheets	1.5.2	G												
			SD-04 Samples														
			Spray Foam Air Barrier	1.5	G												



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 27 36	SD-06 Test Reports														
			Field Peel Adhesion Test	1.5.4	G												
			Thermographic Test	3.4.5.1	G												
			Air Barrier Test	1.8	G												
			Primers	1.5.3	G												
			Flame Spread And Smoke	1.5.4	G												
			Developed Index Ratings Of SPF Products														
			Flame Propagation Of Wall Assemblies	1.5.4	G												
			SD-07 Certificates														
			Closed cell	2.1.2	G												
			Transition Membrane	2.2	G												
			Indoor Air Quality for Spray Foam Air Barrier	2.1.5	S												
			SD-08 Manufacturer's Instructions														
			SPF Handling, Storage, and Spray Procedures	1.6.1	G												
			Substrate Preparation	3.2.1	G												
			Thermal Barrier	1.5.1	G												
			Transition Membrane	2.2	G												
			Primers, Adhesives, and Mastics	2.3	G												
			SD-09 Manufacturer's Field Reports														
			Core Samples	1.11													
			Daily Work Record	3.3.3													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 27 36	Visual Inspection and Thermal Scanning	3.4.5													
		07 42 13.19	SD-01 Preconstruction Submittals														
			Qualification of Manufacturer	1.5.1	G												
			Qualification of Installer	1.5.3	G												
			Qualification of Engineer	1.5.2	G												
			SD-02 Shop Drawings														
			Wall Panel Assemblies	1.3.7	G												
			Wall Panel Assemblies	1.6.1	G												
			Flashing and Accessories	1.6.1	G												
			Anchorage Systems	1.6.1	G												
			Closure Materials	1.6.1													
			metal closure strips	1.6.1													
			SD-03 Product Data														
			manufacturer's catalog data	1.6.1													
			Factory Color Finish	1.6.1													
			Wall Panel Assemblies	1.3.7	G												
			Wall Panel Assemblies	1.6.1	G												
			Flashing and Accessories	1.6.1													
			Secondary Metal Framing	2.5													
			Repair Paint	1.6.1													
			Insulation	1.6.1													
			Flashing Tape	2.4.5													
			Fasteners	1.6.1													
			Fasteners	2.4.7													
			SD-04 Samples														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 42 13.19	Wall Panel Assemblies	1.3.7	G												
			Wall Panel Assemblies	1.6.1	G												
			Sealants	2.4.4	G												
			SD-05 Design Data														
			Calculations	1.5.2	G												
			Wind design analysis	1.6.1	G												
			SD-06 Test Reports														
			Wind load tests	1.3.7	G												
			Seismic tests	1.3.7	G												
			Rated Wall Assembly	1.6.1	G												
			SD-07 Certificates														
			Fasteners	1.6.1													
			Fasteners	2.4.7													
			Repair Paint	1.6.1													
			Qualification of Manufacturer	1.5.1	G												
			Qualification of Installer	1.5.3													
			wall system assembly wind load and fire rating classification listings	1.6.1													
			SD-08 Manufacturer's Instructions														
			Installation of Wall Panels	1.6.1													
			SD-09 Manufacturer's Field Reports														
			Water-Spray Test	3.6.2	G												
			Field Service Report	3.6.3	G												
			SD-11 Closeout Submittals														
			Warranty	1.8	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 42 13.19	Instructions	1.6.1	G												
			Material Safety Data Sheets	1.6.1	G												
		07 54 23	SD-02 Shop Drawings														
			Detail Drawings	1.8.4	G												
			SD-03 Product Data														
			TPO Roofing Membrane	3.2.2	G												
			Flashing	3.2.2.2													
			Membrane Fasteners and Plates	2.1.3													
			Roof Insulation	2.1.6													
			Pre-manufactured accessories	2.1.4													
			Water Cutoffs	3.3.1													
			Information Card	2.1													
			SD-05 Design Data														
			Wind uplift calculations	1.2.3	G												
			SD-07 Certificates														
			Qualification of ENERGY	1.4.1	G												
			STAR-labeled TPO														
			Qualifications of Applicator	1.4.2	G												
			Wind Uplift Resistance	1.2.3	G												
			Fire Resistance	1.2.2	G												
			Minimum Polymer Thickness	2.1.2	G												
			warranty	1.8	G												
			SD-08 Manufacturer's Instructions														
			Application Method	3.2	G												
			Membrane Flashing	2.1.2	G												
			Perimeter Attachment	3.2.3													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 54 23	Auxiliary Fasteners	2.1.3.2													
			Pre-manufactured accessories	2.1.4													
			cold weather	1.5.2	G												
			SD-10 Operation and Maintenance														
			Data														
			Instructions to Government	3.5													
			Personnel														
		07 60 00	SD-02 Shop Drawings														
			Exposed Sheet Metal	2.1.1	G												
			Downspouts	3.1.16	G												
			Expansion Joints	3.1.20	G												
			Base Flashing	3.1.10	G												
			Counterflashing	3.1.11	G												
			Flashing at Roof Penetrations	3.1.21	G												
			and Equipment Supports														
			Reglets	2.1.14	G												
			Scuppers	3.1.17	G												
			Copings	3.1.24	G												
			Drip Edges	3.1.15	G												
			Conductor Heads	3.1.18	G												
			SD-04 Samples														
			Finish Samples	1.4.2	G												
			SD-08 Manufacturer's Instructions														
			Instructions for Installation	1.4.3	G												
			Quality Control Plan	3.5	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 60 00	SD-10 Operation and Maintenance Data														
			Cleaning and Maintenance	1.4.3	G												
		07 81 00	SD-03 Product Data														
			Fireproofing Material	3.3	G												
			SD-04 Samples														
			Spray-Applied Fireproofing	2.1	G												
			SD-06 Test Reports														
			Fire Resistance Rating	1.2.2	G												
			Field Tests	3.6	G												
			Evaluation Reports	1.2.3	G												
			SD-07 Certificates														
			Installer Qualifications	1.4.1	G												
			Surface Preparation Report	3.1	G												
			Manufacturer's Inspection Report	3.5.2	G												
		07 92 00	SD-03 Product Data														
			Sealants	2.1	G												
			Primers	2.2	G												
			Bond Breakers	2.3	G												
			Backstops	2.4	G												
			Field Adhesion	3.1	G												
			SD-07 Certificates														
			Indoor Air Quality For Interior Sealants	2.1.1	S												
			Indoor Air Quality For Interior Floor Joint Sealants	2.1.3	S												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		07 92 00	Indoor Air Quality For Interior	2.1.4	S												
			Acoustical Sealants														
		08 11 13	SD-02 Shop Drawings														
			Doors	2.1	G												
			Doors	2.1	G												
			Frames	2.2	G												
			Frames	2.2	G												
			SD-03 Product Data														
			Doors	2.1	G												
			Frames	2.2	G												
		08 14 00	SD-02 Shop Drawings														
			Doors	2.1	G												
			SD-03 Product Data														
			Doors	2.1	G												
			Accessories	2.2													
			Water-resistant Sealer	2.3.7													
			Warranty	1.5													
			Fire Resistance Rating	2.1.3	G												
			SD-04 Samples														
			Doors	2.1													
			SD-06 Test Reports														
			Cycle-Slam	2.4													
			Hinge Loading Resistance	2.4													
			SD-07 Certificates														
			Certificates of Grade	1.3.1													
			SD-11 Closeout Submittals														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08 14 00	Warranty	1.5													
		08 31 00	SD-02 Shop Drawings														
			Access Doors And Panels	1.3	G												
			SD-03 Product Data														
			Access Doors And Panels	1.3	G												
			Hardware	1.3.2	G												
			Accessories	2.2.8	G												
			Power Transfer Components	1.3.1	G												
			Recycled Content	2.1	S												
			SD-04 Samples														
			Finishes	2.5	G												
			SD-06 Test Reports														
			Acoustical Ratings of Assemblies	1.3.1	G												
		08 34 73	SD-02 Shop Drawings														
			Fabrication Drawings	2.1													
			SD-03 Product Data														
			Hollow Metal Sound Retardant Doors	2.1	G												
			Wood Sound Retardant Doors	2.1	G												
			Door Frames	2.1	G												
			Door Hardware	2.1	G												
			Thresholds	2.1	G												
			SD-06 Test Reports														
			Acoustical Tests	2.4.2	G												
			SD-07 Certificates														



# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08 34 73	Hollow Metal Sound Retardant Doors	2.1	G												
			Wood Sound Retardant Doors	2.1	G												
			Door Frames	2.1	G												
			Door Hardware	2.1	G												
			Thresholds	2.1	G												
			Astragals	2.1	G												
		08 41 13	SD-01 Preconstruction Submittals														
			Sample Warranty	3.6	G												
			SD-02 Shop Drawings														
			Installation Drawings	3.3	G												
			Fabrication Drawings	2.2	G												
			SD-03 Product Data														
			Finish	2.2.4	G												
			Recycled Content of Aluminum Material	2.1.1.2	S												
			SD-06 Test Reports														
			Deflection	3.4.3													
			Air Infiltration	3.4.1													
			Condensation Resistance and Thermal Transmittance	3.4.4													
			SD-08 Manufacturer's Instructions														
			Manufacturer's Instructions	3.3													
			SD-11 Closeout Submittals														
			Manufacturer's Product Warranty	3.6													
		08 71 00	SD-02 Shop Drawings														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08 71 00	Manufacturer's Detail Drawings	1.3	G AE												
			Verification of Existing Conditions	1.3	G AE												
			Hardware Schedule	1.5	G AE												
			SD-03 Product Data														
			Hardware Items	2.3	G AE												
			SD-08 Manufacturer's Instructions														
			Installation	3.1													
			SD-10 Operation and Maintenance														
			Data														
			Hardware Schedule	1.5	G AE												
			SD-11 Closeout Submittals														
			Key Bitting	1.6													
		08 81 00	SD-03 Product Data														
			Insulating Glass	2.3													
			Glazing Accessories	1.3													
			Sealants	2.5.1.1													
			Joint Backer	2.5.2													
			SD-04 Samples														
			Insulating Glass	2.3													
			Tape	2.5.4													
			Sealing Tapes	2.5.4													
			SD-07 Certificates														
			Insulating Glass	2.3													
			SD-08 Manufacturer's Instructions														
			Setting and Sealing Materials	2.5													
			Glass Setting	3.2													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW OR ATTORNEY	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		08 81 00	SD-11 Closeout Submittals														
			Insulated Glass Units	1.7.1													
		08 91 00	SD-02 Shop Drawings														
			Wall louvers	1.4													
			Wall louvers	1.5													
			SD-03 Product Data														
			Metal Wall Louvers	2.2													
			SD-04 Samples														
			Wall louvers	1.4	G												
			Wall louvers	1.5	G												
		09 22 00	SD-02 Shop Drawings														
			Metal Support Systems	2.1	G												
			SD-03 Product Data														
			Metal Support Systems	2.1													
		09 29 00	SD-03 Product Data														
			Glass Mat Water-Resistant	2.1.3													
			Gypsum Tile Backing Board														
			Glass Mat Covered or Reinforced	2.1.4													
			Gypsum Sheathing														
			Glass Mat Covered or Reinforced	2.1.4.1													
			Gypsum Sheathing Sealant														
			Type X Moisture and Mold	2.1.2													
			Resistant Gypsum														
			Accessories	2.1.9													
			Gypsum Board	2.1.1													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 29 00	Recycled Content for Paper Facing and Gypsum Cores	2.1.1	S												
			SD-07 Certificates														
			Asbestos Free Materials	2.1	G												
			Indoor Air Quality for Gypsum Board	2.1.1	S												
			SD-08 Manufacturer's Instructions														
			Safety Data Sheets	2.1													
			SD-10 Operation and Maintenance Data														
			Manufacturer Maintenance Instructions	2.1													
		09 30 10	SD-02 Shop Drawings														
			Detail Drawings	3.2	G AE												
			SD-03 Product Data														
			Porcelain Tile	2.1.1	G												
			Recycled Content for Porcelain Tile	2.1.1	S												
			Transition Strips	2.1	G												
			Transition Strips	2.6.1	G												
			Metal Strips	2.6.2	G												
			Setting-Bed	2.2	G												
			Mortar, Grout, and Adhesive	2.4	G												
			Waterproof Membrane	2.7	G												
			Crack Isolation Membrane	2.8	G												
			SD-04 Samples														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 30 10	Tile	2.1	G AE												
			Accessories	2.1	G AE												
			Transition Strips	2.1	G AE												
			Transition Strips	2.6.1	G AE												
			Metal Strips	2.6.2	G AE												
			Grout	2.4.2	G AE												
			SD-07 Certificates														
			Indoor Air Quality for Adhesives	2.4	S												
			Indoor Air Quality for Sealants	2.4.5	S												
			Water Absorption Rates	1.3.2													
			SD-08 Manufacturer's Instructions														
			Manufacturer's Approved	3.8													
			Cleaning Instructions														
			SD-10 Operation and Maintenance														
			Data														
			Porcelain Tile	2.1.1	G												
			Transition Strips	2.1	G												
			Transition Strips	2.6.1	G												
			Metal Strips	2.6.2	G												
		09 51 00	SD-02 Shop Drawings														
			Approved Detail Drawings	2.1													
			SD-03 Product Data														
			Recycled Content for Type XII	2.2.1.1	S												
			Ceiling Tiles														
			Recycled Content for Suspension	2.3													
			Systems														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR S I F I C A T I O N R E V I E W R	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 51 00	Acoustical Performance	2.1.1													
			SD-04 Samples														
			Acoustical Units	2.2	G AE												
			Acoustical Ceiling Tiles	1.3.1.1	G AE												
			SD-07 Certificates														
			Indoor Air Quality for Type XII	2.2.1.1													
			Ceiling Tiles														
			Indoor Air Quality for Adhesives	2.6													
			Indoor Air Quality for Sealants	2.9													
		09 62 38	SD-03 Product Data														
			Static-Control Resilient Flooring	2.1	G												
			Recycled content for	2.1.1.1	S												
			Static-Dissipative Vinyl Tile														
			Accessories	2.5	G												
			Adhesives	2.3	G												
			Warranty	1.9													
			SD-04 Samples														
			Static-Control Resilient Flooring	2.1	G AE												
			Moldings	2.4	G AE												
			Accessories	2.5	G AE												
			SD-06 Test Reports														
			Fire Resistance	2.8													
			Moisture, Alkalinity and Bond	3.2													
			Testing	3.7													
			SD-07 Certificates														
			Indoor Air Quality for Adhesives	2.3	S												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 62 38	Qualifications of Applicator	1.6													
			SD-08 Manufacturer's Instructions														
			Static-Control Resilient Flooring	2.1	G												
			Accessories	2.5	G												
			SD-10 Operation and Maintenance														
			Data														
			Static-Control Resilient Flooring	2.1	G												
			Accessories	2.5	G												
		09 65 00	SD-02 Shop Drawings														
			Resilient Flooring and	2.11	G												
			Accessories														
			SD-03 Product Data														
			Resilient Flooring and	2.11	G												
			Accessories														
			Adhesives	2.7													
			Luxury Vinyl Tile	2.3													
			Stair Treads, Risers and	2.5													
			Stringers														
			SD-04 Samples														
			Resilient Flooring and	2.11	G AE												
			Accessories														
			SD-06 Test Reports														
			Moisture, Alkalinity and Bond	3.3	G												
			Tests														
			SD-07 Certificates														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 65 00	Indoor Air Quality for Luxury Vinyl Tile	2.3	S												
			Indoor Air Quality for Wall Base	2.4	S												
			Indoor Air Quality for Adhesives	2.7	S												
			SD-08 Manufacturer's Instructions														
			Surface Preparation	3.2	G												
			Installation	3.1	G												
			SD-10 Operation and Maintenance Data														
			Resilient Flooring and Accessories	2.11	G												
		09 67 23.13	SD-02 Shop Drawings														
			Installation Drawings	2.1													
			Fabrication Drawings	2.1													
			SD-03 Product Data														
			Manufacturer's Catalog Data	1.2.2	G												
			SD-04 Samples														
			Hardboard Mounted Epoxy Flooring	1.5.2	G AE												
			Floor Topping	3.1.4	G AE												
			SD-05 Design Data														
			Design Mix Data	1.2.3	G												
			SD-07 Certificates														
			Listing of Product Installations	1.5.1													
			Referenced Standards	1.5													
			Certificates														



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 67 23.13	SD-11 Closeout Submittals														
			Warranty	1.6	G												
		09 68 00	SD-02 Shop Drawings														
			Installation Drawings	3.4	G												
			SD-03 Product Data														
			Carpet	2.1	G												
			Recycled Content for Carpeting	2.1.1	S												
			Moldings	2.4	G												
			Indoor Air Quality for Aerosol	2.3	S												
			Adhesives														
			Indoor Air Quality for	2.3	S												
			Non-Aerosol Adhesives														
			Indoor Air Quality for Concrete	2.3	S												
			Primer														
			SD-04 Samples														
			Carpet	2.1	G AE												
			Moldings	2.4	G AE												
			SD-06 Test Reports														
			Moisture and Alkalinity Tests	3.2	G												
			SD-07 Certificates														
			Indoor Air Quality for Carpet	2.1.2	S												
			SD-08 Manufacturer's Instructions														
			Surface Preparation	3.1													
			SD-10 Operation and Maintenance														
			Data														
			Cleaning and Protection	3.5													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 68 00	Maintenance Service	3.7.2													
			SD-11 Closeout Submittals														
			Warranty	1.6													
		09 69 13	SD-02 Shop Drawings														
			Detailed Installation Drawings	2.2.2	G AE												
			Fabrication Drawings	2.2.1	G AE												
			SD-03 Product Data														
			Access Flooring System	2.1													
			Access Flooring System	2.5													
			Recycled Content of Access Flooring System	2.1.1	S												
			Indoor Air Quality For Pedestal Adhesive	2.1.5	S												
			Indoor Air Quality For Adhesives	2.2.7	S												
			SD-04 Samples														
			Floor Panels	2.2	G AE												
			Floor Covering	2.2.4	G AE												
			Panel Support System	2.3	G AE												
			Accessories	2.2.5	G AE												
			Fascia	2.4	G AE												
			Exposed Step and Ramp Structure	2.5	G AE												
			Perforated Directional Air Supply Panels	2.10													
			Cut Outs	2.11													
			SD-05 Design Data														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 69 13	Seismic Calculations	2.1.7													
			SD-06 Test Reports														
			Factory Tests	2.7													
			Concentrated Load	2.1.1													
			Uniform Live Load	2.1.1													
			Rolling Load	2.1.1													
			Rolling Load	2.1.1													
			Impact Load	2.1.1													
			Ultimate Load	2.1.1													
			Stringer Load	2.1.3													
			Pedestal Axial Load	2.1.4													
			Bonding Strength of Pedestal	2.1.5													
			Adhesive														
			Electrical Resistance	3.2.4													
			Field Tests	3.2													
			SD-07 Certificates														
			Compliance with ICC-ES AC300	2.1													
			Compliance with ICC IBC	2.1													
			Certificate of Compliance	2.1													
			Qualification of Manufacturer	1.4.1													
			SD-10 Operation and Maintenance														
			Data														
			Operation and Maintenance	3.5	G												
			Manuals														
			SD-11 Closeout Submittals														
			Lifting Device	2.2.8													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 69 13	Warranty	1.6	G												
		09 84 20	SD-02 Shop Drawings														
			Approved Detail Drawings	2.2	G AE												
			SD-03 Product Data														
			Installation	3.2													
			Acoustical Wall Panels	2.2	G AE												
			Recycled Content for Fabric Panels	2.1.1.1	S												
			Indoor Air Quality for Composite Wood and Agrifiber Products	2.1.1.1	S												
			SD-04 Samples														
			Acoustical Wall Panels	2.2	G AE												
			SD-07 Certificates														
			Acoustical Wall Panels	2.2													
			SD-11 Closeout Submittals														
			Warranty	1.5													
		09 90 00	SD-02 Shop Drawings														
			Piping Identification	3.9													
			SD-03 Product Data														
			Coating	2.1	G												
			SD-04 Samples														
			Color	1.11	G												
			Textured Wall Coating System	1.5.2	G												
			Sample Textured Wall Coating	1.5.3	G												
			System Mock-Up														
			SD-07 Certificates														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION						CONTRACTOR											
Repair Aircraft Maintenance B1455 for MH-139																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW ATTORNEY	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		09 90 00	Applicator's Qualifications	1.4													
			Qualification Testing	1.5.1.2	G												
			Indoor Air Quality for Paints and Primers	2.1													
			Indoor Air Quality for Consolidated Latex Paints	2.1													
			SD-08 Manufacturer's Instructions														
			Application Instructions	3.3.1													
			Mixing	3.6.2													
			Manufacturer's Safety Data Sheets	1.8.2													
			SD-10 Operation and Maintenance Data														
			Coatings	2.1	G												
		10 14 00.20	SD-02 Shop Drawings														
			Detail Drawings	1.4.2	G AE												
			SD-03 Product Data														
			Room Identification	2.1													
			Stair Signage	2.2													
			Building Directories	2.3													
			SD-04 Samples														
			Interior Signage	1.4.1	G AE												
			SD-10 Operation and Maintenance Data														
			Approved Manufacturer's Instructions	3.1													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		10 14 00.20	Protection and Cleaning	3.1.2													
		10 21 13	SD-02 Shop Drawings														
			Fabrication Drawings	2.1	G AE												
			Installation Drawings	3.3	G AE												
			SD-03 Product Data														
			Cleaning and Maintenance	2.1													
			Instructions														
			Colors And Finishes	2.9													
			Anchoring Devices and	2.2.1													
			Fasteners														
			Hardware and Fittings	2.2.3													
			Brackets	2.2.2													
			Door Hardware	2.2.4													
			Toilet Enclosures	2.3.1													
			Urinal Screens	2.3.2													
			Pilaster Shoes	2.7													
			Finishes	2.2.3.2	G												
			Finishes	2.9.2	G												
			SD-04 Samples														
			Colors and Finishes	2.9	G AE												
			Hardware and Fittings	2.2.3	G AE												
			Anchoring Devices and	2.2.1													
			Fasteners														
			SD-07 Certificates														
			Warranty	1.6													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		10 21 13	SD-10 Operation and Maintenance Data														
			Plastic Identification	2.1.1	G												
		10 22 39	SD-02 Shop Drawings														
			Layouts	3.1.1	G AE												
			Installation Drawings	3.1	G AE												
			SD-03 Product Data														
			Folding Panel Partitions	2.3	G												
			SD-06 Test Reports														
			Acoustical Test Reports	2.1.1.2	G												
			Flame and Smoke Development Tests	2.1.1.1	G												
			SD-07 Certificates														
			Installer Qualifications	1.4.2													
			Manufacturer's Qualifications	1.4.3													
			SD-08 Manufacturer's Instructions														
			Installation Instructions	3.1													
			SD-10 Operation and Maintenance Data														
			Folding Panel Partitions	2.3	G												
		10 26 00	SD-02 Shop Drawings														
			Corner Guards	2.2	G AE												
			Wall Covering and Panels	2.3	G AE												
			SD-03 Product Data														
			Corner Guards	2.2													
			Wall Covering and Panels	2.3	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		10 26 00	SD-07 Certificates														
			Indoor air quality for wall	2.3													
			covering/panels														
		10 28 13	SD-02 Shop Drawings														
			Product Schedule	2.1	G												
		10 44 16	SD-02 Shop Drawings														
			Fire Extinguishers	2.1.1	G												
			Cabinets	Part 2	G												
			Wall Brackets	2.2.2	G												
			Schedule	1.5	G												
			SD-03 Product Data														
			Fire Extinguishers	2.1.1	G												
			Cabinets	Part 2	G												
			Wall Brackets	2.2.2	G												
			SD-07 Certificates														
			Fire Extinguishers Certifications	2.1.1	G												
			Manufacturer's Warranty with	1.4	G												
			Inspection Tag														
		10 51 13	SD-02 Shop Drawings														
			Installation	3.1	G AE												
			SD-04 Samples														
			Color chips	1.5.1	G AE												
		12 24 13	SD-02 Shop Drawings														
			Detailed Drawings	3.3	G AE												
			Installation	1.5	G AE												
			SD-03 Product Data														



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		12 24 13	Window Shades	2.1	G												
			SD-04 Samples														
			Window Shades	2.1	G AE												
			SD-06 Test Reports														
			Flammability Requirements	1.4.2	G												
			SD-07 Certificates														
			Indoor Air Quality for roller	2.1													
			window shades														
			SD-10 Operation and Maintenance														
			Data														
			Window Shades	2.1	G												
		14 24 23	SD-02 Shop Drawings														
			Elevator	2.1	G AE												
			Elevator Components	1.2.1	G AE												
			Elevator Components	1.2.2	G AE												
			Elevator Machine	1.2.1	G AE												
			Elevator Controller	1.2.1	G AE												
			Wiring Diagrams	1.3.4	G AE												
			SD-03 Product Data														
			Elevator	2.1	G AE												
			Elevator Components	1.2.1	G AE												
			Elevator Components	1.2.2	G AE												
			Data Sheets	1.2.2	G AE												
			Elevator Microprocessor	2.5.2	G AE												
			Controller														
			SD-05 Design Data														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		14 24 23	Emergency Power Systems	1.2.3.3													
			Heat Loads	1.2.3.2													
			Reaction Loads	1.2.3.1													
			SD-07 Certificates														
			Price Lists	1.3.2	G												
			Warranty	1.4													
			Endorsement Letter	1.3.1.1													
			Welders' Qualifications	1.2.4													
			Elevator Controller Certification	2.5.2.3	G												
			SD-10 Operation and Maintenance														
			Data														
			Elevator	2.1	G												
			Maintenance Control Program	1.2.5	G												
			(MCP)														
			Software and Documentation	2.5.2.2	G												
		21 13 13	SD-01 Preconstruction Submittals														
			Qualified Fire Protection	1.2.3	G AE												
			Engineer (QFPE)														
			Sprinkler System Designer	1.4.2.1	G AE												
			Sprinkler System Installer	1.4.2.2	G AE												
			SD-02 Shop Drawings														
			Shop Drawing	1.2.1.1	G												
			SD-03 Product Data														
			Pipe	2.1.3	G AE												
			Fittings	2.2.1.2	G AE												
			Valves	2.2.4	G AE												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT CLASSIFICATION REV NO	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		21 13 13	Relief Valves	2.5.5	G AE												
			Sprinklers	2.4	G AE												
			Pipe Hangers and Supports	2.2.3	G AE												
			Sprinkler Alarm Switch	2.3.1	G AE												
			Valve Supervisory (Tamper)	2.3.2	G AE												
			Switch														
			Air Vent	2.5.6	G AE												
			Seismic Bracing	2.2.3	G AE												
			Nameplates	2.1.2	G AE												
			SD-05 Design Data														
			Seismic Bracing	2.2.3	G AE												
			Hydraulic Calculations	1.2.1.2	G AE												
			SD-06 Test Reports														
			Test Procedures	3.6.1	G AE												
			SD-07 Certificates														
			Verification of Compliant	3.6.2.1	G AE												
			Installation														
			Request for Government Final	3.6.2.2	G AE												
			Test														
			SD-10 Operation and Maintenance														
			Data														
			Operating and Maintenance	3.8	G AE												
			(O&M) Instructions														
			Spare Parts	1.6	G AE												
			SD-11 Closeout Submittals														
			As-built drawings	3.8													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		22 00 00	SD-02 Shop Drawings														
			Plumbing System	3.8.1	G												
			SD-03 Product Data														
			Backflow Prevention Assemblies	3.8.1.1	G												
			Fixtures	2.4	G												
			Flush Valve Water Closets	2.4.1	G												
			Flush Valve Urinals	2.4.2	G												
			Countertop Lavatories	2.4.3	G												
			Breakroom Sinks	2.4.4													
			Mop Sinks	2.4.6													
			Pumps	2.9	G												
			Welding	1.5.1													
			Vibration-Absorbing Features	3.3	G												
			Plumbing System	3.8.1													
			SD-06 Test Reports														
			Tests, Flushing and Disinfection	3.8													
			Test of Backflow Prevention	3.8.1.1	G												
			Assemblies														
			Test of Water Meter	3.8.1.2	G												
			SD-07 Certificates														
			Materials and Equipment	1.3													
			Bolts	2.1.1													
			SD-10 Operation and Maintenance														
			Data														
			Plumbing System	3.8.1	G												
		23 05 48.19	SD-02 Shop Drawings														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 05 48.19	Coupling and Bracing	3.1													
			Flexible Couplings or Joints	3.3													
			Equipment Restraint	2.2													
			Contractor Designed Bracing	1.2.4	G												
			SD-03 Product Data														
			Coupling and Bracing	3.1	G												
			Flexible Couplings Or Joints	3.3	G												
			Equipment Restraint	2.2	G												
			Contractor Designed Bracing	1.2.4	G												
			Anchor Bolts	3.9													
			Vibration Isolators	2.2.2													
			SD-05 Design Data														
			Design Calculations	1.2.4													
			SD-06 Test Reports														
			Anchor Bolts	3.9	G												
		23 05 93.00 06	SD-02 Shop Drawings														
			TAB Schematic Drawings and	3.3	G												
			Report Forms														
			SD-03 Product Data														
			TAB Related HVAC Submittals	3.2													
			Duct Air Leakage Test	3.6.1	G												
			Procedures														
			TAB Procedures	3.4	G												
			Calibrations	3.5													
			Duct Air Leakage Tests	3.6													
			Systems Readiness Check	3.7													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT OR CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 05 93.00 06	TAB Field Work	3.8.2	G												
			TAB Verification	3.10	G												
			SD-06 Test Reports														
			Design Review Report	3.1	G												
			Draft Duct Air Leakage Test Report	3.6.4	G												
			Final Duct Air Leakage Test Report	3.6.6	G												
			Systems Readiness Check Report	3.7													
			Draft TAB Report	3.9.1													
			Final TAB Report	3.9.2	G												
			SD-07 Certificates														
			TAB Firm	1.5.1	G												
			TAB Specialist	1.5.2	G												
		23 07 00	SD-02 Shop Drawings														
			MICA Plates	3.2.2.4	G												
			Pipe Insulation Systems	2.3													
			Pipe Insulation Systems	3.2													
			Duct Insulation Systems	3.3													
			Equipment Insulation Systems	3.4													
			Recycled content for insulation materials	2.3.1													
			SD-03 Product Data														
			Pipe Insulation Systems	2.3	G												
			Pipe Insulation Systems	3.2	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 07 00	Duct Insulation Systems	3.3	G												
			Equipment Insulation Systems	3.4													
			SD-04 Samples														
			Thermal Insulation	2.2.1.3													
			Display Samples	3.1.1													
			SD-07 Certificates														
			Indoor air quality for adhesives	2.2.1													
			SD-08 Manufacturer's Instructions														
			Pipe Insulation Systems	2.3													
			Pipe Insulation Systems	3.2													
			Duct Insulation Systems	3.3													
			Equipment Insulation Systems	3.4													
		23 09 00	SD-02 Shop Drawings														
			DDC Contractor Design Drawings	3.2	G AE												
			Draft As-Built Drawings	3.2													
			Final As-Built Drawings	3.2	G												
			SD-03 Product Data														
			Programming Software	1.8.1	G												
			Controller Application Programs	1.8.2													
			Configuration Software	1.5													
			Manufacturer's Product Data	2.2	G												
			Niagara Framework Supervisory	1.8.4													
			Gateway Backups														
			Niagara Framework Engineering	1.8.5	G												
			Tool														
			Niagara Framework Wizards	1.8.3													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW OR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 09 00	SD-05 Design Data														
			Boiler Or Chiller Plant Gateway Request	1.9													
			SD-06 Test Reports														
			Existing Conditions Report	1.5													
			Pre-Construction Quality Control (QC) Checklist	1.10.1													
			Post-Construction Quality Control (QC) Checklist	1.10.2													
			Start-Up Testing Report	3.4.2													
			PVT Procedures	3.5.1													
			PVT Report	3.5.3	G												
			SD-10 Operation and Maintenance Data														
			Operation and Maintenance (O&M) Instructions	3.6													
			Training Documentation	3.8.1													
			SD-11 Closeout Submittals														
			Enclosure Keys	2.5													
			Closeout Quality Control (QC) Checklist	1.10.3													
		23 11 20	SD-02 Shop Drawings														
			Gas Piping System	2.2	G												
			Gas Piping System	3.3	G												
			SD-03 Product Data														
			Pipe and Fittings	1.6.1	G												



# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 11 20	Gas Piping System	2.2	G												
			Gas Piping System	3.3	G												
			Pressure Regulators	2.5.1	G												
			Valves	2.3	G												
			SD-06 Test Reports														
			Testing	3.17	G												
			Pressure Tests	3.17.1	G												
			SD-07 Certificates														
			Welders Procedures and Qualifications	1.5.1	G												
			SD-10 Operation and Maintenance Data														
			Gas Facility System and Equipment Operation	1.3.1	G												
			Gas Facility System Maintenance	1.3.2	G												
			Gas Facility Equipment Maintenance	1.3.3	G												
		23 21 23	SD-02 Shop Drawings														
			System Coordination	2.1.2	G												
			SD-03 Product Data														
			Instructions	2.2.2													
			Equipment Data	2.2.5	G												
			Training Period	3.5.2													
			SD-06 Test Reports														
			Factory Tests	2.1.1													
			Field Quality Control	3.3													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 21 23	SD-07 Certificates														
			Manufacturer's Representative	1.3.1													
			SD-10 Operation and Maintenance														
			Data														
			Operation and Maintenance	3.5.1													
			Manuals														
			Training	3.5.2	G												
		23 23 00	SD-02 Shop Drawings														
			Refrigerant Piping System	2.3	G												
			SD-03 Product Data														
			Refrigerant Piping System	2.3	G												
			Spare Parts	1.5.2													
			Qualifications	1.3.1													
			Refrigerant Piping Tests	3.5	G												
			Verification of Dimensions	3.1													
			SD-06 Test Reports														
			Refrigerant Piping Tests	3.5													
			SD-07 Certificates														
			Service Organization	2.1													
			SD-10 Operation and Maintenance														
			Data														
			Maintenance	1.5													
			Operation and Maintenance	3.4													
			Manuals														
			Demonstrations	3.4													
		23 25 00	SD-03 Product Data														

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 25 00	Water Analysis	2.1.2	G												
			Spare Parts	1.3													
			Field Instructions	3.3.1	G												
			Training Course	3.3.1	G												
		23 30 00	SD-02 Shop Drawings														
			Detail Drawings	1.4.4	G												
			SD-03 Product Data														
			Metallic Flexible Duct	2.10.1.1													
			Insulated Nonmetallic Flexible Duct Runouts	2.10.1.2													
			Duct Connectors	2.10.1.2													
			Duct Access Doors	2.10.2													
			Fire Dampers	2.10.3													
			Manual Balancing Dampers	2.10.4													
			Manual Balancing Dampers	2.10.5													
			Automatic Smoke Dampers	2.10.7													
			Sound Attenuation Equipment	2.10.11													
			Diffusers	2.10.12.1	G												
			Registers and Grilles	2.10.12.2	G												
			Air Vents	2.10.14													
			Centrifugal Fans	2.11.1.1	G												
			In-Line Centrifugal Fans	2.11.1.2	G												
			Air Handling Units	2.12	G												
			Room Fan-Coil Units	2.13.1	G												
			Variable Volume, Single Duct Terminal Units	2.13.2.1	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 30 00	Energy Recovery Devices	2.14	G												
			Test Procedures	1.4.5													
			Diagrams	1.2.1.2													
			Indoor Air Quality for Duct	2.10.1	S												
			Sealants														
			SD-06 Test Reports														
			Performance Tests	3.13													
			Damper Acceptance Test	3.11													
			SD-07 Certificates														
			Ozone Depleting Substances	1.4.3													
			Technician Certification														
			SD-08 Manufacturer's Instructions														
			Manufacturer's Installation	3.2													
			Instructions														
			Operation and Maintenance	3.15.2													
			Training														
			SD-10 Operation and Maintenance														
			Data														
			Operation and Maintenance	3.15.1													
			Manuals														
			Fire Dampers	2.10.3													
			Manual Balancing Dampers	2.10.4													
			Manual Balancing Dampers	2.10.5													
			Automatic Smoke Dampers	2.10.7													
			Centrifugal Fans	2.11.1.1													
			In-Line Centrifugal Fans	2.11.1.2													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 30 00	Air Handling Units	2.12													
			Room Fan-Coil Units	2.13.1													
			Variable Volume, Single Duct	2.13.2.1	G												
			Terminal Units														
			Energy Recovery Devices	2.14													
			SD-11 Closeout Submittals														
			Indoor Air Quality During	3.14	S												
			Construction														
		23 52 00	SD-02 Shop Drawings														
			Detail Drawings	1.5	G												
			SD-03 Product Data														
			Materials and Equipment	2.1.1	G												
			Spare Parts	1.5													
			Water Treatment System	2.1.1	G												
			Heating System Tests	3.8	G												
			Fuel System Tests	3.11													
			Welding	1.3													
			Qualifications	3.8													
			Field Instructions	3.10	G												
			Tests	3.4													
			SD-06 Test Reports														
			Heating System Tests	3.8	G												
			Fuel System Tests	3.11	G												
			SD-07 Certificates														
			Continuous Emissions Monitoring	2.6.1													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW OR ATTORNEY	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 52 00	SD-10 Operation and Maintenance Data														
			Operation and Maintenance Instructions	3.10													
			Water Treatment System	2.1.1													
			SD-11 Closeout Submittals														
			Indoor Air Quality During Construction	3.9.2													
		23 64 10	SD-03 Product Data														
			Water Chiller	3.5.2	G												
			Posted Instructions	3.1.3													
			Verification of Dimensions	1.6.1	G												
			Factory Tests	2.8	G												
			System Performance Tests	3.6	G												
			Demonstrations	3.7													
			Refrigerant	2.5.1													
			Water Chiller - Field Acceptance Test Plan	3.5.1	G												
			SD-06 Test Reports														
			Field Acceptance Testing	3.5													
			Water Chiller - Field Acceptance Test Report	3.5.2													
			Factory Tests	2.8	G												
			System Performance Tests	3.6	G												
			SD-07 Certificates														
			Refrigeration System	3.1.9													

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 64 10	Ozone Depleting Substances	1.3.1	G												
			Technician Certification														
			SD-08 Manufacturer's Instructions														
			Water Chiller - Installation	3.1													
			Instructions														
			SD-10 Operation and Maintenance														
			Data														
			Operation and Maintenance	3.7													
			Manuals														
			SD-11 Closeout Submittals														
			Indoor Air Quality During	3.4	S												
			Construction														
		23 64 26	SD-03 Product Data														
			Grooved Mechanical	2.2.2.4	G												
			Connections For Steel														
			Grooved Mechanical	2.4.3	G												
			Connections For Copper														
			Calibrated Balancing Valves	2.5.8	G												
			Automatic Flow Control Valves	2.5.9	G												
			Pump Discharge Valve	2.5.10													
			Water Temperature Mixing Valve	2.5.11	G												
			Water Temperature Regulating	2.5.12	G												
			Valves														
			Water Pressure Reducing Valve	2.5.13													
			Pressure Relief Valve	2.5.14													

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 64 26	Combination Pressure and Temperature Relief Valves	2.5.15													
			Expansion Joints	2.6.9	G												
			Pumps	2.7	G												
			Combination Strainer and Pump Suction Diffuser	2.6.3													
			Expansion Tanks	2.8													
			Air Separator Tanks	2.9													
			Water Treatment Systems	2.10	G												
			SD-06 Test Reports														
			Piping Welds NDE Report	3.1.1.3													
			Pressure Tests Reports	3.5.2	G												
			SD-07 Certificates														
			Employer's Record Documents (For Welding)	3.1.1.1													
			Welding Procedures and Qualifications	3.1.1.2													
			Fittings	2.2.2													
			Unions	2.4.2													
			Flanges	2.2.2.2													
			Gaskets	2.2.2.2													
			Bolts	2.2.2.2													
			SD-08 Manufacturer's Instructions														
			Lesson plan for the Instruction Course	3.6	G												



# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 64 26	SD-10 Operation and Maintenance														
			Data														
			Water Treatment Systems	2.10	G												
			Calibrated Balancing Valves	2.5.8	G												
			Automatic Flow Control Valves	2.5.9	G												
			Pump Discharge Valve	2.5.10	G												
			Water Temperature Mixing Valve	2.5.11	G												
			Water Temperature Regulating	2.5.12	G												
			Valves														
			Water Pressure Reducing Valve	2.5.13	G												
			Pressure Relief Valve	2.5.14	G												
			Combination Pressure and	2.5.15	G												
			Temperature Relief Valves														
			Expansion Joints	2.6.9	G												
			Pumps	2.7	G												
			Combination Strainer and Pump	2.6.3	G												
			Suction Diffuser														
			Expansion Tanks	2.8	G												
			Air Separator Tanks	2.9	G												
		23 81 23	SD-03 Product Data														
			Computer Room Air Conditioner	2.1	G												
			Space Temperature Control	2.8.2	G												
			System Drawings														
			Filters	2.1.5													
			Refrigerants	1.4	S												
			Leak Detection	2.5.1.3	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		23 81 23	SD-06 Test Reports														
			Manufacturer's Factory Test Plans	2.11.1	G												
			Factory Test Reports	2.11.4	G												
			Field Test Schedule	3.3.2	G												
			Manufacturer's Field Test Plans	3.3.1	G												
			Field Test Reports	3.3.6	G												
			SD-07 Certificates														
			Credentials of the Manufacturer's Field Test Representative	3.3.3	G												
			Ozone Depleting Substances	1.5.1													
			Technician Certification														
			Certified List Of Qualified Permanent Service Organizations	1.6.3													
			SD-08 Manufacturer's Instructions														
			Installation Manual for Each Type of CRAC	3.1.2													
			SD-10 Operation and Maintenance Data														
			Computer Room Air Conditioner Operation and Maintenance Data	3.1.3	G												
			SD-11 Closeout Submittals														
			Indoor Air Quality During Construction	3.2	S												
		25 05 11.21	SD-01 Preconstruction Submittals														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		25 05 11.21	Contractor Computer Cybersecurity Compliance Statements	1.10.1.6	G AE												
			Contractor Temporary Network Cybersecurity Compliance Statements	1.10.6	G AE												
			Cybersecurity Subject Matter Expert Qualifications	1.7.2	G AE												
			SD-02 Shop Drawings														
			Network Communication Report	1.8.1	G AE												
			Cybersecurity Riser Diagram	1.8.3	G AE												
			SD-03 Product Data														
			Control System Cybersecurity Documentation	1.8.5	G AE												
			SD-11 Closeout Submittals														
			Password Change Summary Report	3.4.5.4	G AE												
			Enclosure Keys	3.3.4	G AE												
			Auditing Front End Software	3.5.3	G AE												
			Vendor Guide Compliance Result Report	1.8.4	G AE												
			Control System Inventory Report	1.8.2	G AE												
			Integrity Verification Software	3.12.1	G AE												
		25 05 11.23	SD-01 Preconstruction Submittals														
			Device Account Lock Exception Request	3.3.2	G AE												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		25 05 11.23	Multiple Ethernet Connection Device Request	3.2.2.2	G AE												
			Contractor Computer Cybersecurity Compliance Statements	1.10.1.6	G AE												
			Contractor Temporary Network Cybersecurity Compliance Statements	1.10.6	G AE												
			Cybersecurity Interconnection Schedule	1.8.2	G AE												
			Cybersecurity Subject Matter Expert Qualifications	1.7.2	G AE												
			Proposed STIG and SRG Applicability Report	1.8.1	G AE												
			SD-02 Shop Drawings Network Communication Report	1.8.3	G AE												
			Cybersecurity Riser Diagram	1.8.6	G AE												
			SD-03 Product Data Control System Cybersecurity Documentation	1.8.8	G AE												
			SD-06 Test Reports Control System Cybersecurity Testing Procedures	3.14.1	G AE												
			Control System Cybersecurity Testing Report	3.14.3	G AE												
			SD-07 Certificates														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS SIFIC ATION REV WR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		25 05 11.23	Software Licenses	1.9	G AE												
			SD-11 Closeout Submittals														
			Password Change Summary	3.4.5.5	G AE												
			Report														
			Enclosure Keys	3.3.5	G AE												
			Software and Configuration	1.8.5	G AE												
			Backups														
			Auditing Front End Software	3.5.3	G AE												
			Device Audit Record Upload	3.5.4.1	G AE												
			Software														
			System Maintenance Tool	3.9	G AE												
			Software														
			Control System Scanning Tools	3.11.2	G AE												
			STIG, SRG and Vendor Guide	1.8.7	G AE												
			Compliance Result Report														
			Control System Inventory Report	1.8.4	G AE												
		25 05 11.26	SD-01 Preconstruction Submittals														
			Device Account Lock Exception	3.3.2	G AE												
			Request														
			Multiple Ethernet Connection	3.2.2.2	G AE												
			Device Request														
			Contractor Computer	1.10.1.6	G AE												
			Cybersecurity Compliance														
			Statements														

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		25 05 11.26	Contractor Temporary Network Cybersecurity Compliance Statements	1.10.6	G AE												
			Cybersecurity Interconnection Schedule	1.8.1	G AE												
			Cybersecurity Subject Matter Expert Qualifications	1.7.2	G AE												
			SD-02 Shop Drawings Network Communication Report	1.8.2	G AE												
			Cybersecurity Riser Diagram	1.8.5	G AE												
			SD-03 Product Data Control System Cybersecurity Documentation	1.8.7	G AE												
			SD-06 Test Reports Control System Cybersecurity Testing Procedures	3.13.1	G AE												
			Control System Cybersecurity Testing Report	3.13.3	G AE												
			SD-07 Certificates Software Licenses	1.9	G AE												
			SD-11 Closeout Submittals Password Change Summary Report	3.4.5.4	G AE												
			Enclosure Keys	3.3.5	G AE												
			Software and Configuration Backups	1.8.4	G AE												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		25 05 11.26	Auditing Front End Software	3.5.3	G AE												
			Device Audit Record Upload	3.5.4.1	G AE												
			Software														
			System Maintenance Tool	3.9	G AE												
			Software														
			Vendor Guide Compliance Result	1.8.6	G AE												
			Report														
			Control System Inventory Report	1.8.3	G AE												
		25 10 10	SD-06 Test Reports														
			Pre-Construction QC Checklist	3.10	G												
			Post-Construction QC Checklist	3.10	G												
			SD-11 Closeout Submittals														
			Closeout QC Checklist	3.10	G												
		26 20 00	SD-02 Shop Drawings														
			Panelboards	2.13	G												
			Transformers	2.16	G												
			Cable Trays	2.4	G												
			Wireways	2.29	G												
			Marking Strips	3.1.11.1	G												
			SD-03 Product Data														
			Receptacles	2.12	G												
			Circuit Breakers	2.13.3	G												
			Switches	2.10	G												
			Transformers	2.16	G												
			Motor Controllers	2.18	G												
			Manual Motor Starters	2.19	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW ATTORNEY	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		26 20 00	Metering	2.30	G												
			Secondary Bonding Busbar	2.23.3	G												
			Surge Protective Devices	2.31	G												
			SD-06 Test Reports														
			600-volt Wiring Test	3.5.2	G												
			Grounding System Test	3.5.5	G												
			Transformer Tests	3.5.3	G												
			Ground-fault Receptacle Test	3.5.4	G												
			SD-07 Certificates														
			Fuses	2.11	G												
			SD-09 Manufacturer's Field														
			Reports														
			Transformer Factory Tests	2.33.1													
			SD-10 Operation and Maintenance														
			Data														
			Electrical Systems	1.5.1	G												
			Metering	2.30	G												
		26 28 01.00 10	SD-03 Product Data														
			Fault Current Analysis	2.1													
			Protective Device Coordination	2.1													
			Study														
			System Coordinator	1.4.1													
			Arc Flash Evaluation	2.1.6													
			Arc Flash Labels	2.1.8													
		26 41 00	SD-02 Shop Drawings														



**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		26 41 00	Overall lightning protection system	1.4.1.1	G												
			Each major component	1.4.1.2	G												
			SD-06 Test Reports														
			Lightning Protection and Grounding System Test Plan	1.4.3	G												
			Lightning Protection and Grounding System Test	3.5.1	G												
			SD-07 Certificates														
			Lightning Protection System Installers Documentation	1.2.3	G												
			Component UL Listed and Labeled	1.4.2	G												
			Lightning protection system inspection certificate	1.4.4	G												
			Roof manufacturer's warranty	3.1.1	G												
		26 51 00	SD-02 Shop Drawings														
			Luminaire Drawings	1.5.1	G												
			Occupancy/Vacancy Sensor Coverage Layout	1.5.9	G												
			Lighting Control System One-Line Diagram	1.7.2	G												
			Sequence of Operation for Lighting Control System	2.5.1	G												
			SD-03 Product Data														
			luminaires	2.2	G												

**SUBMITTAL REGISTER**

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		26 51 00	Light Sources	2.3	G												
			LED Drivers	2.4	G												
			Luminaire Warranty	1.6.1	G												
			Lighting Controls Warranty	1.6.2	G												
			Local Area Controller	2.5.1.1.1	G												
			Switches	2.5.2.1	G												
			Digital Switch Timers	2.5.2.2	G												
			Wall Box Dimmers	2.5.2.3	G												
			Scene Wallstations	2.5.2.4	G												
			Occupancy/Vacancy Sensors	2.5.2.5	G												
			Photosensors	2.5.2.6	G												
			Time Clocks	2.5.2.7	G												
			Power Packs	2.5.2.5.4	G												
			Power Hook Luminaire Hangers	2.7.4	G												
			Exit Signs	2.6.1	G												
			Emergency Drivers	2.6.3	G												
			Energy Star Label For	2.2	S												
			Residential Luminaires														
			SD-04 Samples														
			Luminaire Samples	2.2.1	G												
			SD-05 Design Data														
			Luminaire Design Data	1.5.2	G												
			Photometric Plan	1.5.8	G												
			SD-06 Test Reports														
			ANSI/IES LM-79 Test Report	1.5.3	G												
			ANSI/IES LM-80 Test Report	1.5.4	G												

# SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS OR A/E REVIEW R	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		26 51 00	ANSI/IES TM-21 Test Report	1.5.5	G												
			ANSI/IES TM-30 Test Report	1.5.6	G												
			Occupancy/Vacancy Sensor	3.2.1.1	G												
			Verification Test														
			Photosensor Verification Test	3.2.1.1	G												
			SD-07 Certificates														
			LED Driver and Dimming Switch	1.5.7	G												
			Compatibility Certificate														
			SD-10 Operation and Maintenance														
			Data														
			Lighting System	1.7.1	G												
			Lighting Control System	1.7.2	G												
			Maintenance Staff Training Plan	3.3.2.1	G												
			End-User Training Plan	3.3.2.2	G												
		27 10 00	SD-02 Shop Drawings														
			Telecommunications drawings	1.6.1.1	G												
			Telecommunications Space	1.6.1.2	G												
			Drawings														
			SD-03 Product Data														
			Telecommunications cabling	2.3	G												
			Patch panels	2.4.5	G												
			Telecommunications	2.5	G												
			outlet/connector assemblies														
			Equipment support frame	2.4.2	G												
			Connector blocks	2.4.3	G												
			Spare Parts	1.10.3	G												



SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
CONTRACT NO.  
W912QR-16-D-0023

TITLE AND LOCATION						CONTRACTOR											
Repair Aircraft Maintenance B1455 for MH-139																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	CLASSIFICATION GOVT OR A/E REVIEWER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		27 51 16	SD-01 Preconstruction Submittals														
			Qualifications	1.6	G												
			SD-02 Shop Drawings														
			Detail Drawings	2.1.3	G												
			System Layout	1.2.1	G												
			System Design	1.5.12	G												
			SD-03 Product Data														
			Spare Parts	1.8													
			SD-05 Design Data														
			Design Analysis and Calculations	1.5.7	G												
			SD-06 Test Reports														
			Approved Test Procedures	3.5	G												
			Acceptance Tests	3.5													
			SD-07 Certificates														
			Components	2.2													
			SD-10 Operation and Maintenance														
			Data														
			Public Address System	2.1	G												
		28 31 76	SD-01 Preconstruction Submittals														

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION						CONTRACTOR											
Repair Aircraft Maintenance B1455 for MH-139																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS S I F I C A T I O N OR A / E R E V I E W R	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		28 31 76	Qualified Fire Protection Engineer (QFPE)	1.3.2	G AE												
			Fire alarm system designer	1.9.2.1	G AE												
			Supervisor	1.9.2.2	G AE												
			Technician	1.9.2.3	G AE												
			Installer	1.9.2.4	G AE												
			Test Technician	1.9.2.5	G AE												
			Fire Alarm System Site-Specific Software Acknowledgement	1.7	G AE												
			SD-02 Shop Drawings														
			Nameplates	1.9.1.3	G AE												
			Instructions	2.2.4	G AE												
			Wiring Diagrams	1.9.1.4	G AE												
			System Layout	1.9.1.5	G AE												
			Notification Appliances	1.9.1.6	G AE												
			Initiating devices	1.9.1.7	G AE												
			Amplifiers	1.9.1.8	G AE												
			Battery Power	1.9.1.9	G AE												
			Voltage Drop Calculations	1.9.1.10	G AE												
			SD-03 Product Data														
			Fire Alarm and Mass Notification Control Unit (FMCU)	2.3	G AE												
			Local Operating Console (LOC)	1.4.4	G AE												
			Amplifiers	1.9.1.8	G AE												
			Tone Generators	2.5	G AE												
			Digitalized voice generators	2.5	G AE												

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION						CONTRACTOR											
Repair Aircraft Maintenance B1455 for MH-139																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS S I F I C A T I O N OR A / E R E V I S I O N	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		28 31 76	Manual Stations	2.6	G AE												
			Smoke Detectors	2.7	G AE												
			Duct Smoke Detectors	2.7.3	G AE												
			Carbon monoxide detector	2.3.4	G AE												
			Addressable Interface Devices	2.9	G AE												
			Addressable Control Modules	2.10	G AE												
			Isolation Modules	1.9.1.5	G AE												
			Notification Appliances	1.9.1.6	G AE												
			Textual Display Sign Control Panel	1.6	G AE												
			Textual Display Signs	2.11.3	G AE												
			Batteries	2.13.1	G AE												
			Battery Chargers	2.13.2	G AE												
			Surge Protective Devices	2.14	G AE												
			Alarm Wiring	2.14	G AE												
			Back Boxes and Conduit	3.3.4	G AE												
			Terminal Cabinets	3.3.2	G AE												
			Automatic Fire Alarm	2.16	G AE												
			Transmitters														
			Radio Transmitter and Interface Panels	2.16.1	G AE												
			Mass Notification Transceiver	2.13.1.1	G AE												
			Environmental Enclosures or Guards	2.18	G AE												
			Document Storage Cabinet	3.12.3	G AE												
			SD-06 Test Reports														

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASSIFICATION OR A/E REVIEWER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		28 31 76	Test Procedures	3.8.1	G AE												
			SD-07 Certificates														
			Verification of Compliant Installation	3.8.2.1	G AE												
			Request for Government Final Test	3.8.2.2	G AE												
			SD-10 Operation and Maintenance Data														
			Operation and Maintenance (O&M) Instructions	3.10	G AE												
			Instruction of Government Employees	3.11	G AE												
			SD-11 Closeout Submittals														
			As-Built Drawings	1.9.1.13													
			Spare Parts	1.11.1													
		31 00 00.00 06	SD-01 Preconstruction Submittals														
			Shoring	3.5.1													
			Dewatering Work Plan	1.7													
			SD-03 Product Data														
			Utilization of Excavated Materials	3.9													
			Rock Excavation	1.5.2													
			Opening of any Excavation or Borrow Pit	3.4													
			SD-06 Test Reports														
			Testing	3.17													
			Borrow Site Testing	3.17.6													



# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	CLASSIFICATION GOVT OR A/E REVIEWER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		31 00 00.00 06	SD-07 Certificates														
			Testing	3.17													
			Geotechnical Engineer	3.5													
		31 21 13	SD-03 Product Data														
			Respirators	1.8.3.1	G												
			Radon Mitigation Systems Components	2.1.2													
			Radon Mitigation Systems Enclosure Components	2.2													
			SD-06 Test Reports														
			Post Mitigation Testing	3.4.2	G												
			SD-07 Certificates														
			Worker Protection Plan	1.7	G												
			Medical Certification	1.7.3	G												
			Worker Notification	1.7.4	G												
			Respiratory Protection Program	1.8	G												
			Contractor Qualifications	1.9.1.1	G												
			Contractor Experience	1.9.1.2	G												
			Testing Laboratory Certification	1.9.2	G												
			Proof Of Current Calibration For Testing Devices	1.9.3	G												
			Radon Mitigation System Inspection	3.4.1	G												
			SD-08 Manufacturer's Instructions														
			Radon Mitigation Systems Components	2.1.2													

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION						CONTRACTOR											
Repair Aircraft Maintenance B1455 for MH-139																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	CLASSIFICATION GOVT OR A/REVIEWER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		31 21 13	Radon Mitigation Systems	2.2													
			Enclosure Components														
			SD-10 Operation and Maintenance														
			Data														
			Radon Mitigation Systems	2.1	G												
			SD-11 Closeout Submittals														
			Radon Detector Location Log	1.6	G												
			Respirator Program Records	1.8.1	G												
		32 05 33	SD-01 Preconstruction Submittals														
			Integrated Pest Management	2.3	G												
			Plan														
			SD-03 Product Data														
			Fertilizer	2.1	G												
			SD-07 Certificates														
			Maintenance Inspection Report	3.4.1													
		32 11 23	SD-03 Product Data														
			Plant, Equipment, and Tools	1.4													
			SD-06 Test Reports														
			Initial Tests	2.3.1	G												
			In-Place Tests	3.12.1	G												
		32 11 23.23	SD-03 Product Data														
			Plants, Equipment, and Tools	1.4.1	G												
			SD-06 Test Reports														
			Initial Tests	1.5.3.1	G												
			In-Place Tests	1.5.3.2	G												
			Test Section Construction Report	3.6.7													

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	CLASSIFICATION GOVT OR A/E REVIEWER	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		32 12 13	SD-06 Test Reports														
			Sampling and Testing	3.7													
		32 12 16.16	SD-02 Shop Drawings														
			Placement Plan	2.1													
			SD-03 Product Data														
			Diamond Grinding Plan	2.1.6	G												
			Mix Design	2.4	G												
			Contractor Quality Control	3.1	G												
			SD-04 Samples														
			Aggregates	2.2													
			Asphalt Cement Binder	2.3													
			SD-06 Test Reports														
			Aggregates	2.2	G												
			QC Monitoring	3.1.3.9													
			SD-07 Certificates														
			Asphalt Cement Binder	2.3													
			Laboratory Accreditation and Validation	1.4.11													
		32 16 19	SD-03 Product Data														
			Concrete	2.1													
			SD-06 Test Reports														
			Field Quality Control	3.6													
		32 31 13	SD-02 Shop Drawings														
			Fence Assembly	2.1													
			Location of Gate, Corner, End, and Pull Posts	3.2.2.1													

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS S I F I C A T I O N O R A / E R E V I O W R	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		32 31 13	Gate Assembly	2.1													
			Gate Hardware and Accessories	2.3.6													
			Erection/Installation Drawings	Part 3													
			SD-03 Product Data														
			Fence Assembly	2.1													
			Gate Assembly	2.1													
			Gate Hardware and Accessories	2.3.6													
			Zinc Coating	2.4.1													
			Stretcher Bars	2.2.3													
			Concrete	2.4.2													
			SD-07 Certificates														
			Certificates of Compliance	1.3.1													
			SD-08 Manufacturer's Instructions														
			Fence Assembly	2.1													
			Gate Assembly	2.1													
			Hardware Assembly	2.1													
			Accessories	2.1													
		32 92 23	SD-03 Product Data														
			Fertilizer	2.4													
			SD-06 Test Reports														
			Topsoil composition tests	2.2.3													
			SD-07 Certificates														
			sods	2.1													
		33 30 00	SD-01 Preconstruction Submittals														
			Contractor's License	1.3.1													
			SD-02 Shop Drawings														

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS IFICATION	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/	APPROVING AUTHORITY				MAILED TO CONTR/	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		33 30 00	Installation Drawings	3.1.1													
			SD-03 Product Data														
			Precast Concrete Manholes	2.2.2													
			Frames, Covers, and Gratings	2.2.5													
			Gravity Pipe	2.2.1													
		33 40 00	SD-04 Samples														
			Pipe for Culverts and Storm Drains	2.1													
			SD-07 Certificates														
			Resin Certification	2.1.1													
			Oil Resistant Gasket	2.2.4.1													
			Hydrostatic Test on Watertight Joints	3.8.1.1													
			Determination of Density	3.8.1.2													
			Post-Installation Inspection Report	3.8.2.1.3													
			Placing Pipe	3.3													
		33 82 00	SD-02 Shop Drawings														
			Telecommunications Outside Plant	1.6.1.1	G												
			Telecommunications Entrance Facility Drawings	1.6.1.2	G												
			SD-03 Product Data														
			Wire and cable	2.7	G												
			Cable splices, and connectors	2.4	G												
			Closures	2.3	G												

# SUBMITTAL REGISTER

W912QR23R0003\_Specs\_Vol1-0000  
 CONTRACT NO.  
 W912QR-16-D-0023

TITLE AND LOCATION

Repair Aircraft Maintenance B1455 for MH-139

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT CLASS S I F I C A T I O N O R A / E R E V I W R	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		DATE FWD TO APPR AUTH/  DATE RCD FROM CONTR	APPROVING AUTHORITY				MAILED TO CONTR/  DATE RCD FRM APPR AUTH	REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION		DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		33 82 00	Building protector assemblies	2.2.1	G												
			Protector modules	2.2.2	G												
			Spare Parts	1.8.2	G												
			SD-06 Test Reports														
			Pre-installation tests	3.4.1	G												
			Acceptance tests	3.4.2	G												
			Outside Plant Test Plan	1.6.3	G												
			SD-07 Certificates														
			Telecommunications Contractor	1.6.2.1	G												
			Key Personnel	1.6.2.2	G												
			Manufacturer's Qualifications	1.6.2.3	G												
			SD-08 Manufacturer's Instructions														
			Building protector assembly installation	2.2.1	G												
			Cable tensions	3.1.6.1	G												
			Fiber Optic Splices	3.1.7.2	G												
			SD-09 Manufacturer's Field Reports														
			Factory Reel Test Data	2.13.1	G												
			SD-10 Operation and Maintenance Data														
			Telecommunications outside plant (OSP)	1.6.1.1	G												
			SD-11 Closeout Submittals														
			Record Documentation	1.8.1	G												

10th Flight Test Squadron Operations  
Tinker AFB, OK

THIS PAGE INTENTIONALLY LEFT BLANK

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

SECTION 01 11 00

SUMMARY OF WORK  
08/15, CHG 2: 08/21

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals  
Salvage Plan; G

1.2 WORK COVERED BY CONTRACT DOCUMENTS

1.2.1 Project Description

The work includes the renovation of Building 1455 to support the MH-139 simulator training mission and incidental related work.

1.2.2 Location

The work is located at Maxwell AFB, as indicated in the project drawings.

1.3 OCCUPANCY OF PREMISES

Building(s) will be occupied during performance of work under this Contract. Occupancy notifications will be posted in a prominent location in the work area.

Before work is started, arrange with the Contracting Officer a sequence of procedure, means of access, space for storage of materials and equipment, and use of approaches, corridors, and stairways.

1.4 EXISTING WORK

In addition to FAR 52.236-9 Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements:

- a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.
- b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.

1.5 LOCATION OF UNDERGROUND UTILITIES

Obtain digging permits prior to start of excavation, and comply with



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Installation requirements for locating and marking underground utilities. Contact local utility locating service a minimum of 72 hours prior to excavating, to mark utilities, and within sufficient time required if work occurs on a Monday or after a Holiday. Verify existing utility locations indicated on contract drawings, within area of work.

Identify and mark all other utilities not managed and located by the local utility companies. Scan the construction site with Ground Penetrating Radar (GPR), electromagnetic, or sonic equipment, and mark the surface of the ground or paved surface where existing underground utilities are discovered. Verify the elevations of existing piping, utilities, and any type of underground obstruction not indicated, or specified to be removed, that is indicated or discovered during scanning, in locations to be traversed by piping, ducts, and other work to be conducted or installed. Verify elevations before installing new work closer than nearest manhole or other structure at which an adjustment in grade can be made.

#### 1.5.1 Notification Prior to Excavation

Notify the Contracting Officer at least 72 hours prior to starting excavation work.

#### 1.6 NOT USED

#### PART 2 PRODUCTS

Not used.

#### PART 3 EXECUTION

Not used.

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 32 01.00 06

PROJECT SCHEDULE  
10/22

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11 (1995) Administration -- Progress,  
Schedules, and Network Analysis Systems

## 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with LRL Section 01 33 00 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

Preliminary Project Schedule; G

Project Schedule; G

Two copies of the schedules showing codes, dates, durations, categories, etc., as required.

## SD-05 Design Data

Narrative Report

Schedule Reports

Two copies of the reports showing activity numbers, descriptions, dates float, starts, finishes, durations, sequences, etc., as required.

Periodic Schedule Updates; G

Two copies of the schedules showing dates, float, starts, finishes, etc., as required.

## 1.3 QUALITY ASSURANCE

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating (activity status) and preparation of reports. The authorized representative shall be experienced in scheduling projects similar in nature and complexity to this project and shall be experienced in the use of the scheduling software that meets the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

requirements of this specification.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

### 3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to the FAR 52.236-15 - Schedules for Construction Contracts. Show in the schedule the sequence in which the Contractor proposes to perform the work and dates on which the Contractor contemplates starting and completing all schedule activities. The scheduling of the entire project, including the design, if applicable, and construction sequences, is required. The scheduling of construction is the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool.

#### 3.1.1 Approved Project Schedule

Use the approved Project Schedule to measure the progress of the work and to aid in evaluating time extensions. Make the schedule cost loaded and activity coded. The schedule will provide the basis for all progress payments. If the Contractor fails to submit any schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

#### 3.1.2 Schedule Status Reports

Status the schedule and provide a Schedule Status Report on at least a monthly basis. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

#### 3.1.3 Default Terms

Failure of the Contractor to comply with the requirements of the Contracting Officer shall be grounds for a determination, by the Contracting Officer, that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of the contract.

### 3.2 BASIS FOR PAYMENT AND COST LOADING

The schedule shall be the basis for determining contract earnings during each update period and therefore the amount of each progress payment. Lack of an approved schedule update, or qualified scheduling personnel, will result in the inability of the Contracting Officer to evaluate contract

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

earned value for the purposes of payment. Failure of the Contractor to provide all required information will result in the disapproval of the entire project schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the absence of an approved schedule, the Contracting Officer may withhold approval of requests for progress payments. In the case where project schedule revisions are directed by the Contracting Officer and those revisions have not been included in subsequent revisions or updates, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until such revisions to the Project Schedule have been made. Activity cost loading shall be reasonable, as determined by the Contracting Officer. The aggregate value of all activities coded to a contract CLIN shall equal the value of the CLIN on the Schedule.

### 3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

The computer software system utilized by the Contractor to produce and update the Project Schedule shall be capable of meeting all requirements of this specification. Failure of the Contractor to meet the requirements of this specification will result in the disapproval of the schedule. Scheduling software that meets the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11 are Primavera Enterprise products P6 release 7.0 (and subsequent versions). Files shall be saved in an .XER file format, compatible with the Government's version of the scheduling program. Conversion of data from a non-Primavera software into an .XER format will be cause for rejection of the submitted schedules. Other project software of manual methods used to produce any required information shall require approval by the Contracting Officer.

#### 3.3.1 Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. Prepare the Project Schedule using the Precedence Diagram Method (PDM).

#### 3.3.2 Level of Detail Required

Develop the Project Schedule to an appropriate level of detail. Failure to develop the Project Schedule to an appropriate level of detail, as determined by the Contracting Officer, will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

##### 3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than 2 percent of all non-procurement activities shall have Original Durations (OD) greater than 20 work days or 30 calendar days. Procurement activities are defined herein.

##### 3.3.2.2 NOT USED

##### 3.3.2.3 Procurement Activities

The schedule must include separate activities associated with the submittal, approval, procurement, fabrication and delivery of long lead

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

materials, equipment, fabricated assemblies and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days. A typical procurement sequence includes, but is not limited to, the string of activities: submit, approve, procure, fabricate, and deliver.

### 3.3.2.4 Mandatory Tasks/Milestones

The following tasks must be included and listed as separate line activities. Each shall have a separate milestone for submit and a separate milestone for approval/acceptance. Furthermore, the preparation of submittals are to be separate activities from the review/approval/acceptance activities, with the government review/approval/acceptance having appropriate durations as specified in submittal procedures and properly scheduled:

	DESCRIPTION	Spec Section paragraph	# days to/from relationship
1.	Preliminary Schedule	01 32 01.00 06	
2.	Initial Schedule (baseline)	01 32 01.00 06	
3.	Required Permits	52.236-7 / 01 57 19.00 06	
	Identify each permit separately		
4.	Foundation / Substructure		Relationships/Duration TBD by KTR
	Identify multiple buildings separately		
5.	Building dry-in		
	Identify multiple buildings separately		
6.	Permanent Power		
7.	Accident Prevention Plan	01 35 26.00 06	
8.	Quality Control Plan	01 45 04.10 06	
9.	Design Quality Control Plan		
	Reference spec/paragraph if project is D/B		
10	Air Barrier Work Plan	07 05 23	
11	Design Review Report (Cx Agent	01 46 00.00 06	

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

	DESCRIPTION	Spec Section paragraph	# days to/from relationship
12	Sustainability Action Plan		
13	Commissioning Plan	01 46 00.00 06	
	Develop the schedule logic associated with testing and commissioning of mechanical systems to a level of detail consistent with ECB 2005-10		
14	Commissioning Agent	01 46 00.00 06	
15	Commissioning	01 46 00.00 06	Relationships/Duration TBD by KTR
	Identify start and finish of separate systems		
16	Redzone Meeting	00 80 00.00 06	
17	Fire Protection (Sprinkler System) Final Acceptance Test	21 13 13.00 10	
18	Fire Detection (Fire Alarm System) Final Acceptance Test	28 31 76	
19	Building Furniture Ready	00 80 00.00 06	
20	Prefinal Inspection	01 45 04.10 06	
21	Final Acceptance Inspection	01 45 04.10 06	
22	Closeout Documents		
	Separate milestone for Warranty, training, O&M manuals, as-builts, 1354, installed equipment lists, etc.)		

### 3.3.2.5 Government Activities

Show Government and other agency activities that could impact progress. These activities include, but are not limited to: [approvals/acceptance](#),

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

#### 3.3.2.6 Activity Responsibility Coding (RESP)

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor, or government agency performing a given task. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, Government design reviews, environmental permit approvals by State regulators, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements. Code all activities not coded with a Government Responsibility Code to the Prime Contractor or Subcontractor responsible to perform the work. Activities shall not have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and GOVT (for USACE). Unacceptable code values are abbreviations of the names of subcontractors.

#### 3.3.2.7 Activity Work Area Coding (AREA)

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew, from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities shall not have more than one Work Area Code. Not all activities are required to be Work Area coded. A lack of Work Area coding will indicate the activity is not resource or space constrained.

#### 3.3.2.8 Contract Changes/Requests for Equitable Adjustment (REA) Coding (MODF)

Assign an Activity code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by the Contracting Officer, with a Contract Changes/REA Code. Key all Code values to the Government's modification numbering system. Any activity or sequence of activities added to the schedule as a result of alleged constructive changes made by the Government may be added to a copy of the current schedule, subject to the approval of the Contracting Officer. Assign Activity codes for these activities with a Contract Changes/REA Code. Key the code values to the Contractor's numbering system. Approval to add these activities does not necessarily mean the Government accepts responsibility and, therefore, liability for such activities and any associated impacts to the schedule, but rather the Government recognizes such activities are appropriately added to the schedule for the purposes of maintaining a realistic and meaningful schedule. Such activities shall not be Responsibility Coded to the Government unless approved. An activity shall not have more than one Contract Changes/REA Code.

#### 3.3.2.9 Contract Line Item (CLIN) Coding (BIDI)

Code all activities to the CLIN on the Contract Line Item Schedule to which the activity belongs. An activity shall not contain more than one CLIN Item Code. CLIN Item code all activities, even when an activity is not cost loaded.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.3.2.10 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities based upon the phase of work in which the activity occurs. Code activities to a Construction Phase. Code fast track construction phases proposed by the Contractor to allow filtering and organizing the schedule by fast track design and construction packages. If the contract specifies construction phasing with separately defined performance periods, identify a Construction Phase Code to allow filtering and organizing the schedule accordingly. Each activity shall be identified with a single project phase and have only one Phase of Work code.

### 3.3.2.11 Category of Work Coding (CATW)

Assign Category of Work Code to all activities according to the category of work to which best describes the activity. Category of Work Code shall include, but is not limited to: construction submittal approvals, acceptance, procurement, fabrication, delivery, weather sensitive installation, non-weather sensitive installation, start-up, test and turnover. Assign a Category of Work Code to each activity. Each activity shall have only one Category of Work Code.

### 3.3.2.12 Definable Features of Work Coding (FOW1, FOW2, FOW3)

Assign a Definable Feature of Work Code to appropriate activities based on the definable feature of work to which the activity belongs. Definable Feature of Work is defined in LRL Section 01 45 04.10 06 CONTRACTOR QUALITY CONTROL. An activity shall not have more than one Definable Feature of Work Code. Not all activities are required to be Definable Feature of Work Coded.

## 3.3.3 Scheduled Project Completion and Activity Calendars

The schedule interval shall extend from NTP date to the required contract completion date. The contract completion activity (End Project) shall finish based on the required contract duration in the accepted contract proposal, as adjusted for any approved contract time extensions. The first scheduled work period shall be the day after NTP is acknowledged by the Contractor. Schedule activities on a calendar to which the activity logically belongs. Activities may be assigned to a 7 day calendar when the contract assigns calendar day durations for the activity such as a Government Acceptance activity. If the Contractor intends to perform physical work less than seven days per week, schedule the associated activities on a calendar with non-work periods identified including weekends and holidays. Assign the Category of Work Code - Weather Sensitive Installation to those activities that are weather sensitive. Original durations must account for anticipated normal adverse weather. The Government will interpret all work periods not identified as non-work periods on each calendar as meaning the Contractor intends to perform work during those periods.

### 3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. Include as the first activity in the project schedule an activity called "Start Project" or NTP. The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 3.3.3.2 Schedule Constraints and Open Ended Logic

Completion of the last activity in the schedule shall be constrained by the contract completion date. Schedule calculations shall result in a negative float when the calculated early finish date of the last activity is later than the contract completion date. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the contract completion date for the project, and with a zero day duration or by using the "project must finish by" date in the scheduling software. The schedule shall have no constrained dates other than those specified in the contract. The use of artificial float constraints such as "zero free float" or "zero total float" are typically prohibited. There shall only be 2 open ended activities: Start Project (or NTP) with no predecessor logic and End Project with no successor logic.

#### 3.3.3.3 Early Project Completion

The last activity shall have a late finish constraint equal to the contract required completion date so that the schedule calculation will result in positive float if the project schedule projects a completion date prior to the contract required completion date. In the event the project schedule calculates an early completion date of the last activity prior to the contract have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. The Contractor shall specifically address each of those activities in the narrative report and at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period. The Government will not approve an early completion schedule with zero float on the longest path. The Government is under no obligation to accelerate activities for which it is responsible to support a proposed early contract completion.

#### 3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall be constrained to show negative float if the calculated early finish date of the last activity in that phase is later than the specified interim completion date.

##### 3.3.4.1 Start Phase

The Contractor shall include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work and the activity will have a zero day duration.

##### 3.3.4.2 End Phase

The Contractor shall include as the last activity for a project phase an activity called "End Phase X" where "X" refers to the phase of work and the activity will have a zero day duration.

##### 3.3.4.3 Phase "X" Hammock

The Contractor shall include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" hammock activity shall be logically tied to the earliest and latest activities in the phase.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in the scheduling software. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the AS and AF dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports shall result in the disapproval of the Contractor's updated schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Disable program features which calculate one of these parameters from the other.

### 3.3.6 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Correct out of sequence progress that continues for more than two update cycles by logic revision, as approved by the Contracting Officer.

### 3.3.7 Negative Lags and Start to Finish Relationships

Lag durations contained in the project schedule shall not have a negative value. Do not use Start to Finish (SF) relationships.

### 3.3.8 Calculation Mode

Schedule calculations shall retain the logic between predecessors and successors even when the successor activity starts and the predecessor activity has not finished. Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") will not be allowed.

### 3.3.9 Milestones

The schedule must include milestone activities for each significant project event including but not limited to: see list of items in paragraph 3.3.2.4 above.

Activity ID	Description	BL Start	Previous Start	Current Start	Actual Start
		BL Finish	Previous Finish	Current Finish	Actual Finish
(TBD by KTR)	Preliminary Schedule				

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Activity ID	Description	BL Start	Previous Start	Current Start	Actual Start
		BL Finish	Previous Finish	Current Finish	Actual Finish
(TBD by KTR)	Preliminary Schedule				
(TBD by KTR)	Initial Schedule				
(TBD by KTR)					

### 3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data CD, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS. When design/build requirements are not within the project scope of work, all design submittals are not applicable

#### 3.4.1 Preliminary Project Schedule Submission

Submit the Preliminary Project Schedule, defining the Contractor's planned operations for the first 90 calendar days for approval within 15 calendar days after the NTP is acknowledged. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 90 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. Detail it for the first 90 calendar days. It may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as previously specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required Plan and Program preparations, submissions and approvals identified in the contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) as well as design activities, the planned submissions of all early design packages, permitting activities, design review conference activities and other non-construction activities intended to occur within the first 90 calendar days. Schedule any construction activities planned for the first 90 calendar days after NTP. Constrain planned construction activities by Government acceptance of the associated design package(s) and all other specified Program and Plan approvals. Activity code any activities that are summary in nature after the first 90 calendar days with Responsibility Code (RESP) and Feature of Work code (FOW1, FOW2, FOW3).

#### 3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 42 calendar days after NTP. The schedule shall demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. The Initial Schedule shall be at a reasonable level of detail as determined by the Contracting Officer. The Contractor shall participate in a review and evaluation of the proposed schedule and

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

analysis by the Contracting Officer.

### 3.4.3 Design Package Schedule Submission

With each design package submitted to the Government, submit a frag-net schedule extracted from the then current Preliminary, Initial or Updated schedule which covers the activities associated with that Design Package including construction, procurement and permitting activities.

### 3.4.4 Periodic Schedule Updates

Based on the result of the meeting, specified in PERIODIC SCHEDULE UPDATE MEETINGS, submit periodic schedule updates. These submissions will enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

### 3.4.5 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in [ER 1-1-11](#), Appendix A. This exact structure is mandatory, even if some fields are not used. A template SDEF compatible schedule backup file (sdef.prx) is available on the QCS website: [www.rmssupport.com](http://www.rmssupport.com). The SDEF format is as follows:

Field	Activity Code	Length	Description
1	WRKP	3	Workers per Day
2	RESP	4	Responsible Party (e.g. GC, subcontractor, USACE)
3	AREA	4	Area of Work
4	MODF	6	Modification or REA number
5	BIDI	6	Bid Item (CLIN)
6	PHAS	2	Phase of Work
7	CATW	1	Category of Work
8	FOW1	10	Feature of Work (up to 10 characters in length)
9	FOW2	10	Feature of Work (up to 20 characters in length)
10	FOW3	10	Feature of Work (up to 30 characters in length)

## 3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project in addition to the requirements for submission of schedules and reports in paragraphs 1.2 "SUBMITTALS":

### 3.5.1 Data CD's

Provide two sets of data CD's containing the project schedule in the backup format. Each CD shall also contain all previous update backup files. File medium shall be CD. Label each CD indicating the type of schedule (Preliminary, Initial, Update), full contract number, Data Date and file name. Each schedule file submitted shall have a unique file name as determined by the Contractor and acceptable to the Government.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.5.2 Narrative Report

A Narrative Report shall be provided with the Preliminary, Initial, and each Periodic Update of the project schedule, as the basis of the progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths where the total float is less than or equal to 20 work days, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to communicate to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis. Identify and explain why any activities that, based their calculated late dates, should have either started or finished during the update period but did not.

### 3.5.3 Approved Changes Verification

Only those project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

### 3.5.4 Schedule Reports

The format, filtering, organizing and sorting for each schedule report shall be as directed by the Contracting Officer. Typically reports shall contain: Activity Numbers, Activity Description, Original Duration, Actual Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete. The following lists typical reports that will be requested. One or all of these reports may be requested for each schedule submission.

#### 3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

#### 3.5.4.2 Logic Report

A list of detailed predecessor and successor activities for every activity in ascending order by activity number.

#### 3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

#### 3.5.4.4 Earnings Report by CLIN

A compilation of the Contractor's Total Earnings on the project from the NTP to the data date. This report shall reflect the earnings of specific activities based on the agreements made in the schedule update meeting defined herein. Provided that the Contractor has furnished a complete schedule update, this report shall serve as the basis of determining progress payments. Group activities by CLIN item number and sort by

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

activity number. This report shall: sum all activities coded to a particular CLIN and provide a CLIN item percent earned value; and complete and sum CLIN items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

#### 3.5.4.5 Milestone Report

A matrix with column headings: Activity ID; Description; Baseline Start/Finish; Previous Month Start/Finish; Current Month Start/Finish; Actual Start/Finish. At a minimum, each row in the matrix shall include milestones listed in paragraph 3.3.2.4.

Activity ID	Description	BL Start	Previous Start	Current Start	Actual Start
		BL Finish	Previous Finish	Current Finish	Actual Finish
TBD by KTR	Preliminary Schedule				
TBD by KTR	Initial Schedule				
TBD by KTR	Permit				
	Foundation/ Substructure				
	Building Dry-in				
	Permanent Power				
	Accident Prevention Plan				
	Quality Control Plan				
	Design Quality Control Plan				
	Air Barrier Work Plan				

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Activity ID	Description	BL Start	Previous Start	Current Start	Actual Start
		BL Finish	Previous Finish	Current Finish	Actual Finish
	Design Review Report (Cx Agent)				

### 3.5.5 Network Diagram

The network diagram is required for the Preliminary, Initial and Periodic Updates. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

#### 3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

#### 3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

#### 3.5.5.3 Critical Path

The critical path shall be clearly shown.

#### 3.5.5.4 Banding

Organize activities as directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

### 3.6 PERIODIC SCHEDULE UPDATE MEETINGS

Conduct periodic schedule update meetings for the purposes of reviewing the Contractor's proposed out of sequence corrections, determining causes for delay, correcting logic, maintaining schedule accuracy and determining earned value. Meetings shall occur at least monthly within five days of the proposed schedule data date and after the Contractor has updated the schedule with Government concurrence respecting actual start dates, actual finish dates, remaining durations and percent complete for each activity it intend to status. Provide a computer with the scheduling software loaded and a projector during the meeting which allows all meeting participants to view the proposed schedule update during the meeting. The meeting and resultant approvable schedule update shall be a condition precedent to a formal submission of the update as described in SUBMISSION REQUIREMENTS and to the submission of an invoice for payment. The meeting will be a working interactive exchange which will allow the Government and the Contractor the opportunity to review the updated schedule on a real time and interactive basis. The Contractor's authorized scheduling representative will organize, sort, filter and schedule the update as requested by the Government. The meeting will last no longer than 8 hours. A rough draft of the proposed activity logic corrections and narrative report shall be provided to the Government 48 hours in advance of the meeting. The Contractor's Project Manager and Authorized Scheduler shall attend the meeting with the Authorized Representative of the Contracting Officer.

#### 3.6.1 Update Submission Following Progress Meeting

Submit a complete update of the project schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 working days after the periodic schedule update meeting, reflecting only those changes made during the previous update meeting.

#### 3.6.2 Status of Activities

Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be subject to the approval of the Government prior to the meeting. As a minimum, address the following items on an activity by activity basis during each progress meeting.

##### 3.6.2.1 Start and Finish Dates

Accurately show the status of the AS and/or AF dates for each activity currently in-progress or completed since the last update. The Government may allow an AF date to be assigned with the percent complete less than 100% to account for the value of work remaining but not restraining successor activities. Only assign AS dates when actual progress occurs on an activity.

##### 3.6.2.2 Remaining Duration

Update the estimated RD for all incomplete activities independent of Percent Complete. Remaining Durations may exceed the activity OD or may



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

exceed the activity's prior update RD if the Government considers the current OD or RD to be understated based on current progress, insufficient work crews actually manning the job, unrealistic OD or deficiencies that must be corrected that restrain successor activities.

#### 3.6.2.3 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete. To allow for proper schedule management, cost load the correction of punch list from Government pre-final inspection activity(ies) not less than 1 percent of the total contract value, which activity(ies) may be declared 100 percent complete upon completion and correction of all punch list work identified during Government pre-final inspection(s).

#### 3.6.2.4 Logic Changes

Specifically identify and discuss all logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. The Government will only approve logic revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.

#### 3.6.2.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule that does not represent the actual or planned prosecution and progress of the work.

### 3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor believes it is entitled to an extension of the contract performance period, completion date, or any interim milestone date, furnish the following for a determination by the Contracting Officer: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of excusable delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is a condition precedent to any approvals by the Government. In response to each Request For Proposal issued by the Government, the Contractor shall submit a schedule impact analysis demonstrating whether or not the change contemplated by the Government impacts the critical path.

#### 3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Contractor's own actions, which result in a calculated schedule delay, will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

### 3.7.2 Submission Requirements

Submit a justification for each request for a change in the contract completion date of less than 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Identify activities impacted in each justification for change by a unique activity code contained in the required data file.

### 3.7.3 Additional Submission Requirements

The Contracting Officer may request an interim update with revised activities for any requested time extension of over 2 weeks. Provide this disk within 4 days of the Contracting Officer's request.

## 3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The Contracting Officer will approve proposed revisions to the schedule prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

## 3.9 WEEKLY PROGRESS MEETINGS

- a. The Government and the Contractor shall meet weekly (or as otherwise mutually agreed to) between the meetings described in paragraph PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming three weeks. The then current and approved schedule update shall be

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

used for the purposes of this meeting and for the production and review of reports. The Contractor's Project Manager and the Authorized Representative of the Contracting Officer shall attend. The Contractor shall provide the planned activities for the next three weeks based on a Primavera filter of the current approved schedule. Any activity that has not started or finished as planned shall be listed as a QC deficiency in RMS. The Contractor's Project Manager and the Authorized Representative of the Contracting Officer shall attend. The weekly progress meeting will address the status of RFI's, RFP's and Submittals. At the weekly progress meeting, address the status of approved schedule progress, RFIs, RFPs and Submittals. Prior to beginning work on specific work elements of a Project, the Contractor shall confer with the COR and agree on a sequence of procedures and means of access to premises and buildings; space for storage of materials and equipment; delivery of materials; and use of approaches, use of corridors, stairways, and similar means of passage. Contractor shall provide minutes for the Weekly Progress Meeting, minutes to be attached with the QC Daily Report.

b. Provide a bar chart produced by the scheduling software, organized by Total Float and Sorted by Early Start Date, and a three week "look-ahead" schedule by filtering all schedule activities to show only current ongoing activities and activities scheduled to start during the upcoming three weeks, organized by Work Area Code (AREA) and sorted by Early Start Date.

c. The Government and the Contractor shall jointly review the reports. If it appears that activities on the longest path(s) which are currently driving the calculated completion date (driving activities), are not progressing satisfactorily and therefore could jeopardize timely project completion, corrective action must be taken immediately. Corrective action includes but is not limited to: increasing the number of work crews; increasing the number of work shifts; increasing the number of hours worked per shift; and determining if Government responsibility coded activities require Government corrective action.

### 3.10 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

### 3.11 TRANSFER OF SCHEDULE DATA INTO RMS/QCS

The Contractor shall download and upload the schedule data into the Resident Management System (RMS) prior to RMS databases being transferred to the Government and is considered to be additional supporting data in a form and detail required by the Contracting Officer pursuant to FAR 52.232-5 - Payments under Fixed-Price Construction Contracts. The receipt of a proper payment request pursuant to FAR 52.232-27 - Prompt Payment for Construction Contracts is contingent upon the Government receiving both acceptable and approvable hard copies and electronic export from QCS of the application for progress payment.

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

SECTION 01 33 00

SUBMITTAL PROCEDURES

08/18, CHG 4: 02/21

PART 1 GENERAL

1.1 DEFINITIONS

1.1.1 Submittal Descriptions (SD)

Submittal requirements are specified in the technical sections. Examples and descriptions of submittals identified by the Submittal Description (SD) numbers and titles follow:

SD-01 Preconstruction Submittals

Preconstruction Submittals include schedules and a tabular list of locations, features, and other pertinent information regarding products, materials, equipment, or components to be used in the work.

Certificates Of Insurance

Surety Bonds

List Of Proposed Subcontractors

List Of Proposed Products

Baseline Network Analysis Schedule (NAS)

Submittal Register

Schedule Of Prices Or Earned Value Report

Work Plan

Quality Control (QC) plan

Environmental Protection Plan

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### SD-04 Samples

Fabricated or unfabricated physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards ensuring work can be judged. Includes assemblies or portions of assemblies that are to be incorporated into the project and those that will be removed at conclusion of the work.

#### SD-05 Design Data

Design calculations, mix designs, analyses or other data pertaining to a part of work.

#### SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. Unless specified in another section, testing must have been within three years of date of contract award for the project.

Report that includes findings of a test required to be performed on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report that includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports

Daily logs and checklists

Final acceptance test and operational test procedure

#### SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that the product, system, or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor. The document purpose is to further promote the orderly progression of a portion of the work by documenting procedures, acceptability of methods, or personnel qualifications.

Confined space entry permits

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Text of posted operating instructions

#### SD-10 Operation and Maintenance Data

Data provided by the manufacturer, or the system provider, including manufacturer's help and product line documentation, necessary to maintain and install equipment, for operating and maintenance use by facility personnel.

Data required by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.

Data incorporated in an operations and maintenance manual or control system.

#### SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Submittals required for Guiding Principle Validation (GPV) or Third Party Certification (TPC).

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

##### 1.1.2 Approving Authority

Office or designated person authorized to approve the submittal.

##### 1.1.3 Work

As used in this section, on-site and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction. In exception, excludes work to produce SD-01 submittals.

#### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Submittal Register; G

#### 1.3 SUBMITTAL CLASSIFICATION

##### 1.3.1 Government Approved (G)

Government approval is required for extensions of design, critical materials, variations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Government.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, submittals are considered to be "shop drawings."

#### 1.3.2 For Information Only

Submittals not requiring Government approval will be for information only. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are not considered to be "shop drawings."

#### 1.3.3 Sustainability Reporting Submittals (S)

Submittals for Guiding Principle Validation (GPV) or Third Party Certification (TPC) are indicated with an "S" designation. These submittals are for information only and for use as specified in Section 01 33 29 SUSTAINABILITY REPORTING.

Schedule submittals for these items throughout the course of construction as provided; do not wait until closeout.

### 1.4 PREPARATION

#### 1.4.1 Transmittal Form

#### 1.4.2 Submittal Format

##### 1.4.2.1 Format of SD-01 Preconstruction Submittals

When the submittal includes a document that is to be used in the project, or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

##### 1.4.2.2 Format for SD-02 Shop Drawings

Provide shop drawings not less than 8 1/2 by 11 inches nor more than 30 by 42 inches, except for full-size patterns or templates. Prepare drawings to accurate size, with scale indicated, unless another form is required. Ensure drawings are suitable for reproduction and of a quality to produce clear, distinct lines and letters, with dark lines on a white background.

- a. Include the nameplate data, size, and capacity on drawings. Also include applicable federal, military, industry, and technical society publication references.
- b. Dimension drawings, except diagrams and schematic drawings. Prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawings as indicated on the contract drawings. Identify materials and products for work shown.

Submit an electronic copy of drawings in PDF format.

##### 1.4.2.2.1 Drawing Identification

Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph IDENTIFYING SUBMITTALS.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Number drawings in a logical sequence. Each drawing is to bear the number of the submittal in a uniform location next to the title block. Place the Government contract number in the margin, immediately below the title block, for each drawing.

#### 1.4.2.3 Format of SD-03 Product Data

Present product data submittals for each section. Include a table of contents, listing the page and catalog item numbers for product data.

Indicate, by prominent notation, each product that is being submitted; indicate the specification section number and paragraph number to which it pertains.

##### 1.4.2.3.1 Product Information

Supplement product data with material prepared for the project to satisfy the submittal requirements where product data does not exist. Identify this material as developed specifically for the project, with information and format as required for submission of SD-07 Certificates.

Provide product data in units used in the Contract documents. Where product data are included in preprinted catalogs with another unit, submit the dimensions in contract document units, on a separate sheet.

##### 1.4.2.3.2 Standards

Where equipment or materials are specified to conform to industry or technical-society reference standards of such organizations as the American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), or Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

##### 1.4.2.3.3 Data Submission

Collect required data submittals for each specific material, product, unit of work, or system into a single submittal that is marked for choices, options, and portions applicable to the submittal. Mark each copy of the product data identically. Partial submittals will not be accepted for expedition of the construction effort.

Submit the manufacturer's instructions before installation.

##### 1.4.2.4 Format of SD-04 Samples

###### 1.4.2.4.1 Sample Characteristics

Furnish samples in the following sizes, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately the same size as specified:

- a. Sample of Equipment or Device: Full size.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- b. Sample of Materials Less Than 2 by 3 inches: Built up to 8 1/2 by 11 inches.
- c. Sample of Materials Exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.
- d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.
- e. Sample Volume of Nonsolid Materials: Pint. Examples of nonsolid materials are sand and paint.
- f. Color Selection Samples: 2 by 4 inches. Where samples are specified for selection of color, finish, pattern, or texture, submit the full set of available choices for the material or product specified. Sizes and quantities of samples are to represent their respective standard unit.
- g. Sample Panel: 4 by 4 feet.
- h. Sample Installation: 100 square feet.

#### 1.4.2.4.2 Sample Incorporation

Reusable Samples: Incorporate returned samples into work only if so specified or indicated. Incorporated samples are to be in undamaged condition at the time of use.

Recording of Sample Installation: Note and preserve the notation of any area constituting a sample installation, but remove the notation at the final clean-up of the project.

#### 1.4.2.4.3 Comparison Sample

Samples Showing Range of Variation: Where variations in color, finish, pattern, or texture are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range. Mark each unit to describe its relation to the range of the variation.

When color, texture, or pattern is specified by naming a particular manufacturer and style, include one sample of that manufacturer and style, for comparison.

#### 1.4.2.5 Format of SD-05 Design Data

Provide design data and certificates on 8 1/2 by 11 inch paper.

#### 1.4.2.6 Format of SD-06 Test Reports

Provide design data and certificates on 8 1/2 by 11 inch paper.

By prominent notation, indicate each report in the submittal. Indicate the specification number and paragraph number to which each report pertains.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.4.2.7 Format of SD-07 Certificates

Provide design data and certificates on 8 1/2 by 11 inch paper.

#### 1.4.2.8 Format of SD-08 Manufacturer's Instructions

Present manufacturer's instructions submittals for each section. Include the manufacturer's name, trade name, place of manufacture, and catalog model or number on product data. Also include applicable federal, military, industry, and technical-society publication references. If supplemental information is needed to clarify the manufacturer's data, submit it as specified for SD-07 Certificates.

Submit the manufacturer's instructions before installation.

##### 1.4.2.8.1 Standards

Where equipment or materials are specified to conform to industry or technical-society reference standards of such organizations as the American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), or Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

#### 1.4.2.9 Format of SD-09 Manufacturer's Field Reports

By prominent notation, indicate each report in the submittal. Indicate the specification number and paragraph number to which each report pertains.

#### 1.4.2.10 Format of SD-10 Operation and Maintenance Data (O&M)

Comply with the requirements specified in Section 01 78 23 OPERATION AND MAINTENANCE DATA for O&M Data format.

#### 1.4.2.11 Format of SD-11 Closeout Submittals

When the submittal includes a document that is to be used in the project or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

#### 1.4.3 Source Drawings for Shop Drawings

##### 1.4.3.1 Source Drawings

The entire set of source drawing files (DWG) will not be provided to the Contractor. Request the specific Drawing Number for the preparation of shop drawings. Only those drawings requested to prepare shop drawings will be provided. These drawings are provided only after award.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.4.3.2 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction data for the referenced project. Any other use or reuse is at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim, and waives to the fullest extent permitted by law any claim or cause of action of any nature against the Government, its agents, or its subconsultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities, or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic source drawing files are not construction documents. Differences may exist between the source drawing files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic source drawing files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. The Contractor is responsible for determining if any conflict exists. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished source drawing files, the signed and sealed construction documents govern. Use of these source drawing files does not relieve the Contractor of the duty to fully comply with the contract documents, including and without limitation the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction data related to this contract, remove all previous indication of ownership (seals, logos, signatures, initials and dates).

#### 1.4.4 Electronic File Format

Provide submittals in electronic format, with the exception of material samples required for SD-04 Samples items. Compile the submittal file as a single, complete document, to include the Transmittal Form described within. Name the electronic submittal file specifically according to its contents, and coordinate the file naming convention with the Contracting Officer. Electronic files must be of sufficient quality that all information is legible. Use PDF as the electronic format, unless otherwise specified or directed by the Contracting Officer. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is searchable and can be copied. If documents are scanned, optical character resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature or a scan of a signature.

### 1.5 QUANTITY OF SUBMITTALS

#### 1.5.1 Number of SD-01 Preconstruction Submittal Copies

Unless otherwise specified, submit three sets of administrative submittals.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.5.2 Number of SD-04 Samples

- a. Submit two samples, or two sets of samples showing the range of variation, of each required item. One approved sample or set of samples will be retained by the approving authority and one will be returned to the Contractor.
- b. Submit one sample panel or provide one sample installation where directed. Include components listed in the technical section or as directed.
- c. Submit one sample installation, where directed.
- d. Submit one sample of nonsolid materials.

#### 1.6 INFORMATION ONLY SUBMITTALS

Submittals without a "G" designation must be certified by the QC manager and submitted to the Contracting Officer for information-only. Provide information-only submittals to the Contracting Officer a minimum of 14 calendar days prior to the Preparatory Meeting for the associated Definable Feature of Work (DFOW). Approval of the Contracting Officer is not required on information only submittals. The Contracting Officer will mark "receipt acknowledged" on submittals for information and will return only the transmittal cover sheet to the Contractor. Normally, submittals for information only will not be returned. However, the Government reserves the right to return unsatisfactory submittals and require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

#### 1.7 PROJECT SUBMITTAL REGISTER

A sample Project Submittal Register showing items of equipment and materials for when submittals are required by the specifications is provided as "Appendix A - Submittal Register."

##### 1.7.1 Submittal Management

Prepare and maintain a submittal register, as the work progresses. Do not change data that is output in columns (c), (d), (e), and (f) as delivered by Government; retain data that is output in columns (a), (g), (h), and (i) as approved. As an attachment, provide a submittal register showing items of equipment and materials for which submittals are required by the specifications. This list may not be all-inclusive and additional submittals may be required.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD Number. and type, e.g., SD-02 Shop Drawings) required in each specification section.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Column (e): Lists one principal paragraph in each specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting the project requirements.

Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns and all dates on which submittals are received by and returned by the Government.

#### 1.7.2 Preconstruction Use of Submittal Register

Submit the submittal register. Include the QC plan and the project schedule. Verify that all submittals required for the project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

Column (a) Activity Number: Activity number from the project schedule.

Column (g) Contractor Submit Date: Scheduled date for the approving authority to receive submittals.

Column (h) Contractor Approval Date: Date that Contractor needs approval of submittal.

Column (i) Contractor Material: Date that Contractor needs material delivered to Contractor control.

#### 1.7.3 Contractor Use of Submittal Register

Update the following fields with each submittal throughout the contract.

Column (b) Transmittal Number: List of consecutive, Contractor-assigned numbers.

Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.

Column (l) Date submittal transmitted.

Column (q) Date approval was received.

#### 1.7.4 Approving Authority Use of Submittal Register

Update the following fields:

Column (b) Transmittal Number: List of consecutive, Contractor-assigned numbers.

Column (l) Date submittal was received.

Column (m) through (p) Dates of review actions.

Column (q) Date of return to Contractor.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 1.7.5 Action Codes

#### 1.7.5.1 Contractor Action Codes

DESIGN BID BUILD SUBMITTALS			
Submittal Classifications shown in UFGS Sections	Submittal Classification	Corresponding SpecsIntact Submittal Register Code which is populated in the SI Submittal Register. Software Limitations: (The software shows one character delineation in the SpecsIntact Submittal Register)	RMS - The following Submittal Classifications are populated in RMS when the SpecsIntact Submittal Data File is pulled into RMS)
G	Submittal requires Government	G	GA
BLANK	Submittal is For Information Only (FIO)	BLANK	FIO
S	Submittal is for documentation of Sustainable requirements	S	S/FIO

### 1.7.6 Delivery of Copies

Submit an updated electronic copy of the submittal register to the Contracting Officer with each invoice request. Provide an updated Submittal Register monthly regardless of whether an invoice is submitted.

## 1.8 VARIATIONS

Variations from contract requirements require Contracting Officer approval pursuant to contract Clause FAR 52.236-21 Alt. I Specifications and Drawings for Construction, and will be considered where advantageous to the Government.

### 1.8.1 Considering Variations

Discussion of variations with the Contracting Officer before submission will help ensure that functional and quality requirements are met and minimize rejections and resubmittals. For variations that include design changes or some material or product substitutions, the Government may require an evaluation and analysis by a licensed professional engineer hired by the contractor.

Specifically point out variations from contract requirements in a transmittal letter. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.8.2 Proposing Variations

"

Specifically point out variations from contract requirements in a transmittal letter. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

#### 1.8.3 Warranting that Variations are Compatible

When delivering a variation for approval, the Contractor warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

#### 1.8.4 Review Schedule Extension

In addition to the normal submittal review period, a period of 14 days will be allowed for the Government to consider submittals with variations.

### 1.9 SCHEDULING

Schedule and submit concurrently product data and shop drawings covering component items forming a system or items that are interrelated. Submit pertinent certifications at the same time. No delay damages or time extensions will be allowed for time lost in late submittals. .

- a. Coordinate scheduling, sequencing, preparing, and processing of submittals with performance of work so that work will not be delayed by submittal processing. The Contractor is responsible for additional time required for Government reviews resulting from required resubmittals. The review period for each resubmittal is the same as for the initial submittal.
- b. Submittals required by the contract documents are listed on the submittal register. If a submittal is listed in the submittal register but does not pertain to the contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but that have been omitted from the register or marked "N/A."
- c. Resubmit the submittal register and annotate it monthly with actual submission and approval dates. When all items on the register have been fully approved, no further resubmittal is required.

Contracting Officer review will be completed within 30 days after the date of submission.

#### 1.10 GOVERNMENT APPROVING AUTHORITY

When the approving authority is the Contracting Officer, the Government will:

- a. Note the date on which the submittal was received.
- b. Review submittals for approval within the scheduling period specified and only for conformance with project design concepts and compliance

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

with contract documents.

- c. Identify returned submittals with one of the actions defined in paragraph REVIEW NOTATIONS and with comments and markings appropriate for the action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date submittals. 1 copies of the submittal will be retained by the Contracting Officer and 2 copies of the submittal will be returned to the Contractor.

#### 1.10.1 Review Notations

Submittals will be returned to the Contractor with the following notations:

- a. Submittals marked "approved" or "accepted" authorize proceeding with the work covered.
- b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize proceeding with the work covered provided that the Contractor takes no exception to the corrections.
- c. Submittals marked "not approved," "disapproved," or "revise and resubmit" indicate incomplete submittal or noncompliance with the contract requirements or design concept. Resubmit with appropriate changes. Do not proceed with work for this item until the resubmittal is approved.
- d. Submittals marked "not reviewed" indicate that the submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.
- e. Submittals marked "receipt acknowledged" indicate that submittals have been received by the Government. This applies only to "information-only submittals" as previously defined.

#### 1.11 DISAPPROVED SUBMITTALS

Make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications, give notice to the Contracting Officer as required under the FAR clause titled CHANGES. The Contractor is responsible for the dimensions and design of connection details and the construction of work. Failure to point out variations may cause the Government to require rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, make such revisions and resubmit in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

#### 1.12 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals is not to be construed as



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

a complete check, and indicates only that

Approval or acceptance by the Government for a submittal does not relieve the Contractor of the responsibility for meeting the contract requirements or for any error that may exist, because under the Quality Control (QC) requirements of this contract, the Contractor is responsible for ensuring information contained within each submittal accurately conforms with the requirements of the contract documents.

After submittals have been approved or accepted by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

#### 1.13 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not to be construed to change or modify any contract requirements. Before submitting samples, provide assurance that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those that may be damaged in testing, will be returned to the Contractor, at its expense, upon completion of the contract. Unapproved samples will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make as that material. The Government reserves the right to disapprove any material or equipment that has previously proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Replace such materials or equipment to meet contract requirements.

#### PART 2 PRODUCTS

Not Used

#### PART 3 EXECUTION

Not Used

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 35 26.00 06

GOVERNMENT SAFETY REQUIREMENTS  
04/20

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

## AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

- ASSP A10.32 (2013) Fall Protection
- ASSP A10.34 (2001; R 2012) Protection of the Public on or Adjacent to Construction Sites
- ASSP Z359.1 (2016) The Fall Protection Code

## AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

- ASME B30.22 (2016) Articulating Boom Cranes
- ASME B30.3 (2016) Tower Cranes
- ASME B30.5 (2018) Mobile and Locomotive Cranes
- ASME B30.8 (2015) Floating Cranes and Floating Derricks

## NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 10 (2018; TIA 18-1) Standard for Portable Fire Extinguishers
- NFPA 241 (2019) Standard for Safeguarding Construction, Alteration, and Demolition Operations
- NFPA 51B (2019) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
- NFPA 70 (2017; ERTA 1-2 2017; TIA 17-1; TIA 17-2; TIA 17-3; TIA 17-4; TIA 17-5; TIA 17-6; TIA 17-7; TIA 17-8; TIA 17-9; TIA 17-10; TIA 17-11; TIA 17-12; TIA 17-13; TIA 17-14; TIA 17-15; TIA 17-16; TIA 17-17 ) National Electrical Code
- NFPA 70E (2018; TIA 18-1; TIA 81-2) Standard for Electrical Safety in the Workplace

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2014) Safety and Health Requirements  
Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1915 Confined and Enclosed Spaces and Other  
Dangerous Atmospheres in Shipyard  
Employment

29 CFR 1926 Safety and Health Regulations for  
Construction

29 CFR 1926.500 Fall Protection

1.2 SUBMITTALS

Government approval/acceptance is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with LRL Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP)

Fatigue Management Plan  
Bloodborne Pathogen Plan  
Exposure Control Plan  
Automatic External Defibrillator (AED) Program  
Site Layout Plan

Access/Haul Road Plan  
Hearing Conservation Program  
Respiratory Protection Plan  
Health Hazard Control Program  
Hazard Communication Program

Process Safety Management Plan  
Lead Compliance Plan & Specifications  
Asbestos Abatement Plan & Specifications  
Radiation Safety Program  
Abrasive Blasting Plan

Heat Stress Monitoring Plan  
Cold Stress Monitoring Plan  
Indoor Air Quality Management Plan  
Mold Remediation Plan  
Chromium (VI) Exposure Evaluation

Crystalline Silica Assessment  
Lighting Plan for Night Operations  
Traffic Control Plan  
Fire Prevention Plan  
Wild Land Fire Management Plan

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Arc Flash Hazard Analysis  
Assured Equipment Grounding Control Program (AEGCP)  
Hazardous Energy Control Plan  
Standard Pre-Lift Plan (LHE)  
Critical Lift Plan - LHE

Naval Architectural Analysis-LHE (Floating)  
Floating Plant Inspection and Certification  
Severe Weather Plan for Marine Activities  
Emergency Plan for Marine Activities  
Man Overboard/Abandon Ship Procedures

Float Plan for Launches, Motorboats, Skiffs  
Fall Protection and Prevention Plan  
Demolition/Renovation Plan (to include engineering survey)  
Rope Access Work Plan  
Excavation/Trenching Plan

Fire Prevention & Protection Plan for Underground Construction  
Compressed Air Plan for Underground Construction  
Erection and Removal Plan for Formwork and Shoring  
PreCast Concrete Plan  
Lift-Slab Plans

Masonry Bracing Plan  
Steel Erection Plan  
Explosives Safety Site Plan (ESSP)  
Blasting Plan  
Dive Operations Plan

Safe Practices Manual for Diving Activities  
Emergency Management Plan for Diving  
Tree Felling/Maintenance Program  
Aircraft/Airfield Construction Safety & Phasing Plan (CSPP)  
Aircraft/Airfield Safety Plan Compliance Document (SPCD)

Site Safety and Health Plan (HTRW)  
Confined Space Entry Procedures  
Confined Space Program

Activity Hazard Analysis (AHA); G, RO

Site Safety and Health Officer Qualifications(SSHO); G, RO

Proof of qualification for Crane Operators; G, RO

Critical Lift Plan; G, RO

#### SD-06 Test Reports

Reports

Accident Reports

Monthly Exposure Reports

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Crane Reports

Regulatory Citations and Violations

SD-07 Certificates

Confined Space Entry Permit

Hot work permit

Crane Certificate of Compliance

Submit one copy of each permit/certificate attached to each daily Quality Control Report.

### 1.3 DEFINITIONS

- a. Site Safety and Health Officer (SSHO). The qualified or competent person who is responsible for the on-site safety and health management required for the contract project work.
- b. Competent Person, Fall Protection: A person designated in writing by the employer to be responsible for immediate supervising, implementing and monitoring of the fall protection program, who through training, knowledge and experience in fall protection and rescue systems and equipment, is capable of identifying, evaluating and addressing existing and potential fall hazards and, who has the authority to take prompt corrective measures with regard to such hazards.
- c. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.
- d. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.
- e. Qualified Person, Fall Protection: A person with a recognized degree or professional certificate and with extensive knowledge, training and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating and specifying fall protection and rescue systems; shall have an advanced understanding of the regulatory requirements, physical sciences and engineering principles that affect equipment and systems for FP and rescue; be able to calculate forces generated by an arrested fall, the total loading and the deflection of the fall arrest anchorage, the impact on the structural members to which the fall arrest system is attached and shall be able to determine safe locations of anchorages; shall supervise the design, selection, installation and inspection of certified anchorages and horizontal lifelines.
- f. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
  - (1) Death, regardless of the time between the injury and death, or the length of the illness;
  - (2) Days away from work (any time lost after day of injury/illness

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

onset);

- (3) Fatal injury / illness;
- (4) Permanent totally disabling injury/illness;
- (5) Permanent partial disabling injury/illness;
- (6) One(1) or more persons hospitalized as inpatients as a result of a single occurrence;
- (7) \$500,000 or greater accidental property damage;
- (8) Three(3) or more individuals become ill or have a medical condition which is suspected to be related to a site condition, or a hazardous or toxic agent on the site;
- (9) Restricted work;
- (10) Transfer to another job;
- (11) Medical treatment beyond first aid;
- (12) Loss of consciousness; or
- (13) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (13) above.

g. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

h. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; and/or collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.).

i. Low-slope roof. A roof having a slope less than or equal to 4 in 12 (vertical to horizontal).

j. Steep roof. A roof having a slope greater than 4 in 12 (vertical to horizontal).

k. [Certified Safety Professional/Certified Industrial Hygienist Qualifications](#)

(1) Certified Construction Health & Safety Technician (CHST). An individual who is currently certified by the Board of Certified Safety Professionals.

(2) Certified Industrial Hygienist (CIH). An individual who is

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

currently certified by the American Board of Industrial Hygiene.

(3) Certified Safety Professional (CSP). An individual who is currently certified by the Board of Certified Safety Professionals.

(4) Certified Safety Trained Supervisor (STS). An individual who is currently certified by the Board of Certified Safety Professionals.

(5) Associate Safety Professional (ASP). An individual who is currently certified by the Board of Certified Safety Professionals.

#### 1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with USACE EM 385-1-1, federal, state, local, host nation laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

#### 1.5 SITE QUALIFICATIONS, DUTIES AND MEETINGS

##### 1.5.1 Personnel Qualifications

##### 1.5.1.1 Site Safety and Health Officer Qualifications (SSHO)

a. A Site Safety and Health Officer (SSHO) and alternate(s) shall be provided at the work site at all times and shall be a member of the onsite work organization and be responsible for overall management of the safety and occupational health program. The SSHO shall have the authority to act in all safety matters for the Contractor at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The SSHO and alternate(s) shall be employed by the Prime Contractor and shall report to a corporate safety official or other corporate official not engaged in quality control or supervision.

The SSHO shall be:

assigned no other duties except being the SSHO, shall not be the CQC System Manager or Superintendent.

b. The SSHO and alternate(s) shall have an experience Level as follows and the Contractor must show evidence that the SSHO and alternate(s) have met these requirements. When an alternate is required for the project, the alternate shall have the same experience level and other qualifications as the SSHO. In addition, the SSHO and alternate(s) are also required to have:

(1) Completed, as a minimum, the 30-Hour OSHA Construction Industry safety class with current First Aid and CPR Training / AED.

(2) Either a person with 10 years of demonstratable SSHO experience on

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

similar projects or a College graduate with Five (5) years of Construction Industry safety experience on similar projects in supervising or managing general or industry construction (managing safety programs or processes or conducting hazard analyses and developing controls).

(3) Maintained experience through having taken 24 hours of documented formal or on-line safety and health related coursework in the past three years. The training must be applicable to the work being performed on the contract. Teaching is not considered the equivalent of attending training.

(4) SSHO shall be able to demonstrate training in the following areas: personal protective equipment and clothing to include selection, use and maintenance; hazard communication; excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents.

c. To insure that safety and health conditions are maintained/enforced at all times, and a SSHO is present at all times, the Contractor shall designate one or more alternates to perform the safety and health requirements stated herein to cover any period when the SSHO can not be present, such as during absences for vacations/extended sickness, or when there are multiple shifts that requires additional coverage. The alternate(s) shall have the same qualifications/training/ education requirements as the SSHO.

d. The Contractor shall identify the SSHO and alternate(s) for this project and shall submit qualifications to the Government in resume form for acceptance. A copy of the letter to the SSHO and alternate(s) signed by an authorized official of the firm describing responsibilities and delegating authority to stop work when safety or occupational health of workers is compromised must be provided to the Government.

e. Acceptance of the Contractor's SSHO and alternate(s) is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes to operations including removal of personnel, as necessary, to obtain a safe work site. At no time will the job be permitted to operate without a SSHO on duty at the work site.

f. Duties of the SSHO shall include, as a minimum, the following in addition to the duties now listed per other paragraphs of this Section:

- (1) Prepare the Contractor's Safety Plan, and Activity Hazard Analysis for each definable feature of work;
- (2) Provide safety indoctrination to all construction site visitors;
- (3) Ensure the Contractor's accepted Accident Prevention Plan is carried out;
- (4) Ensure that all Contractor/subcontractor employees have all HTRW, asbestos, and lead paint training, and their personnel protection equipment meets applicable OSHA/EPA requirements;
- (5) Conducts daily walk through of the site ensuring work is being



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

accomplished safely and occupational health is not compromised;

(6) Attend and participate in all preparatory and initial quality control phase meetings;

(7) Conduct weekly safety meetings for all workers;

(8) Conduct monthly supervisory safety meetings;

(9) Provide accident reports;

(10) Produce a Daily Safety Report of activities performed and attach this report to the Contractor's Quality Control Report.

(11) Provide minutes for weekly and monthly safety meetings, minutes to be attached with the Daily Safety Report.

#### 1.5.2 Personnel Duties

##### 1.5.2.1 Site Safety and Health Officer (SSHO)

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractors' daily quality control report.

b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 for prime contractor.

c. Maintain applicable safety reference material on the job site.

d. Attend the pre-construction conference, pre-work safety conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.

e. Implement and enforce accepted APPS and AHAs.

f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

h. Other duties as identified per LRL Section 01 45 04.10 06 Contractor Quality Control. Failure to perform the above duties shall result in dismissal of the SSHO, and/or CQC System Manager, and/or superintendent and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

#### 1.5.3 Meetings

##### 1.5.3.1 Pework Safety Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the prework safety conference. The purpose of the prework safety conference is for the Contractor and the Contracting Officer's representatives to become acquainted and explain the functions and operating procedures of their

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

respective organizations and to reach mutual understanding relative to the administration of the overall project's APP before the initiation of work. This includes the project superintendent, Site Safety and Health Officer, Quality Control System Manager, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).

b. The Contractor shall discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, a schedule for the preparation, submittal, review, and acceptance of AHAs shall be established to preclude project delays.

c. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the prework safety conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work shall not begin until there is an accepted APP.

d. The functions of a prework safety conference, may take place at the Post-Award Kickoff meeting for Design Build Contracts.

#### 1.5.3.2 Weekly Safety Meetings

Shall be conducted and documented as required by EM 385-1-1. Minutes showing contract title, signatures of attendees and a list of topics discussed shall be attached to the Contractors' daily quality control report.

#### 1.5.3.3 Work Phase Meetings

The appropriate AHA shall be reviewed and attendance documented by the Contractor at the preparatory, initial, and follow-up control phases of quality control inspection in accordance with LRL Section 01 45 04.10 06 CONTRACTOR QUALITY CONTROL. The analysis should be used during daily inspections to ensure the implementation and effectiveness of safety and health controls; and the results reported on the daily QC Report.

### 1.6 TRAINING

#### 1.6.1 New Employee Indoctrination

New employees (prime and sub-contractor) will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

#### 1.6.2 Periodic Training

Provide Safety and Health Training in accordance with USACE EM 385-1-1 and the accepted APP. Ensure all required training has been accomplished for all onsite employees.

#### 1.6.3 Training on Activity Hazard Analysis (AHA)

Prior to beginning a new control phase, training will be provided to all affected employees to include a review of the AHA to be implemented.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 1.7 ACCIDENT PREVENTION PLAN (APP)

a. The Contractor shall use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and shall address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Any portions of the Contractor's overall safety and health program referenced in the APP shall be included in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed per requirements of EM 385-1-1, Appendix A-1, Paragraph 3, Signature Sheet.

Fatigue Management Plan  
Bloodborne Pathogen Plan  
Exposure Control Plan  
Automatic External Defibrillator (AED) Program  
Site Layout Plan

Access/Haul Road Plan  
Hearing Conservation Program  
Respiratory Protection Plan  
Health Hazard Control Program  
Hazard Communication Program

Process Safety Management Plan  
Lead Compliance Plan & Specifications  
Asbestos Abatement Plan & Specifications  
Radiation Safety Program  
Abrasive Blasting Plan

Heat Stress Monitoring Plan  
Cold Stress Monitoring Plan  
Indoor Air Quality Management Plan  
Mold Remediation Plan  
Chromium (VI) Exposure Evaluation

Crystalline Silica Assessment  
Lighting Plan for Night Operations  
Traffic Control Plan  
Fire Prevention Plan  
Wild Land Fire Management Plan

Arc Flash Hazard Analysis  
Assured Equipment Grounding Control Program (AEGCP)  
Hazardous Energy Control Plan  
Standard Pre-Lift Plan (LHE)  
Critical Lift Plan - LHE

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Naval Architectural Analysis-LHE (Floating)  
Floating Plant Inspection and Certification  
Severe Weather Plan for Marine Activities  
Emergency Plan for Marine Activities  
Man Overboard/Abandon Ship Procedures

Float Plan for Launches, Motorboats, Skiffs  
Fall Protection and Prevention Plan  
Demolition/Renovation Plan (to include engineering survey)  
Rope Access Work Plan  
Excavation/Trenching Plan

Fire Prevention & Protection Plan for Underground Construction  
Compressed Air Plan for Underground Construction  
Erection and Removal Plan for Formwork and Shoring  
PreCast Concrete Plan  
Lift-Slab Plans

Masonry Bracing Plan  
Steel Erection Plan  
Explosives Safety Site Plan (ESSP)  
Blasting Plan  
Dive Operations Plan

Safe Practices Manual for Diving Activities  
Emergency Management Plan for Diving  
Tree Felling/Maintenance Program  
Aircraft/Airfield Construction Safety & Phasing Plan (CSPP)  
Aircraft/Airfield Safety Plan Compliance Document (SPCD)

Site Safety and Health Plan (HTRW)  
Confined Space Entry Procedures  
Confined Space Program

b. Submit the APP to the Contracting Officer fifteen (15) calendar days prior to the date of the prework safety conference for acceptance. Work cannot proceed without an accepted APP. The Contracting Officer reviews and comments on the Contractor's submitted APP and accepts it when it meets the requirements of the contract provisions.

c. Acceptance is conditional and will be predicated on satisfactory performance during the construction. Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified. Work cannot proceed without an accepted APP.

d. Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and Construction Quality Control System Manager. Should any hazard become evident, stop work in the area, and secure the area. The project superintendent shall inform/notify the Contracting Officer within 12 hours of discovery, both verbally and in writing, and develop a plan for resolution as soon as possible to eliminate/ remove the hazard. In the interim, all necessary action shall be taken to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by [ASSP A10.34](#)), and the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

environment.

e. Copies of the accepted plan will be maintained at the Resident Engineer's office and at the contractor's job site office.

f. The APP shall be continuously reviewed and amended, as necessary, throughout the life of the contract. Unusual or high-hazard activities not identified in the original APP shall be incorporated in the plan as they are discovered.

#### 1.8 ACTIVITY HAZARD ANALYSIS (AHA)

a. The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1 as modified by the Louisville District, using CELRL Form 1259, current edition. Submit the AHA for review at least fifteen (15) calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP.

b. An AHA will be developed by the Contractor for every operation involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform work. In addition, AHA's are needed using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHA's will either be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer. The analysis must identify and evaluate hazards and outline the proposed methods and techniques for the safe completion of each phase of work. At a minimum, define activity being performed, sequence of work, specific safety and health hazards anticipated, control measures (to include personal protective equipment) to eliminate or reduce each hazard to acceptable levels, equipment to be used, inspection requirements, training requirements for all involved, and the competent person in charge of that phase of work. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls. For work with fall hazards, including fall hazards associated with scaffold erection and removal, identify the appropriate fall arrest systems. For work with materials handling equipment, address safeguarding measures related to materials handling equipment. For work requiring excavations, include requirements for safeguarding excavations.

c. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

d. The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

e. Activity hazard analyses shall be updated as necessary to provide an effective response to changing work conditions and activities. The on-site superintendent, site safety and health officer and competent persons used to develop the AHAs, including updates, shall sign and date the AHAs before they are implemented.

f. The activity hazard analyses shall be developed using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

contractor for submittal to the Contracting Officer.

#### 1.9 DISPLAY OF SAFETY INFORMATION

Within one (1) calendar day after commencement of work, erect a safety bulletin board at the job site. The safety bulletin board shall include information and be maintained as required by EM 385-1-1, Section 01.A.07.

#### 1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

#### 1.11 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

#### 1.12 REPORTS

Submit reports as their incidence occurs, in accordance with the requirements of this paragraph entitled, "Reports."

##### 1.12.1 Accident Reports

For recordable injuries and illnesses, and property damage accidents resulting in at least \$5,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the USACE Accident Report Form 3394 and provide the report to the Contracting Officer within five (5) calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

##### 1.12.2 Accident Notification

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$5,000, or any weight handling equipment accident. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

##### 1.12.3 Monthly Exposure Reports

Monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor.

##### 1.12.4 Regulatory Citations and Violations

Contact the Contracting Officer immediately of any OSHA or other regulatory agency inspection or visit, and provide the Contracting Officer with a copy

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

of each citation, report, and contractor response. Correct violations and citations promptly and provide written corrective actions to the Contracting Officer.

#### 1.12.5 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1 and as specified herein with Daily Reports of Inspections.

#### 1.12.6 Crane Certificate of Compliance

The Contractor shall provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). Certificate shall state that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance shall comply with 29 CFR 1926 and USACE EM 385-1-1 Section 16. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. The Contractor shall also certify that all of its crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices). These certifications shall be posted on the crane.

#### 1.12.7 Critical Lift Plan

Prior to performing Load Handling Equipment Critical Lifts, as identified in EM 385-1-1, a detailed Critical Lift Plan shall be developed and written by a competent person complying with all USACE requirements in EM 385-1-1. As part of the Critical Lift Plan, Proof of qualification for Crane Operators, lift supervisors and the rigger shall be submitted to the GDA.

#### 1.12.8 Confined Space Entry Permit

In accordance with 29 CFR 1910, 29 CFR 1915 and EM 385-1-1, prior to entering a permit required confined space, a confined space entry permit shall be completed, reviewed, processed, signed and maintained. The entry supervisor or manager shall be required to sign all permits daily before entry.

#### 1.13 HOT WORK PERMIT

Prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, a written Hot Work Permit shall be requested from the area, base, post or local fire district. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 60 minutes after completion of the task or as specified on the hot work permit.

When starting work in the facility, Contractors shall require their personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Division phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DIVISION IMMEDIATELY.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## PART 2 PRODUCTS NOT USED

## PART 3 EXECUTION

### 3.1 CONSTRUCTION AND/OR OTHER WORK

The Contractor shall comply with USACE EM 385-1-1, NFPA 241, the APP, the AHA, Federal and/or State OSHA regulations, and other related submittals and installation/activity fire and safety regulations. The most stringent standard shall prevail.

#### 3.1.1 Hazardous Material Use

Each hazardous material must receive approval prior to being brought onto the job site or prior to any other use in connection with this contract. Allow a minimum of ten (10) working days for processing of the request for use of a hazardous material.

#### 3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

#### 3.1.3 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos. If additional material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within fourteen (14) calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to FAR 52.243-4 - Changes and FAR 52.236-2 - Differing Site Conditions.

### 3.2 PRE-OUTAGE COORDINATION MEETING

Contractors are required to apply for utility outages at least fifteen (15) days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Special requirements for electrical outage requests are contained elsewhere in this specification section. Once approved, and prior to beginning work on the utility system requiring shut down, the Contractor shall attend a pre-outage coordination meeting with the Contracting Officer and the Installation representative to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.3 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

The Contractor shall establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. The program shall include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

#### 3.3.1 Training

The Contractor shall institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, the Contractor shall provide training for each employee who might be exposed to fall hazards. A competent person for fall protection shall provide the training. Training requirements shall be in accordance with USACE EM 385-1-1, Section 21.C.

#### 3.3.2 Fall Protection Equipment and Systems

The Contractor shall enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard or on a surface 6 feet or more above lower levels. Fall protection systems such as guardrails/toeboards, personnel fall arrest system, safety nets, etc., are required when working within 6 feet of any leading edge and employees shall be protected from fall hazards as specified in EM 385-1-1, Section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, Section 21. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with 29 CFR 1926.500, Subpart M, USACE EM 385-1-1 and ASSP A10.32.

##### 3.3.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ASSP Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed (6 feet). The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

#### 3.3.3 Fall Protection for Roofing Work

Fall protection controls shall be implemented based on the type of roof

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

being constructed and work being performed. The roof area to be accessed shall be evaluated for its structural integrity including weight-bearing capabilities for the projected loading.

a. Low Sloped Roofs:

(1) For work within (6 feet) of an edge, on low-slope roofs, personnel shall be protected from falling by use of personal fall arrest systems, guardrails, or safety nets.

(2) For work greater than (6 feet) from an edge, warning lines shall be erected and installed in accordance with 29 CFR 1926.500 and USACE EM 385-1-1.

b. Steep-Sloped Roofs: Work on steep-sloped roofs requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also includes residential or housing type construction.

3.3.4 Existing Anchorage

Existing anchorages, to be used for attachment of personal fall arrest equipment, shall be certified (or re-certified) by a qualified person for fall protection in accordance with ASSP Z359.1. Existing horizontal lifeline anchorages shall be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

3.3.5 Horizontal Lifelines

Horizontal lifelines shall be designed, installed, certified and used under the supervision of a qualified person for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 ( 29 CFR 1926.500).

3.3.6 Guardrails and Safety Nets

Guardrails and safety nets shall be designed, installed and used in accordance with EM 385-1-1 and 29 CFR 1926 Subpart M.

3.3.7 Rescue and Evacuation Procedures

When personal fall arrest systems are used, the contractor must ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. A Rescue and Evacuation Plan shall be prepared by the contractor and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. The Rescue and Evacuation Plan shall be included in the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan and the Accident Prevention Plan (APP).

3.4 SCAFFOLDING

Employees shall be provided with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access to scaffold platforms greater than 6 (six) feet in height shall be accessed by use of a scaffold stair

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

system. Vertical ladders commonly provided by scaffold system/tower manufacturers shall not be used for accessing scaffold platforms greater than 6 (six) feet in height. The use of an adequate gate is required. Contractor shall ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Special care shall be given to ensure scaffold systems are not overloaded. Side brackets, used to extend scaffold platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Work platforms shall be placed on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than 6 (six) feet. Delineate fall protection requirements when working above 6 (six) feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

#### 3.4.1 Stilts

The use of stilts in conjunction with scaffolds is prohibited. Stilts shall not be used for gaining additional height for construction, renovation, repair or maintenance work; see EM 385-1-1 for types of scaffolds where this requirement applies.

### 3.5 EQUIPMENT

#### 3.5.1 Material Handling Equipment

- a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
- b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
- c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

#### 3.6 Weight Handling Equipment

- a. Cranes and derricks shall be equipped as specified in EM 385-1-1, Section 16.
- b. The Contractor shall notify the Contracting Officer fifteen (15) days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.
- c. The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person (as defined in ASME B30.5). All testing shall be performed in accordance with the manufacturer's recommended procedures.
- d. The Contractor shall comply with ASME B30.5 for mobile and locomotive

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes, and ASME B30.8 for floating cranes and floating derricks.

e. Under no circumstance shall a Contractor make a lift at or above 85% of the cranes rated capacity in any configuration.

f. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 and ASME B30.5 or ASME B30.22 as applicable.

g. Crane suspended personnel work platforms (baskets) shall not be used unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Personnel shall not be lifted with a line hoist or friction crane.

h. Portable fire extinguishers shall be inspected, maintained, and recharged as specified in NFPA 10, Standard for Portable Fire Extinguishers.

i. All employees shall be kept clear of loads about to be lifted and of suspended loads.

j. The Contractor shall use cribbing when performing lifts on outriggers.

k. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

l. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.

m. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.

n. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

o. Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

p. Each load shall be rigged/attached independently to the hook/master-link in such a fashion that the load cannot slide or otherwise become detached. Multiple Lift Rigging (MLR aka "Christmas Tree Rigging") is not allowed unless it is for the purpose of erecting/placing structural steel ONLY.

q. The presence of Government personnel does not relieve the Contractor of an obligation to comply with all applicable safety regulations. The Government will investigate all complaints of unsafe or unhealthful working conditions received in writing from contractor employees, federal civilian employees, or military personnel.

### 3.7 EXCAVATIONS

The competent person shall perform soil classification in accordance with 29 CFR 1926.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.7.1 Utility Locations

Prior to digging, the appropriate digging permit must be obtained. All underground utilities in the work area must be positively identified by a private utility locating service in addition to any station locating service and coordinated with the station utility department. Any markings made during the utility investigation must be maintained throughout the contract.

### 3.7.2 Utility Location Verification

The Contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within 2 feet of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility the utility shall be exposed by hand digging every 100 feet if parallel within 5 feet of the excavation.

### 3.7.3 Shoring Systems

Trench and shoring systems must be identified in the accepted safety plan and AHA. Manufacture tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on-site for review. Job-made shoring or shielding shall have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electric underground cables.

### 3.7.4 Trenching Machinery

Trenching machines with digging chain drives shall be operated only when the spotters/laborers are in plain view of the operator. Operator and spotters/laborers shall be provided training on the hazards of the digging chain drives with emphasis on the distance that needs to be maintained when the digging chain is operating. Documentation of the training shall be kept on file at the project site.

## 3.8 UTILITIES WITHIN CONCRETE SLABS

Utilities located within concrete slabs or pier structures, bridges, and the like, are extremely difficult to identify due to the reinforcing steel used in the construction of these structures. Whenever contract work involves concrete chipping, saw cutting, or core drilling, the existing utility location must be coordinated with station utility departments in addition to a private locating service. Outages to isolate utility systems shall be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

## 3.9 ELECTRICAL

### 3.9.1 Conduct of Electrical Work

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA.

### 3.9.2 Portable Extension Cords

Portable extension cords shall be sized in accordance with manufacturer ratings for the tool to be powered and protected from damage. All damaged extension cords shall be immediately removed from service. Portable extension cords shall meet the requirements of NFPA 70.

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 42 00

### SOURCES FOR REFERENCE PUBLICATIONS

02/19

#### PART 1 GENERAL

##### 1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization (e.g., ASTM B564 Standard Specification for Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

##### 1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided.

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)  
1801 Alexander Bell Drive  
Reston, VA 20191  
Ph: 800-548-2723; 703-295-6300  
Internet: <https://www.asce.org/>

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING  
ENGINEERS (ASHRAE)  
1791 Tullie Circle, NE  
Atlanta, GA 30329  
Ph: 404-636-8400 or 800-527-4723  
Fax: 404-321-5478  
E-mail: [ashrae@ashrae.org](mailto:ashrae@ashrae.org)  
Internet: <https://www.ashrae.org/>

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)  
Two Park Avenue  
New York, NY 10016-5990  
Ph: 800-843-2763  
Fax: 973-882-1717  
E-mail: [customercare@asme.org](mailto:customercare@asme.org)  
Internet: <https://www.asme.org/>

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)  
520 N. Northwest Highway  
Park Ridge, IL 60068  
Ph: 847-699-2929  
E-mail: [customerservice@assp.org](mailto:customerservice@assp.org)  
Internet: <https://www.assp.org/>

AMERICAN WATER WORKS ASSOCIATION (AWWA)  
6666 W. Quincy Avenue

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Denver, CO 80235 USA  
Ph: 303-794-7711 or 800-926-7337  
Fax: 303-347-0804  
Internet: <https://www.awwa.org/>

ASSOCIATED AIR BALANCE COUNCIL (AABC)  
1220 19th St NW, Suite 410  
Washington, DC 20036  
Ph: 202-737-0202  
Fax: 202-315-0285  
E-mail: [info@aabc.com](mailto:info@aabc.com)  
Internet: <https://www.aabc.com/>

ASTM INTERNATIONAL (ASTM)  
100 Barr Harbor Drive, P.O. Box C700  
West Conshohocken, PA 19428-2959  
Ph: 610-832-9500  
Fax: 610-832-9555  
E-mail: [service@astm.org](mailto:service@astm.org)  
Internet: <https://www.astm.org/>

INTERNATIONAL CODE COUNCIL (ICC)  
500 New Jersey Avenue, NW  
6th Floor, Washington, DC 20001  
Ph: 800-786-4452 or 888-422-7233  
Fax: 202-783-2348  
E-mail: [order@iccsafe.org](mailto:order@iccsafe.org)  
Internet: <https://www.iccsafe.org/>

NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB)  
8575 Grovemont Circle  
Gaithersburg, MD 20877  
Ph: 301-977-3698  
Fax: 301-977-9589  
Internet: <http://www.nebb.org>

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)  
1 Batterymarch Park  
Quincy, MA 02169-7471  
Ph: 800-344-3555  
Fax: 800-593-6372  
Internet: <https://www.nfpa.org>

SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION  
(SMACNA)  
4201 Lafayette Center Drive  
Chantilly, VA 20151-1219  
Ph: 703-803-2980  
Fax: 703-803-3732  
Internet: <https://www.smacna.org/>

U.S. ARMY (DA)  
Army Publishing Directorate  
9301 Chapek Rd., Bldg 1458  
Fort Belvoir, VA 22060-5447  
Ph: 703-614-3727  
E-mail: [usarmy.pentagon.hqda-apd.mbx.customer-service@mail.mil](mailto:usarmy.pentagon.hqda-apd.mbx.customer-service@mail.mil)



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Internet: <https://armypubs.army.mil/>

U.S. ARMY CORPS OF ENGINEERS (USACE)

CRD-C DOCUMENTS available on Internet:

<http://www.wbdg.org/ffc/army-coe/standards>

Order Other Documents from:

Official Publications of the Headquarters, USACE

E-mail: [hqpublications@usace.army.mil](mailto:hqpublications@usace.army.mil)

Internet: <http://www.publications.usace.army.mil/>

or

<https://www.hnc.usace.army.mil/Missions/Engineering-Directorate/TECHINFO/>

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

1200 Pennsylvania Avenue, N.W.

Washington, DC 20004

Ph: 202-564-4700

Internet: <https://www.epa.gov>

--- Some EPA documents are available only from:

National Technical Information Service (NTIS)

5301 Shawnee Road

Alexandria, VA 22312

Ph: 703-605-6060 or 1-800-363-2068

Fax: 703-605-6880

TDD: 703-487-4639

E-mail: [info@ntis.gov](mailto:info@ntis.gov)

Internet: <https://www.ntis.gov/>

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

1200 New Jersey Ave., SE

Washington, DC 20590

Ph: 202-366-4000

E-mail: [ExecSecretariat.FHWA@dot.gov](mailto:ExecSecretariat.FHWA@dot.gov)

Internet: <https://www.fhwa.dot.gov/>

Order from:

Superintendent of Documents

U.S. Government Publishing Office (GPO)

732 N. Capitol Street, NW

Washington, DC 20401

Ph: 202-512-1800 or 866-512-1800

Bookstore: 202-512-0132

Internet: <https://www.gpo.gov/>

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

8601 Adelphi Road

College Park, MD 20740-6001

Ph: 866-272-6272

Internet: <https://www.archives.gov/>

Order documents from:

Superintendent of Documents

U.S. Government Publishing Office (GPO)

732 N. Capitol Street, NW

Washington, DC 20401

Ph: 202-512-1800 or 866-512-1800

Bookstore: 202-512-0132

Internet: <https://www.gpo.gov/>

## PART 2 PRODUCTS

Not used

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

PART 3 EXECUTION

Not used

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

SECTION 01 45 00.15 10

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)  
11/16, CHG 2: 08/19

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this section to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1

(2014) Safety -- Safety and Health  
Requirements Manual

1.2 MEASUREMENT AND PAYMENT

The work of this section is not measured for payment. The Contractor is responsible for the work of this section, without any direct compensation other than the payment received for contract items.

1.3 CONTRACT ADMINISTRATION

The Government will use the Resident Management System (RMS) to assist in its monitoring and administration of this contract. The Government accesses the system using the Government Mode of RMS (RMS GM) and the Contractor accesses the system using the Contractor Mode (RMS CM). The term RMS will be used in the remainder of this section for both RMS GM and RMS CM. The joint Government-Contractor use of RMS facilitates electronic exchange of information and overall management of the contract. The Contractor accesses RMS to record, maintain, input, track, and electronically share information with the Government throughout the contract period in the following areas:

- Administration
- Finances
- Quality Control
- Submittal Monitoring
- Scheduling
- Closeout
- Import/Export of Data

1.3.1 Correspondence and Electronic Communications

For ease and speed of communications, exchange correspondence and other documents in electronic format to the maximum extent feasible. Some correspondence, including pay requests and payrolls, are also to be provided in paper format with original signatures. Paper documents will govern, in the event of discrepancy with the electronic version.

1.3.2 Other Factors

Other portions of this document have a direct relationship to the reporting accomplished through RMS. Particular attention is directed to FAR

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

52.236-15 Schedules for Construction Contracts; FAR 52.232-27 Prompt Payment for Construction Contracts; FAR 52.232-5 Payments Under Fixed-Priced Construction Contracts; Section 01 32 01.00 10 PROJECT SCHEDULE; Section 01 33 00 SUBMITTAL PROCEDURES; Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS; and Section 01 45 00.00 10 QUALITY CONTROL.

#### 1.4 RMS SOFTWARE

RMS is a web based application. Download, install and be able to utilize the latest version of RMS within 7 calendar days of receipt of the Notice to Proceed. RMS software, user manuals, access and installation instructions, program updates and training information are available from the RMS website (<https://rms.usace.army.mil>). The Government and the Contractor will have different access authorities to the same contract database through RMS. The common database will be updated automatically each time a user finalizes an entry or change.

#### 1.5 CONTRACT DATABASE - GOVERNMENT

The Government will enter the basic contract award data in RMS prior to granting the Contractor access. The Government entries into RMS will generally be related to submittal reviews, correspondence status, and Quality Assurance(QA) comments, as well as other miscellaneous administrative information.

#### 1.6 CONTRACT DATABASE - CONTRACTOR

Contractor entries into RMS establish, maintain, and update data throughout the duration of the contract. Contractor entries generally include prime and subcontractor information, daily reports, submittals, RFI's, schedule updates and payment requests. RMS includes the ability to import attachments and export reports in many of the modules, including submittals. The Contractor responsibilities for entries in RMS typically include the following items:

##### 1.6.1 Administration

##### 1.6.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within 7 calendar days of receiving access to the contract in RMS. This includes, but is not limited to, Contractor's name, address, telephone numbers, management staff, and other required items.

##### 1.6.1.2 Subcontractor Information

Enter all missing subcontractor administrative data and information into RMS CM within 7 calendar days of receiving access to the contract in RMS or within 7 calendar days of the signing of the subcontractor agreement for agreements signed at a later date. This includes name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor is listed separately for each trade to be performed.

##### 1.6.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

with "H". Letters are numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C" or "RFP".

#### 1.6.1.4 Equipment

Enter and maintain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

#### 1.6.1.5 Reports

Track the status of the project utilizing the reports available in RMS. The value of these reports is reflective of the quality of the data input. These reports include the Progress Payment Request worksheet, Quality Control (QC) comments, Submittal Register Status, and Three-Phase Control worksheets.

#### 1.6.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response.

### 1.6.2 Finances

#### 1.6.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the project schedule. The sum of pay activities equals the total contract amount, including modifications. Each pay activity must be assigned to a Contract Line Item Number (CLIN). The sum of the activities assigned to a CLIN equals the amount of each CLIN.

#### 1.6.2.2 Payment Requests

Prepare all progress payment requests using RMS. Update the work completed under the contract at least monthly, measured as percent or as specific quantities. After the update, generate a payment request and prompt payment certification using RMS. Submit the signed prompt payment certification and payment request as well as supporting data either electronically or by hard copy. Unless waived by the Contracting Officer, a signed paper copy of the approved payment certification and request is also required and will govern in the event of discrepancy with the electronic version.

### 1.6.3 Quality Control (QC)

Enter and track implementation of the 3-phase QC Control System, QC testing, transferred and installed property and warranties in RMS. Prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements in RMS. Maintain all data on a daily basis. Insure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments of same within 7 calendar days of Government acceptance of the CQC Plan.

#### 1.6.3.1 Quality Control (QC) Reports

The Contractor's Quality Control (QC) Daily Report in RMS is the official

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

report. The Contractor can use other supplemental formats to record QC data, but information from any supplemental formats are to be consolidated and entered into the RMS QC Daily Report. Any supplemental information may be entered into RMS as an attachment to the report. QC Daily Reports must be finalized and signed in RMS within 24 hours after the date covered by the report. Provide the Government a printed signed copy of the QC Daily Report, unless waived by the Contracting Officer.

#### 1.6.3.2 Deficiency Tracking.

Use the QC Daily Report Module to enter and track deficiencies. Deficiencies identified and entered into RMS by the Contractor or the Government will be sequentially numbered with a QC or QA prefix for tracking purposes. Enter each deficiency into RMS the same day that the deficiency is identified. Monitor, track and resolve all QC and QA entered deficiencies. A deficiency is not considered to be corrected until the Government indicates concurrence in RMS.

#### 1.6.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS. Worksheets for the three-phase control meetings are generated within RMS.

#### 1.6.3.4 Labor and Equipment Hours

Enter labor and equipment exposure hours on a daily basis. Roll up the labor and equipment exposure data into a monthly exposure report.

#### 1.6.3.5 Accident/Safety Reporting

Both the Contractor and the Government enter safety related comments in RMS as a deficiency. The Contractor must monitor, track and show resolution for safety issues in the QC Daily Report area of the RMS QC Module. In addition, follow all reporting requirements for accidents and incidents as required in [EM 385-1-1](#), Section [01 35 26](#) GOVERNMENTAL SAFETY REQUIREMENTS and as required by any other applicable Federal, State or local agencies.

#### 1.6.3.6 Definable Features of Work

Enter each feature of work, as defined in the approved CQC Plan, into the RMS QC Module. A feature of work may be associated with a single or multiple pay activities, however a pay activity is only to be linked to a single feature of work.

#### 1.6.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager.

#### 1.6.4 Submittal Management

Enter all current submittal register data and information into RMS within 7 calendar days of receiving access to the contract in RMS. The information shown on the submittal register following the specification Section [01 33 00](#)

SUBMITTAL PROCEDURES will already be entered into the RMS database when access is granted. Group electronic submittal documents into transmittal packages to send to the Government, except very large electronic files, samples, spare parts, mock ups, color boards, or where hard copies are

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

specifically required. Track transmittals and update the submittal register in RMS on a daily basis throughout the duration of the contract. Submit hard copies of all submittals unless waived by the Contracting Officer.

#### 1.6.5 Schedule

Enter and update the contract project schedule in RMS by either manually entering all schedule data or by importing the Standard Data Exchange Format (SDEF) file, based on the requirements in Section 01 32 01.00 13 PROJECT SCHEDULE.

#### 1.6.6 Closeout

Closeout documents, processes and forms are managed and tracked in RMS by both the Contractor and the Government. Ensure that all closeout documents are entered, completed and documented within RMS.

### 1.7 IMPLEMENTATION

Use of RMS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain contract data within the RMS system. RMS is an integral part of the Contractor's required management of quality control.

### 1.8 NOTIFICATION OF NONCOMPLIANCE

Take corrective action within 7 calendar days after receipt of notice of RMS non-compliance by the Contracting Officer.

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

Not Used

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 45 04.10 06

CONTRACTOR QUALITY CONTROL  
04/20

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

## ASTM INTERNATIONAL (ASTM)

ASTM D3740 (2019) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E329 (2018) Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

## 1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

## 1.3 SUBMITTALS

Government approval/acceptance is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval, or for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with LRL Section 01 33 00 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

## Construction Quality Control Plan; G, RO

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with FAR 52.246-12 - Inspection of Construction. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all design and construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 (DQCP) NOT USED

3.3 CONSTRUCTION QUALITY CONTROL PLAN (CQCP)

The Contractor shall furnish for review by the Government, not later than thirty (30) days after receipt of notice to proceed, the Contractor Construction Quality Control (CQC) Plan proposed to implement the requirements of FAR 52.246-12 - Inspection of Construction. The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first thirty (30) days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.3.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to someone higher in the Contractor's organization than the project superintendent, shall not be the superintendent.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with LRL Section 01 33 00 SUBMITTAL

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### PROCEDURES.

- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)
- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

#### 3.3.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

#### 3.3.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

#### 3.4 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of thirty (30) calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

#### 3.4.1 Subcontractor CQC Orientation

Before a Subcontractor begins work on the jobsite, the CQC System Manager will train the Subcontractor and answer any questions pertaining to quality control operations. This requirement is waived only if a Subcontractor attended the initial coordination meeting described above. A record of the orientation shall be documented in the QC Report.

### 3.5 CONSTRUCTION QUALITY CONTROL ORGANIZATION

#### 3.5.1 Personnel Requirements

a. The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. A Site Safety Health Officer (SSHO) will be required for this contract. See LRL Section 01 35 26.00 06 GOVERNMENT SAFETY REQUIREMENTS for the SSHO qualifications and duties.

b. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC, and safety/health organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times and made available to the SSHO, except as otherwise acceptable to the Contracting Officer.

#### 3.5.2 CQC System Manager Qualifications and Duties

a. The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a graduate engineer graduate architect, or a graduate of construction management, with a minimum of five (5) years construction experience on construction similar to this contract, or a construction person with a minimum of ten (10) years in related quality management work.

b. This CQC System Manager shall be employed by the Prime Contractor and be on the site at all times during construction. Alternate(s) for the CQC System Manager shall be identified in the CQC Plan to serve in the event of the CQC System Manager's absence. The requirements for the alternates shall be the same as for the designated CQC System Manager.

c. The CQC System Manager shall be:

assigned no other duties except being the CQC System Manager. Shall not be the SSHO or the superintendent.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.5.3 CQC Personnel

a. NOT USED

b. In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas identified per Experience Matrix Table. These individuals may be employees of the prime or subcontractor. These individuals identified per the Experience Matrix Table, shall be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals in the Experience Matrix Table shall have no other duties other than quality control.

c. The word "graduate" below indicates an individual possessing a four-year college degree accredited in the respective field listed-with experience obtained following graduation in the type of work being performed on the project.

Experience Matrix Table

<u>AREA</u>		<u>QUALIFICATIONS</u>
a.	NOT USED	NOT USED
b.	Civil	Graduate Civil Engineer with 2 years related experience or person with 5 yrs related experience
c.	Geotechnical	Graduate Geotechnical Engineer or Civil Engineer specializing in Geotechnical Engineering with 3 yrs relevant experience or Engineering Technician, working under the direction of a Licensed Professional Engineer, with 5 yrs relevant experience
d.	Mechanical	Graduate Mechanical Engineer with 2 yrs related experience or person with 5 yrs related experience
e.	Electrical	Graduate Electrical Engineer with 2 yrs related experience or person with 5 yrs related experience
f.	Structural	Graduate Structural Engineer with 2 yrs related experience or person with 5 yrs related experience
g.	Architectural	Graduate Architect with 2 yrs related experience or person with 5 yrs related experience
h.	Environmental	Graduate Environmental Engineer with 3 yrs related experience

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

<u>AREA</u>		<u>QUALIFICATIONS</u>
a.	NOT USED	NOT USED
i.	LEED-AP BD+C	LEED Accredited by GBCI (Green Building Certification Institute)
j.	Submittals	Submittal Clerk with 1yr experience
k.	NOT USED	NOT USED
l.	Concrete, Pavements and Soils	Civil Engineer identified in item B or C above, and supplemented with the Corps validated QC testing laboratory
m.	Kitchen Equipment Specialist	Must have 5 years minimum experience in the installation of commercial kitchen
n.	IT/Communications	BICSI Certified RCDD Registered Communication Distribution Designer)with 2 yrs related experience
o.	Roofing	RCI Registered Roof Observer

#### 3.5.3.1 Registered Roof Observer

a. The Contractor shall hire an independent RCI Registered Roof Observer (RRO) to perform roof installation quality control during the course of this contract. The independent RRO shall not be employed by the prime contractor but shall be subcontracted and responsible for reporting conditions simultaneously to the Government and the Contractor. The RRO shall be on site for the duration of the roofing operations. The Registered Roof Observers will perform daily oversight and quality control on all roof work to assure compliance with the projects plans and specifications.

b. The Government will supply the format of the daily report file which is intended to supplement the daily QC report instead of replacing same. The RRO shall provide daily reports per CQC requirements, number of squares of roof places and the contractors compliance with specifications and details. The RRO shall take daily color photographs (a minimum 24 photos total for the project) of every type of activity performed that shall include (but not limited to) insulation attachment, application of roofing membrane and flashings, sheet metal installation, kettle operation, material storage/handling and compliance with safety requirements. Photos may be digital but one hard color copy shall be made daily and kept on site.

#### 3.5.3.2 RRO COMMUNICATION WITH THE GOVERNMENT

The Registered Roof Observer shall submit all plans, schedules, reports, and documentation directly to the Contracting Officer's Representative concurrent with submission to the CQC System Manager. The RRO shall have

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

direct communication with the Contracting Officer's Representative regarding all elements of the roofing installation process.

#### 3.5.4 Additional Requirement

In addition to the above experience and/or education requirements the CQC System Manager and Alternate(s) shall have completed and passed the course entitled "Construction Quality Management For Contractors" within the last 5 years. A copy of the certification shall be provided with the CQCP. This course is periodically offered by the Associated Builders and Constructors, Inc., or Associated General Contractor, Inc., and the U.S. Army Corps of Engineers.

#### 3.5.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

#### 3.6 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in LRL Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements. When LRL Section 01 46 00.00 06 TOTAL BUILDING COMMISSIONING is included in the contract, the submittals required by those sections shall be coordinated with LRL Section 01 33 00 SUBMITTAL PROCEDURES to ensure adequate time is allowed for each type of submittal required.

#### 3.7 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

##### 3.7.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- d. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- e. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- f. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- g. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- h. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- i. Resolve all differences.
- j. Discussion of the initial control phase.
- k. Review of provisions that have been made to provide required control inspection and testing.
- l. Review of the CQC plan, specifically its organization chart and delegation letters. Insure all required members of the CQC organization for this feature of work are qualified, have been appointed, accepted and have requisite authority delegated.
- m. The Government shall be notified at least 24 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

### 3.7.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

safety plan and activity hazard analysis. Review the activity analysis with each worker.

- f. The Government shall be notified at least 72 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

### 3.7.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

### 3.7.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

## 3.8 TESTS

### 3.8.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. For QC testing of construction materials including soil, rock, aggregate, asphalt, concrete, and steel, the Contractor shall procure the services of a Corps of Engineers (COE) validated testing laboratory or establish a COE validated testing laboratory at the project site. Technical specifications included in the contract that require materials testing by an approved commercial testing laboratory shall be intended to mean by a COE validated laboratory. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

system, including all of the test documentation requirements, have been prepared.

- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

### 3.8.2 Testing Laboratories

#### 3.8.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in [ASTM D3740](#) and [ASTM E329](#).

#### 3.8.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$1,375.00 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

#### 3.8.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

#### 3.8.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the following address:

For delivery by mail:

Geotechnical & Structures Laboratory  
Material Testing Center (GS-E)  
U.S. Army Engineer Research and Development Center  
3909 Halls Ferry Road  
Vicksburg, MS 39180-6199

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.9 COMPLETION INSPECTION

#### 3.9.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the FAR 52.211-10 - Commencement, Prosecution, and Completion of Work, or by the specifications, the CQC System Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

#### 3.9.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

#### 3.9.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least fourteen (14) days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with FAR 52.246-12 - Inspection of Construction.

### 3.10 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.
- k. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report. All calendar days shall be accounted for throughout the life of the contract. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.
- l. Deficiency Tracking System. The Contractor shall maintain a cumulative list of deficiencies identified for the duration of the project. Deficiencies to be listed include those failures, Government oral observations and Notifications of Noncompliance. The list shall be maintained at the project site. Copies of updated listings shall be submitted to the Government at least every thirty (30) days.

### 3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 45 35

### SPECIAL INSPECTIONS

11/20

#### PART 1 GENERAL

##### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7-16

(2017; Errata 2018; Supp 1 2018) Minimum  
Design Loads and Associated Criteria for  
Buildings and Other Structures

INTERNATIONAL CODE COUNCIL (ICC)

ICC IBC

(2018) International Building Code

##### 1.2 GENERAL REQUIREMENTS

Perform Special Inspections in accordance with the Statement of Special Inspections, Schedule of Special Inspections and Chapter 17 of ICC IBC. The Statement of Special Inspections and Schedule of Special Inspections are included as an attachment to this specification. Special Inspections are to be performed by an independent third party and are intended to ensure that the work of the Prime Contractor is in accordance with the Contract Documents and applicable building codes. Special inspections do not take the place of the three phases of control inspections performed by the Contractor's QC Manager or any testing and inspections required by other sections of the specifications.

##### 1.3 DEFINITIONS

###### 1.3.1 Continuous Special Inspections

Continuous Special Inspections is the constant monitoring of specific tasks by a special inspector. These inspections must be carried out continuously over the duration of the particular tasks.

###### 1.3.2 Perform

Perform these Special Inspections tasks for each welded joint or member.

###### 1.3.3 Observe

Observe these Special Inspections items on a periodic daily basis. Operations need not be delayed pending these inspections.

###### 1.3.4 Special Inspector (SI)

A qualified person retained by the Contractor and approved by the Contracting Officer as having the competence necessary to inspect a particular type of construction requiring Special Inspections. The SI must

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

be an independent third party hired directly by the Prime Contractor.

#### 1.3.5 Associate Special Inspector (ASI)

A qualified person who assists the SI in performing Special Inspections but must perform inspection under the direct supervision of the SI and cannot perform inspections without the SI on site.

#### 1.3.6 Third Party

A Special inspector must not be an employee of the Contractor or of any Sub-Contractor performing the work to be inspected.

#### 1.3.7 Contracting Officer

The Government official having overall authority for administrative contracting actions. Certain contracting actions may be delegated to the Contracting Officer's Representative (COR).

#### 1.3.8 Contractor's Quality Control (QC) Manager

An individual retained by the Prime Contractor and qualified in accordance with the Section 01 45 04.10 06. Contractor having the overall responsibility for the Contractor's QC organization.

#### 1.3.9 Structural Engineer of Record (SER)

A registered design professional contracted by the Government as an A/E responsible for the overall design and review of submittal documents prepared by others. The SER is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws in the state in which the design professional works. The SER is also referred to as the Engineer of Record (EOR) in design code documents.

#### 1.3.10 Statement of Special Inspections (SSI)

A document developed by the SER identifying the material, systems, components and work required to have Special Inspections. This statement is included at the end of this specification.

#### 1.3.11 Schedule of Special Inspections (SSI)

A schedule which lists each of the required Special Inspections, the extent to which each Special Inspection is to be performed, and the required frequency for each in accordance with ICC IBC Chapter 17. This schedule is included at the end of this specification.

#### 1.3.12 Designated Seismic Systems (DSS)

Those nonstructural components that require design in accordance with ASCE 7-16 Chapter 13 and for which the component importance factor,  $I_p$ , is greater than 1.0. This designation applies to systems that are required to be operational following the Design Earthquake for RC I - IV structures and following the MCER for RC V structures. All systems in RC V facilities designated as MC-1 in accordance with UFC 3-301-02 are considered part of the Designated Seismic Systems. Designated Seismic Systems will have an Importance Factor  $I_p = 1.5$ .

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.3.13 Definable Feature of Work (DFOW)

An inspection group that is separate and distinct from other inspection groups, having inspection requirements or inspectors that are unique.

#### 1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Special Inspections Agency's [Written NDT Practices](#) with method and evidence of regular equipment calibration where applicable

##### SD-06 Test Reports

Special Inspections [Daily Reports](#)

Special Inspections [Biweekly Reports](#)

##### SD-07 Certificates

[AISC Certified Steel Fabricator](#)

[Steel Joist Institute Membership](#)

[Certificate of Compliance](#)

[Special Inspector Qualifications](#); G

[Qualification Records](#) for NDT technicians

##### SD-11 Closeout Submittals

[Interim Report](#) of Special Inspections for Each DFOW; G

[Comprehensive Final Report](#) of Special Inspections; G

#### 1.5 SPECIAL INSPECTOR QUALIFICATIONS

Submit qualifications for each [special inspector](#).

##### 1.5.1 Steel Construction and High Strength Bolting

###### 1.5.1.1 Special Inspector

- a. ICC Structural Steel and Bolting Special Inspector certificate with one year of related experience, or
- b. Registered Professional Engineer with three years of related experience

###### 1.5.1.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 1.5.2 Welding Structural Steel

#### 1.5.2.1 Special Inspector

- a. ICC Structural Welding Special Inspector certificate with one year of related experience, or
- b. AWS Certified Welding Inspector

#### 1.5.2.2 Associate Special Inspector

AWS Certified Associate Welding Inspector

### 1.5.3 Nondestructive Testing of Welds

#### 1.5.3.1 Special Inspector

NDT Level III Certificate

#### 1.5.3.2 Associate Special Inspector

NDT Level II Certificate plus one year of related experience

### 1.5.4 Cold Formed Steel Framing

#### 1.5.4.1 Special Inspector

- a. ICC Structural Steel and Bolting Special Inspector certificate with one year of related experience, or
- b. ICC Commercial Building Inspector with one year of experience, or
- c. ICC Residential Building Inspector with one year of experience, or
- d. Registered Professional Engineer with three years related experience

#### 1.5.4.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

### 1.5.5 Concrete Construction

#### 1.5.5.1 Special Inspector

- a. ICC Reinforced Concrete Special Inspector Certificate with one year of related experience, or
- b. ACI Concrete Construction Special Inspector, or
- c. Registered Professional Engineer with three years of related experience

#### 1.5.5.2 Associate Special Inspector

- a. ACI Concrete Construction Special Inspector in Training, or
- b. Engineer-In-Training with one year of related experience



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.5.6 Prestressed Concrete Construction

##### 1.5.6.1 Special Inspector

- a. ICC Pre-stressed Special Inspector Certificate with one year of related experience, or
- b. PCI Quality Control Technician/ Inspector Level II Certificate with one year of related experience, or
- c. Registered Professional Engineer with three years of related experience

##### 1.5.6.2 Associate Special Inspector

- a. PCI Quality Control Technician/ Inspector Level I Certificate with one year of related experience, or
- b. Engineer-In-Training with one year of related experience

#### 1.5.7 Post-tensioned Concrete Construction

##### 1.5.7.1 Special Inspector

- a. PTI Level 2 Unbonded PT Inspector Certificate, or
- b. Registered Professional Engineer with three years of related experience

##### 1.5.7.2 Associate Special Inspector

- a. PTI Level 1 Unbonded PT Inspector Certificate with one year of related experience, or
- b. Engineer-In-Training with one year of related experience

#### 1.5.8 Masonry Construction

##### 1.5.8.1 Special Inspector

- a. ICC Structural Masonry Special Inspector Certificate with one year of related experience, or
- b. Registered Professional Engineer with three years of related experience

##### 1.5.8.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

#### 1.5.9 Wood

##### 1.5.9.1 Special Inspector

- a. ICC Commercial Building Inspector Certificate with one year of related experience, or
- b. ICC Residential Building Inspector with one year of experience, or
- c. Registered Professional Engineer with three years of related experience

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

1.5.9.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.10 Verification of Site Soil Condition, Fill Placement and Load-Bearing Requirements

1.5.10.1 Special Inspector

- a. ICC Soils Special Inspector Certificate with one year of related experience, or
- b. NICET Soils Technician Level II Certificate in Construction Material Testing, or
- c. Geologist-In-Training with three years of related experience, or
- d. Registered Professional Engineer with three years of related experience

1.5.10.2 Associate Special Inspector

- a. NICET Soils Technician Level I Certificate in Construction Material Testing with one year of related experience, or
- b. Engineer-In-Training with one year of related experience

1.5.11 Deep Foundations

1.5.11.1 Special Inspector

- a. NICET Soils Technician Level II Certificate in Construction Material Testing, or
- b. Geologist-In-Training with three years of related experience, or
- c. Registered Professional Engineer with three years of related experience

1.5.11.2 Associate Special Inspector

- a. NICET Soils Technician Level I Certificate in Construction Material Testing with one year of related experience, or
- b. NICET Geotechnical Engineering Technician Level I Construction or Generalist Certificate with one year of related experience, or
- c. Engineer-In-Training with one year of related experience

1.5.12 Sprayed Fire Resistant Material

1.5.12.1 Special Inspector

- a. ICC Spray-applied Fireproofing Special Inspector Certificate, or
- b. ICC Fire Inspector I Certificate with one year of related experience, or
- c. Registered Professional Engineer or Architect with related experience

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

1.5.12.2 Associate Special Inspector

Engineer-In-Training with one year of related experience

1.5.13 Mastic and Intumescent Fire Resistant Coatings

1.5.13.1 Special Inspector

- a. ICC Spray-applied Fireproofing Special Inspector Certificate, or
- b. ICC Fire Inspector I Certificate with one year of related experience, or
- c. Registered Professional Engineer or Architect with related experience

1.5.13.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.14 Exterior Insulation and Finish System (EIFS)

1.5.14.1 Special Inspector

- a. AWCI EIFS Inspector Certificate, or
- b. Exterior Design Institute Certificate, or
- c. Registered Professional Engineer or Architect with related experience

1.5.14.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.15 Fire-Resistant Penetrations and Joints

1.5.15.1 Special Inspector

- a. Passed the UL Firestop Exam with one year of related experience, or
- b. Passed the FM Firestop Exam with one year of related experience, or
- c. Registered Professional Engineer with related experience

1.5.15.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.16 Smoke Control

1.5.16.1 Special Inspector

- a. AABC Technician Certification with one year of related experience, or
- b. Registered Professional Engineer with related experience

1.5.16.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## PART 2 PRODUCTS

### 2.1 FABRICATOR SPECIAL INSPECTIONS

Special Inspections of fabricator's work performed in the fabricator's shop is required to be inspected in accordance with the Statement of Special Inspections and the Schedule of Special Inspections unless the fabricator is certified by the approved agency to perform such work without Special Inspections. Submit the following certifications to the Contracting Officer for information to allow work performed in the fabricator's shop to not be subjected to Special Inspections.

[AISC Certified Steel Fabricator.](#)

[Steel Joist Institute Membership](#)

At the completion of fabrication, submit a [certificate of compliance](#), to be included with the comprehensive final report of Special Inspections, stating that the materials supplied and work performed by the fabricator are in accordance with the construction documents.

## PART 3 EXECUTION

### 3.1 RESPONSIBILITIES

#### 3.1.1 Quality Control Manager

- a. Supervise all Special Inspectors required by the Contract Documents and the IBC.
- b. Verify the qualifications of all of the Special Inspectors.
- c. Verify the qualifications of fabricators.
- d. Maintain a 3-ring binder for the Special Inspector's daily and [biweekly reports](#). This file must be located in a conspicuous place in the project trailer/office to allow review by the Contracting Officer and the SER.
- e. Maintain a rework items list that includes discrepancies noted on the Special Inspectors daily report.

#### 3.1.2 Special Inspectors

- a. Inspect all elements of the project for which the special inspector is qualified to inspect and are identified in the Schedule of Special Inspections.
- b. Attend preparatory phase meetings related to the Definable Feature of Work (DFOW) for which the special inspector is qualified to inspect.
- c. Submit Special Inspections agency's [written NDT practices](#) for the monitoring and control of the agency's operations to include the following:
  - (1) The agency's procedures for the selection and administration of inspection personnel, describing the training, experience and examination requirements for qualifications and certification of inspection personnel.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- (2) The agency's inspection procedures, including general inspection, material controls, and visual welding inspection.
- d. Submit [qualification records](#) for nondestructive testing (NDT) technicians designated for the project.
- e. Submit NDT procedures and equipment calibration records for NDT to be performed and equipment to be used for the project.
- f. Submit a copy of the [daily reports](#) to the QC Manager.
- g. Report discrepancies that are observed during Special Inspections to the QC Manager for correction. If discrepancies are not corrected before the special inspector leaves the site the observed discrepancies must be documented in the daily report.
- h. Submit a biweekly Special Inspection Report until all inspections are complete. A report is required for each biweekly period in which Special Inspections activity occurs, and must include the following:
  - (1) A brief summary of the work performed during the reporting time frame.
  - (2) Changes and discrepancies with the drawings, specifications and mechanical or electrical component certification, that were observed during the reporting period.
  - (3) Discrepancies which were resolved or corrected.
  - (4) A list of nonconforming items requiring resolution.
  - (5) All applicable test result including nondestructive testing reports.
- i. At the completion of each DFOW requiring Special Inspections, submit an [interim report](#) of Special Inspections that documents the Special Inspections completed for that DFOW. Identify the inspector responsible for each item inspected and corrections of all discrepancies noted in the daily reports. The interim report of Special Inspections must be signed, dated and indicate the certification of the special inspector qualifying them to conduct the inspection.
- j. At the completion of the project submit a [comprehensive final report](#) of Special Inspections that documents the Special Inspections completed for the project and corrections of all discrepancies noted in the daily reports. The comprehensive final report of Special Inspections must be signed, dated and indicate the certification of the special inspector qualifying them to conduct the inspection.

### 3.2 DEFECTIVE WORK

Check work as it progresses, but failure to detect any defective work or materials must in no way prevent later rejection if defective work or materials are discovered, nor obligate the Contracting Officer to accept such work.

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SCHEDULE OF SPECIAL INSPECTIONS

Reference UFGS 01 45 35 for all requirements not noted as part of this schedule.

### **INSPECTION DEFINITIONS:**

- PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and noted verification.
- OBSERVE:** Observe these items randomly during the course of each work day to ensure that applicable requirements are being met. Operations need not be delayed pending these inspections at contractor's risk.
- DOCUMENT:** Document, with a report, that the work has been performed in accordance with the contract documents. This is in addition to any other reports required in the Special Inspections guide specification.
- CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

---

The Seismic Design Category for this project is: ☐ A, ☐ B, ☐ C, ☒ D, ☐ E, ☐ F (check appropriate box)

**STRUCTURAL - STEEL – WELDING SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

STEEL INSPECTION <u>PRIOR TO WELDING</u> – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Table C-N5.4-1		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Verify that the welding procedures specification (WPS) is available	<b>PERFORM</b>	
2. Verify manufacturer certifications for welding consumables are available	<b>PERFORM</b>	
3. Verify material identification	<b>PERFORM</b>	Type and grade.
4. Welder Identification System	<b>PERFORM</b>	The fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. Stamps, if used, shall be the low-stress type.
5. Fit-up of groove welds (including joint geometry)	OBSERVE	<ul style="list-style-type: none"> <li>✓ Joint preparation</li> <li>✓ Dimensions (alignment, root opening, root face, bevel)</li> <li>✓ Cleanliness (condition of steel surfaces)</li> <li>✓ Tacking (tack weld quality and location)</li> <li>✓ Backing type and fit (if applicable)</li> </ul>
6. Configuration and finish of access holes	OBSERVE	
7. Fit-up of fillet welds	OBSERVE	<ul style="list-style-type: none"> <li>✓ Dimensions (alignment, gaps at root)</li> <li>✓ Cleanliness (condition of steel surfaces)</li> <li>✓ Tacking (tack weld quality and location)</li> </ul>
STEEL INSPECTION <u>DURING WELDING</u> – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Table C-N5.4-2		
TASK	INSPECTION TYPE	DESCRIPTION
8. Use of qualified welders	<b>PERFORM</b>	Welding by welders, welding operators, and tack welders who are qualified in conformance with requirements.
9. Control and handling of welding consumables	OBSERVE	<ul style="list-style-type: none"> <li>✓ Packaging</li> <li>✓ Electrode atmospheric exposure control</li> </ul>
10. No welding over cracked tack welds	OBSERVE	
11. Environmental conditions	OBSERVE	<ul style="list-style-type: none"> <li>✓ Wind speed within limits</li> <li>✓ Precipitation and temperature</li> </ul>
12. Welding Procedures Specification followed	OBSERVE	<ul style="list-style-type: none"> <li>✓ Settings on welding equipment</li> <li>✓ Travel speed</li> <li>✓ Selected welding materials</li> <li>✓ Shielding gas type/flow rate</li> <li>✓ Preheat applied</li> <li>✓ Interpass temperature maintained (min./max.)</li> <li>✓ Proper position (F, V, H, OH)</li> <li>✓ Intermix of filler metals avoided</li> </ul>
13. Welding techniques	OBSERVE	<ul style="list-style-type: none"> <li>✓ Interpass and final cleaning</li> <li>✓ Each pass within profile limitations</li> <li>✓ Each pass meets quality requirements</li> </ul>

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.

**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.



**STRUCTURAL - STEEL – WELDING SECTION (CONTINUED)**

STEEL INSPECTION AFTER WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Table C-N5.4-3		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
14. Welds cleaned	OBSERVE	
15. Size, length, and location of all welds	<b>PERFORM</b>	Size, length, and location of all welds conform to the requirements of the detail drawings.
16. Welds meet visual acceptance criteria	<b>PERFORM AND DOCUMENT</b>	<ul style="list-style-type: none"> <li>✓ Crack prohibition</li> <li>✓ Weld/base-metal fusion</li> <li>✓ Crater cross section</li> <li>✓ Weld profiles</li> <li>✓ Weld size</li> <li>✓ Undercut</li> <li>✓ Porosity</li> </ul>
17. Arc strikes	<b>PERFORM</b>	
18. k-area	<b>PERFORM</b>	When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks. (AISC 360 – Table N5.4-3)
19. Backing removed, weld tabs removed and finished, and fillet welds added where required	<b>PERFORM</b>	
20. Repair activities	<b>PERFORM AND DOCUMENT</b>	
21. Document acceptance or rejection of welded joint or member	<b>PERFORM</b>	

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**STRUCTURAL - STEEL – BOLTING SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

STEEL INSPECTION TASKS PRIOR TO BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Table C-N5.6-1		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Manufacture's certifications available for fastener materials	<b>PERFORM</b>	
2. Fasteners marked in accordance with ASTM requirements	OBSERVE	
3. Proper fasteners selected for joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	OBSERVE	
4. Proper bolting procedure selected for joint detail	OBSERVE	
5. Connecting elements, including appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	OBSERVE	
6. Proper storage provided for bolts, nuts, washers, and other fastener components	OBSERVE	
STEEL INSPECTION TASKS DURING BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Table C-N5.6-2		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
7. Fastener assemblies of suitable condition, placed in all holes and washers (if required) are positioned as required	OBSERVE	
8. Joint brought to the snug-tight condition prior to pretensioning operation	OBSERVE	
9. Fastener component not turned by the wrench prevented from rotating	OBSERVE	
10. Bolts are pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid point toward the free edges	OBSERVE	
STEEL INSPECTION TASKS AFTER BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC 1705.2.1, AISC 360-10: Table C-N5.6-3		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
11. Document acceptance or rejection of all bolted connections	<b>DOCUMENT</b>	

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**STRUCTURAL - STEEL - NON DESTRUCTIVE TESTING SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

NONDESTRUCTIVE TESTING OF WELDED JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Section N5.5		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Use of qualified nondestructive testing personnel	<b>PERFORM</b>	Visual weld inspection and nondestructive testing (NDT) shall be conducted by personnel qualified in accordance with AWS D1.8 clause 7.2
2. Welded joints subject to fatigue	OBSERVE	Dye penetrant testing (DT) and Ultrasonic testing (UT) shall be performed on 100% of welded joints identified on contract drawings as being subject to fatigue.
3. Weld tab removal sites	OBSERVE	At the end of welds where weld tabs have been removed, magnetic particle testing shall be performed on the same beam-to-column joints receiving UT

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**STRUCTURAL - STEEL – AISC 341 REQUIREMENTS (SEISMIC PROVISIONS) SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

NONDESTRUCTIVE TESTING OF WELDED JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 341-16: Section J6.2		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
4. CJP groove welds	OBSERVE	Dye penetrant testing (DT) and ultrasonic testing (UT) shall be performed on 100% of CJP groove welds for materials greater than 5/16" thick (8mm).
5. Beam cope and access hole.	OBSERVE	At welded splices and connections, thermally cut surfaces of beam copes and access holes shall be tested using magnetic particle testing (MT) or dye penetrant testing (DT), when the flange thickness exceeds 1 1/2 in. for rolled shapes, or when the web thickness exceeds 1 1/2 in. for built-up shapes.
6. K-area NDT (AISC 341)	PERFORM	Where welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, the web shall be tested for cracks using magnetic particle testing (MT). The MT inspection area shall include the k-area base metal within 3-inches of the weld. The MT shall be performed no sooner than 48 hours following completion of the welding.
7. Placement of reinforcing or contouring fillet welds	DOCUMENT	

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**STRUCTURAL - STEEL - COMPOSITE CONSTRUCTION <sup>1</sup>****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

COMPOSITE CONSTRUCTION PRIOR TO PLACING CONCRETE – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 360-16: Table N6.1, AISC 341-16: Table J9.1		
TASK	INSPECTION TYPE <sup>2</sup>	DESCRIPTION
1. Placement and installation of steel headed stud anchors	<b>PERFORM</b>	
2. Material identification of reinforcing steel (Type/Grade)	OBSERVE	
3. Determination of carbon equivalent for reinforcing steel other than ASTM A706	OBSERVE	
4. Proper reinforcing steel size, spacing, clearances, support, and orientation	OBSERVE	
5. Reinforcing steel has not been re-bent in the field	OBSERVE	
6. Reinforcing clearances have been provided	OBSERVE	
7. Reinforcing steel has been tied and supported as required	OBSERVE	
8. Composite member has required size	OBSERVE	

**END SECTION****STRUCTURAL - STEEL - OTHER INSPECTIONS****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

OTHER STEEL INSPECTIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.2.1, AISC 341-16: Tables J8.1 & J10.1		
TASK	INSPECTION TYPE <sup>2</sup>	DESCRIPTION
1. Anchor rods and other embedments supporting structural steel	<b>PERFORM</b>	Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement of concrete.
2. Fabricated steel or erected steel frame	OBSERVE	Verify compliance with the details shown on the construction documents, such as braces, stiffeners, member locations and proper application of joint details at each connection.
3. Reduced beam sections (RBS) where/if occurs	<b>DOCUMENT</b>	✓ Contour and finish ✓ Dimensional tolerances
4. Protected zones	<b>DOCUMENT</b>	No holes or unapproved attachments made by fabricator or erector
5. H-piles where/if occurs	<b>DOCUMENT</b>	No holes or unapproved attachments made by the responsible contractor

**END SECTION**<sup>1</sup> See Concrete Construction Section for all concrete related inspection of composite steel construction.

<sup>2</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**STRUCTURAL - COLD-FORMED METAL DECK - PLACEMENT SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

METAL DECK INSPECTION <u>PRIOR TO</u> DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.1		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Verify compliance of materials (deck and all deck accessories) with construction documents, including profiles, material properties, and base metal thickness	<b>PERFORM</b>	
2. Document acceptance or rejection of deck and deck accessories	<b>DOCUMENT</b>	
METAL DECK INSPECTION <u>DURING</u> DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.2		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
3. Verify compliance of deck and all deck accessories installation with construction documents	<b>PERFORM</b>	
4. Verify deck materials are represented by the mill certifications that comply with the construction documents	<b>PERFORM</b>	
5. Document acceptance or rejection of installation of deck and deck accessories	<b>DOCUMENT</b>	
METAL DECK INSPECTION <u>AFTER</u> DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.3		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
6. Welding procedure specification (WPS) available	<b>PERFORM</b>	
7. Manufactures certifications for welding consumables available	OBSERVE	
8. Material identification (type/grade)	OBSERVE	
9. Check welding equipment	OBSERVE	

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**STRUCTURAL - COLD-FORMED METAL DECK – WELDING SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

METAL DECK INSPECTION <u>DURING</u> WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.4		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Use of qualified welders	OBSERVE	
2. Control and handling of welding consumables	OBSERVE	
3. Environmental conditions (wind speed, moisture, temperature)	OBSERVE	
4. WPS followed	OBSERVE	
METAL DECK INSPECTION <u>AFTER</u> WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.5		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
5. Verify size and location of welds, including support, sidelap, and perimeter welds.	<b>PERFORM</b>	
6. Welds meet visual acceptance criteria	<b>PERFORM</b>	
7. Verify repair activities	<b>PERFORM</b>	
8. Document acceptance or rejection of welds	<b>DOCUMENT</b>	

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**STRUCTURAL - COLD-FORMED METAL DECK – FASTENING SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

METAL DECK INSPECTION BEFORE MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.6		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Manufacturer installation instructions available for mechanical fasteners	OBSERVE	
2. Proper tools available for fastener installation	OBSERVE	
METAL DECK INSPECTION DURING MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.7		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
3. Fasteners are positioned as required	OBSERVE	
4. Fasteners are installed in accordance with manufacturer's instructions	OBSERVE	
METAL DECK INSPECTION AFTER MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE SDI QA/QC-2011, Appendix 1, Table 1.8		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
5. Check spacing, type, and installation of support fasteners	<b>PERFORM</b>	
6. Check spacing, type, and installation of sidelap fasteners	<b>PERFORM</b>	
7. Check spacing, type, and installation of perimeter fasteners	<b>PERFORM</b>	
8. Verify repair activities	<b>PERFORM</b>	
9. Document acceptance or rejection of mechanical fasteners	<b>DOCUMENT</b>	

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.  
**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.  
**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.



**STRUCTURAL - LIGHT GAUGE STEEL FRAMING AND/OR LIGHT GAUGE TRUSSES SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

LIGHT GAUGE STEEL CONSTRUCTION AND CONNECTIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC 1705.2.2, 1705.11.2, 1705.11.3, UFC 4 023 03		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Trusses spanning 60-feet or greater where/if applies	<b>PERFORM</b>	Verify that temporary and permanent truss restraint/bracing is installed in accordance with approved truss submittal package.
2. Welded connections (seismic and/or wind resisting system)	OBSERVE	Visually inspect all welds composing part of the main wind or seismic force resisting system, including shearwalls, braces, collectors (drag struts), and hold-downs.
3. Connections (seismic and/or wind resisting system)	OBSERVE	Visually inspect all screw attachment, bolting, anchoring and other fastening of components within the main wind or seismic force resisting system, including roof deck, roof framing, exterior wall covering, wall to roof/floor connections, braces, collectors (drag struts) and hold-downs.
4. Cold-formed steel (progressive collapse resisting system where/if applies)	OBSERVE	Verify proper welding operations, screw attachment, bolting, anchoring and other fastening of components within the progressive collapse resisting system, including horizontal tie force elements, vertical tie force elements and bridging elements (UFC 4 023 03).

**END SECTION****STRUCTURAL - OPEN-WEB STEEL JOISTS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐**

OPEN-WEB STEEL JOISTS AND JOIST GIRDERS – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC TABLE 1705.2.3		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Installation of open-web steel joists and joist girders	OBSERVE	✓ End connections – welded or bolted ✓ Bridging – horizontal and diagonal

**END SECTION**

<sup>1</sup> **PERFORM:** Perform these tasks for each weld, fastener or bolted connection, and required verification.

**OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**STRUCTURAL - CONCRETE CONSTRUCTION SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

CONCRETE CONSTRUCTION, INCLUDING COMPOSITE DECK – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC TABLE 1705.3 (ACI 318 REFERENCES NOTED IN IBC TABLE)		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Inspect reinforcement, including prestressing tendons, and verify placement.	OBSERVE	Verify prior to placing concrete that reinforcing is of specified type, grade and size; that it is free of oil, dirt and unacceptable rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
2. Reinforcing bar welding	OBSERVE	✓ Verify weldability of reinforcing bars other than ASTM A 706 ✓ Inspect single-pass fillet welds, maximum 5/16" in accordance with AWS D1.4
3. All other welding	<b>CONTINUOUS</b>	Visually inspect all welds in accordance with AWS D1.4
4. Cast in place anchors and post installed drilled anchors (downward inclined)	OBSERVE	Verify prior to placing concrete that cast in place anchors and post installed drilled anchors have proper embedment, spacing and edge distance.
5. Post-installed adhesive anchors in horizontal or upward inclined orientations	<b>CONTINUOUS AND DOCUMENT</b>	✓ Inspect as required per approved ICC-ES report ✓ Verify that installer is certified for installation of horizontal and overhead installation applications ✓ Inspect proof loading as required by the contract documents (IBC Table 1705.3, 4)
6. Verify use of required mix design	OBSERVE	Verify that all mixes used comply with the approved construction documents (IBC Table 1705.3, 5)
7. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	<b>CONTINUOUS</b>	At the time fresh concrete is sampled to fabricate specimens for strength test verify these tests are performed by qualified technicians.
8. Inspect concrete and/or shotcrete placement for proper application techniques	<b>CONTINUOUS</b>	Verify proper application techniques are used during concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.
9. Verify maintenance of specified curing temperature and technique	OBSERVE	Inspect curing, cold weather protection, and hot weather protection procedures.
10. Pre-stressed concrete	<b>CONTINUOUS</b>	Verify application of prestressing forces and grouting of bonded prestressing tendons.

**CONTINUED ON FOLLOWING PAGE**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

## SCHEDULE OF SPECIAL INSPECTIONS FOR UFGS 01 45 35

**STRUCTURAL - CONCRETE CONSTRUCTION (CONTINUED)**

CONCRETE CONSTRUCTION, INCLUDING COMPOSITE DECK – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC TABLE 1705.3 (ACI 318 REFERENCES NOTED IN IBC TABLE)		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
11. Inspect erection of precast concrete members	OBSERVE	
12. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	OBSERVE	
13. Inspect formwork for shape, location and dimensions of the concrete member being formed.	OBSERVE	

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**DOCUMENT:** Document in a report that the work has been performed as required. This is in addition to all other required reports.

**CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

**STRUCTURAL - MASONRY CONSTRUCTION SECTION (ALL RISK CATEGORIES)****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE <u>AT START</u> OF CONSTRUCTION IBC 1705.4 (ACI 530-13 TABLE 3.1.2 & 3.1.3)		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Compliance with approved submittals prior to start	OBSERVE	
2. Proportions of site-mixed mortar.	OBSERVE	
3. Grade and type of reinforcement, anchor bolts, and prestressing tendons and anchorages	OBSERVE	
4. Prestressing technique	OBSERVE	
5. Properties of thin bed mortar for AAC masonry	OBSERVE	
MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE <u>PRIOR TO</u> GROUTING IBC 1705.4 (ACI 530-13 TABLE 3.1.2 & 3.1.3)		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
6. Grout space	CONTINUOUS	
7. Proportions of site-prepared grout and prestressing grout for bonded tendons	OBSERVE	
8. Proportions of site-mixed grout and prestressing grout for bonded tendons	OBSERVE	
9. Placement of masonry units and mortar joints	OBSERVE	
10. Welding of reinforcement	<b>CONTINUOUS</b>	
MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE <u>DURING</u> CONSTRUCTION IBC 1705.4 (ACI 530-13 TABLE 3.1.2 & 3.1.3)		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
11. Size and location of structural elements is in compliance	OBSERVE	
12. Preparation, construction, and protection of masonry during cold weather (temperature below 40°F (4.4°C) or hot weather (temp above 90°F (32.2°C))	OBSERVE	
13. Application and measurement of prestressing force	<b>CONTINUOUS</b>	
14. Placement of grout and prestressing grout for bonded tendons	<b>CONTINUOUS</b>	
15. Placement of AAC masonry units and construction of thin bed mortar joints	<b>CONTINUOUS</b>	Continuous for first 5000 square feet only (465 square meters).
16. Observe preparation of grout specimens, mortar specimens, and/or prisms	OBSERVE	
17. Type, size and placement of reinforcement, connectors, anchor bolts and prestressing tendons and anchorages, including details of anchorage of masonry to structural members, frames, or other construction	CONTINUOUS	

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

**STRUCTURAL - WOOD CONSTRUCTION – SPECIALTY ITEMS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** ☐

WOOD CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC 1705.5		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. High-load diaphragms where applicable	OBSERVE	Verify thickness and grade of sheathing, size of framing members at panel edges, nail diameters and length, and the number of fastener lines and that fastener spacing is per approved contract documents.
2. Metal-plate connected wood trusses spanning 60 feet or greater	OBSERVE	Verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the approved truss submittal package

**END SECTION****STRUCTURAL - WOOD CONSTRUCTION - SEISMIC & WIND SECTION****THIS SECTION IS APPLICABLE IF BOX IS CHECKED:** ☐

WOOD CONSTRUCTION SEISMIC AND WIND – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.11 & 1705.12.2		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Nailing, bolting, anchoring and other fastening of elements of the main wind/seismic force-resisting system	OBSERVE (CONTINUOUS FOR GLUING)	Includes connectors for: shearwall sheathing, roof/floor sheathing, drag struts/collectors (double top plates), braces, hold downs, roof connections to exterior walls.

**END SECTION****STRUCTURAL – ISOLATION AND ENERGY DISSIPATION SYSTEMS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** ☐

ISOLATION AND ENERGY DISSIPATION SYSTEMS – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC TABLE 1705.12.8		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Fabrication and installation	OBSERVE	Verify that fabrication and installation of isolator units and energy dissipation devices conform to manufacturer's recommendations and approved construction documents
2. Testing of seismic isolation Systems in seismically isolated structures		Seismic Isolation Systems in seismically isolated structures shall be tested accordance with ASCE 7, Section 17.8

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**GEOTECHNICAL - SOILS INSPECTION SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

SOILS INSPECTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC 1705.6		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Materials below shallow foundations are adequate to achieve the design bearing capacity.	OBSERVE	
2. Excavations are extended to proper depth and have reached proper material	OBSERVE	
3. Perform classification and testing of compacted fill materials	<b>OBSERVE</b>	
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	<b>CONTINUOUS</b>	
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	OBSERVE	During fill placement, the special inspector shall verify that proper materials and procedures are used in accordance with the provisions of the approved geotechnical report

**END SECTION****GEOTECHNICAL - DRIVEN DEEP FOUNDATION ELEMENTS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐**

DEEP DRIVEN FOUNDATION CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE IBC 1705.7		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Verify element materials, sizes and lengths comply with requirements	<b>CONTINUOUS</b>	
2. Inspect driving operations and maintain complete and accurate records for each element	<b>CONTINUOUS</b>	
3. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element	<b>CONTINUOUS</b>	
4. Determine capacities of test elements and conduct additional load tests if required.	<b>CONTINUOUS</b>	
5. For steel or concrete elements, perform additional special inspections in accordance with the Steel and Concrete sections in this schedule		

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

**GEOTECHNICAL - HELICAL PILE FOUNDATIONS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** ☐

HELICAL PILE FOUNDATIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE  
2018 IBC 1705.9

TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation data as required. The approved geotechnical report and the contract documents shall be used to determine compliance	<b>CONTINUOUS</b>	

**END SECTION****GEOTECHNICAL - CAST IN PLACE DEEP FOUNDATION ELEMENTS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** ☐

CAST IN PLACE DEEP FOUNDATION ELEMENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE  
2018 IBC 1705.8

TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Inspect drilling operations and maintain complete and accurate records for each element.	<b>CONTINUOUS</b>	
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes	<b>CONTINUOUS</b>	For concrete elements, perform additional special inspections in accordance with the Concrete section in this schedule

**END SECTION**

<sup>1</sup> **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

**FIRE PROTECTION - SPRAYED FIRE-RESISTANT MATERIALS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

SPRAYED FIRE RESISTANT MATERIALS (SFRM) – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.14		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Substrate condition	OBSERVE	Prior to application, confirm that surfaces have been prepared according to the approved fire-resistance design and manufacturer's instructions.
2. Material thickness	OBSERVE	Verify SFRM thickness according to 2018 IBC 1705.14.4
3. Material density	OBSERVE	Verify SFRM density according to 2018 IBC 1705.14.5
4. Bond strength	OBSERVE	Verify bond strength of cured SFRM according to IBC 1705.14.6

**END SECTION****FIRE PROTECTION - MASTIC AND INTUMESCENT COATINGS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.15		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Inspect according to AWCI 12-B and the contract documents	OBSERVE	Inspections shall be performed in accordance with AWCI 12-B, Standard Practice for the Testing and Inspection of Field Applied Thin Film Intumescent Fire-Resistive Materials.

**END SECTION****FIRE PROTECTION – FIRE RESISTANT PENETRATIONS AND JOINTS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

FIRE RESISTANT PENETRATIONS AND JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE 2018 IBC 1705.17		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Inspections of penetration firestop systems conducted in accordance with ASTM E 2174.	OBSERVE	
2. Inspections of fire-resistant joint systems conducted in accordance with ASTM E 2393	OBSERVE	

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.



**FIRE PROTECTION – SMOKE CONTROL SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒****SMOKE CONTROL – VERIFY THE FOLLOWING ARE IN COMPLIANCE  
2018 IBC 1705.18**

TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Verify device locations and perform leakage testing	OBSERVE	Perform during erection of ductwork and prior to concealment
2. Pressure difference testing, flow measurements and detection and control verification	OBSERVE	Perform prior to occupancy and after sufficient completion

**END SECTION**

---

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**ARCHITECTURAL - EXTERIOR INSULATION AND FINISH SYSTEMS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** ☐

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) – VERIFY THE FOLLOWING ARE IN COMPLIANCE  
2018 IBC 1705.16

TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Water resistive barrier coating applied over a sheathing substrate.	OBSERVE	Verify that water resistive barrier coating complies with ASTM E 2570.

**END SECTION****ARCHITECTURAL – ARCHITECTURAL COMPONENTS****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED:** ☒

ARCHITECTURAL COMPONENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE  
2018 IBC 1705.12.5, 1705.12.7

TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Erection and fastening of exterior cladding and interior and exterior veneer.	OBSERVE	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. <b>Inspector Note: Inspection not required if height is less than 30 feet or weight is less than 5psf</b>
2. Interior and exterior non-load bearing walls	OBSERVE	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. <b>Inspector Note: Inspection not required if interior non-load bearing walls weigh less than 15psf</b>
3. Access floors	OBSERVE	Verify that anchorage complies with approved construction documents.
4. Storage racks	OBSERVE	Verify that anchorage complies with approved construction documents. Inspection of post-installed anchors shall comply with approved ICC-ES report. <b>Inspector Note: Not required for racks less than 8 feet in height</b>

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

**PLUMBING/MECHANICAL/ELECTRICAL DESIGNATED SEISMIC SYSTEMS SECTION****ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒**

PLUMBING, MECHANICAL AND ELECTRICAL IBC 1705.12.6		
TASK	INSPECTION TYPE <sup>1</sup>	DESCRIPTION
1. Anchorage of electrical equipment for emergency and standby power systems	OBSERVE	✓ Check for general conformance
2. Anchorage of all other electrical equipment in Seismic Design Categories E and F only (See first page of this schedule for Seismic Design Category)	OBSERVE	✓ Check for general conformance
3. Installation and anchorage of piping designed to carry hazardous materials and their associated mechanical units.	OBSERVE	✓ Check for general conformance
4. Installation and anchorage of vibration isolation systems where the construction documents require a nominal clearance of ¼" or less between support framing and restraint.	OBSERVE	✓ Check for general conformance
5. Verification of clearance between fire sprinkler piping and surrounding mechanical and electrical equipment, including ductwork, piping and their structural supports.	OBSERVE	✓ Check for minimum clearances noted in ASCE7 13.2.3 or a nominal clearance of not less than 3 inches

**END SECTION**

<sup>1</sup> **OBSERVE:** Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

THIS PAGE INTENTIONALLY LEFT BLANK

Project: MH-139  
 Location: Maxwell AFB  
 Project #:  
 Date: 4/19/2022



## STATEMENT OF SPECIAL INSPECTIONS

Project Seismic Design Category: D  
 Project Risk Category: II  
 Project Design Wind Speed (mph): 112  
 Number of Stories: 2  
 Structure Height Above Grade (ft): 30  
 Hazardous Occupancy or attached to such? No Group H Occupancies

### **Special Inspector of Record (SIOR)**

A Special Inspector of Record (SIOR) IS NOT required (per UFGS 01 45 35, Section 1.3.8)

### **Lateral Force Resisting System (LFRS)**

2018 IBC 1704.3.2 and 1704.3.3

Following is a listing of critical main wind/seismic force resisting systems for this structure. Carefully inspect these elements as part of the roles and responsibilities of the Special Inspector (reference the Schedule of Special Inspections for inspection checklists).

Vertical LFRS Elements	Notes
Steel Ordinary Moment Frames	Building Addition
Steel Intermediate Moment Frames	Level 2 steel moment frames with concrete Lvl 2 slab
Light-frame (coldform) wall systems using flat strap bracing	Coldform wall enclosures at Lvl 1 & Lvl 2
Horizontal LFRS Elements	Notes
Concrete over metal deck	2nd floor
Metal Roof Deck & Related Fastening System	See Roof Plan

Project: MH-139

Location: Maxwell AFB

Project #: 0

Date: 4/19/2022

### Designated Seismic Systems (DSS)

(2018 IBC 1705.13.3) (ASCE 7-16, 13.2.2, C13.2.2) (UFC 3-301-1, 2-5.3)

Non-structural 'Designated Seismic Systems' (DSS) must remain operable and contain hazardous substances following a design earthquake. Accordingly, all Designated Seismic Systems must be listed below and must be certified by the manufacturer to remain both operable and/or to contain hazardous substances after a design earthquake per UFC 3-301-01, Section 3-6.2. Submit said Certificates of Compliance to the Contracting Officer for each DSS after they have been reviewed and accepted by the EOR/DOR.

Additionally, the below listed Designated Seismic Systems must be carefully inspected by the Special Inspector according to the requirements noted in the Schedule of Special Inspections, Section AA.

#### ELECTRICAL Designated Seismic Systems (DSS) Requiring a Certificate of Compliance

1.	DSS Emergency or Standby Power System
2.	
3.	
4.	
5.	

If additional space is required, append an additional sheet listing the remaining DSS

#### MECHANICAL/PLUMBING Designated Seismic Systems (DSS) Requiring a Certificate of Compliance

1.	DSS Gas lines and associated fittings, anchorage, & flexible Connections
2.	
3.	
4.	
5.	
6.	

If additional space is required, append an additional sheet listing the remaining DSS

#### OTHER Designated Seismic Systems (DSS) Requiring a Certificate of Compliance

1.	DSS Building egress stair systems
2.	DSS Building fire sprinkler systems
3.	
4.	
5.	
6.	

### Final Walk Down Inspection and Report

(UFC 3 301 01 SECTION 2-5.4)

Designated Seismic Systems shall receive a final walk-down inspection by the Registered Design Professional in Responsible Charge

Final Walk Down Report, Prepared by the Registered Design Professional in Responsible Charge, Must Include:

1. Record observations of Final Walk Down Inspection
2. Document that Inspections were performed in accordance with the Schedule of Special Inspections
3. Document that all Designated Seismic Systems are installed according to construction/manufacture document requirements, and that Compliance Certificates have been collected (UFC 03 301 01, 3-6.2, 13.2.2.2).

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 46 00.00 06

## TOTAL BUILDING COMMISSIONING

04/20

## PART 1 GENERAL

Commission the building systems listed herein. Employ the services of independent Commissioning Specialists. The Commissioning Specialists must be 1st tier subcontractors of the General or Prime Contractor; must be financially and corporately independent of all other subcontractors; and must not have any other role in constructing the systems to be commissioned. The Commissioning Specialists must coordinate all aspects of the commissioning process. Conform to the commissioning procedures outlined in this specification.

## 1.1 SYSTEMS TO BE COMMISSIONED

Commission the following systems:

Heating, Ventilating, Air Conditioning, and Refrigeration Systems (HVAC)

Building Automation System

Lighting Systems

Power Distribution Systems

Service Water Heating Systems

Plumbing Systems

Water Pumping and Mixing Systems

Energy and Water Utility Metering Systems and Sub-Meters

Fenestration Control Systems

Building Envelope: include moisture, thermal integrity, and air tightness for the entire building envelope including systems such as walls, fenestration, roofing, roof openings, floors, below grade perimeter walls, slabs-on-grade, floor assemblies.

## 1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING  
ENGINEERS (ASHRAE)

ASHRAE 180

(2018) Standard Practice for Inspection  
and Maintenance of Commercial Building  
HVAC Systems

ASHRAE 202

(2018) Commissioning Process for Buildings

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

and Systems

ASSOCIATED AIR BALANCE COUNCIL (AABC)

**ACG Commissioning Guideline** (2005) Commissioning Guideline

NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB)

**NEBB Commissioning Standard** (2018) Whole Building Technical  
Commissioning of New Construction

SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION  
(SMACNA)

**ANSI/SMACNA 014-2013** (2013) HVAC Systems Commissioning Manual,  
2nd Edition

US Army Corps of Engineers (USACE)

**ER 25-345-1** Regulation No. 25-345-1 Military  
Publications SYSTEMS MANUAL

### 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.

#### **SD-01 Preconstruction Submittals**

##### **Commissioning Specialists G, DO**

Submit the Commissioning Specialists' certification of qualifications no later than 30 calendar days after Notice to Proceed. Submit one hard copy and an electronic copy.

##### **Project Schedule; G, DO**

Project construction schedule which includes commissioning milestone activities. Submit within 14 calendar days following the Construction Commissioning Coordination Meeting. Submit one hard copy and an electronic copy.

#### **SD-06 Test Reports**

##### **Construction Phase Commissioning Plan; G, DO.**

Submit no later than 30 calendar days after the Construction Commissioning Coordination Meeting. Submit one hard copy and an electronic copy.

##### **Building Envelope Inspection Checklists; G, DO**

Submit the completed and initialed **Building Envelope Inspection Checklists** no later than 7 calendar days after completion of inspection of all checklists items. Submit one hard copy and an electronic copy.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### Pre-Functional Checklists; G, DO

Submit no later than 7 calendar days after completion of all checklist items for each system. Submit one hard copy and an electronic copy.

#### PVT Procedures; G, DO

Submit no later than 14 calendar days prior to Performance Verification Tests. Submit one hard copy and an electronic copy.

#### PVT Report; G, DO

Submit no later than 30 calendar days prior to Functional Performance Tests. Submit three hard copies and an electronic copy.

#### Issues Log

Submit one hard copy and an electronic copy on the same day each month.

#### Trend Log Report

Submit one hard copy and an electronic copy no later than 14 calendar days prior to Functional Performance Tests.

#### Post-Construction Trend Log Report

Submit one hard copy and one electronic copy of the Post-Construction Trend Log Reports, once for peak cooling season and once for peak heating season, no later than 14 calendar days following receipt of the trend log data by the Lead Commissioning Specialist.

#### Commissioning Report; G, DO

Submit no later than 14 calendar days following commissioning team acceptance of all Performance Tests. Submit three hard copies and an electronic copy.

#### Post-Construction Commissioning Report; G, DO

Submit no later than 14 calendar days following completion of all post-construction trend log reviews and building site visit. Submit three hard copies and an electronic copy.

### SD-07 Certificates

#### Certificate of Readiness; G, DO

Submit no later than 14 calendar days prior to Functional Performance Tests. Submit one hard copy and an electronic copy.

### SD-10 Operation and Maintenance Data

#### Systems Training; G, DO

Submit two copies of the Systems Training recording no later than

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

14 calendar days following completing of the Systems Training.

**Training Plan; G, RO**

Submit one hard copy and an electronic copy no later than 30 calendar days prior to the associated training.

**Training Attendance Rosters; G, RO**

Submit one hard copy and an electronic copy no later than 7 calendar days following the completion of the training for each system to be commissioned.

**Systems Manual; G, DO**

Submit Systems Manual no later than 30 calendar days following completion of Functional Performance Tests. Submit three hard copies and an electronic copy.

**Post-Construction Systems Manual; G, DO**

Submit Systems Manual no later than 14 calendar days following completion of all post-construction trend log reviews and building site visits. Submit three hard copies and an electronic copy.

**Maintenance and Service Life Plans; G, DO**

Submit the Maintenance Plan and Service Life Plan no later than 30 calendar days following the completion of Functional Performance tests. Submit three hard copies and an electronic copy.

**1.4 COMMISSIONING SPECIALISTS**

**1.4.1 Lead Commissioning Specialist (CxC)**

The Lead Commissioning Specialist must lead and oversee all commissioning work specified herein and be the primary point of contact for the Government regarding commissioning work. The Lead Commissioning Specialist (CxC) must have a minimum of five years of commissioning experience, including two projects of similar size and complexity. The Lead Commissioning Specialist must also be one of the following:

- a. AABC Commissioning Group (ACG) Certified Commissioning Authority
- b. Building Commissioning Association (BCA) Certified Commissioning Professional
- c. International Certification Board/Testing, Adjusting, and Balancing Bureau (ICB/TABB) Certified Commissioning Supervisor
- d. National Environmental Balancing Bureau (NEBB) Qualified Systems Commissioning Administrator
- e. University of Wisconsin-Madison Qualified Commissioning Provider
- f. Association of Energy Engineers (AEE) Certified Building Commissioning Specialist

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.4.2 Electrical Commissioning Specialist (CxE)

The technical work associated with the power distribution and generation systems must be performed by an Electrical Commissioning Specialist that is an engineering technician certified by the InterNational Electrical Testing Association (NETA) with five years of experience inspecting, testing, and calibrating electrical distribution and generation equipment, systems, and devices.

#### 1.4.3 Building Envelope Commissioning Specialist (CxB)

The technical work associated with the Building Envelope systems must be performed by a Building Envelope Commissioning Specialist (CxB) meeting one of the following qualifications:

- a. Five years of experience coordinating and instructing personnel involved in installation, joining, and sealing of air barrier materials and components and certification as an Air Barrier Installer from the Air Barrier Association of America (ABAA) or other 3rd party air barrier association.
- b. A registered architect with at least five years of building envelope design or construction experience.

Commissioning Specialists with alternative qualifications may be approved at the sole discretion of the Government. The CxB may act as the Air Barrier Inspector required by UFGS section 07 27 10.00 10 BUILDING AIR BARRIER SYSTEM provided that all of the qualification requirements of that specification section are met. The CxB may act as the thermographer required by UFGS section 07 05 23 PRESSURE TESTING AN AIR BARRIER SYSTEM FOR AIR TIGHTNESS provided that all qualification requirements of that specification section are met. The firm providing the CxB may act as the Pressure Test Agency required by UFGS section 07 05 23 provided that all qualification requirements of that specification section are met.

#### 1.4.4 Commissioning Specialists Certification

The Commissioning Specialists' qualifications must include the names of the specialists and firms; certifications, licenses, or registrations; years of experience and a listing of representative projects of similar size and complexity. Describe any lapses in certification or disciplinary action taken by the certifying body against the proposed specialists or firms in detail. Any specialist/technician or firm that has been the subject of disciplinary action by the certifying body within the five years preceding the contract award is not eligible to perform any duties related to commissioning.

The Commissioning Specialists' certifications must be maintained for the entire duration of the duties specified herein. If, for any reason, a Commissioning Specialist loses a certification during this period, immediately notify the Contracting Officer's Representative and submit another Commissioning Specialist. All work specified in this specification section to be performed by the Commissioning Specialist is invalid if the Commissioning Specialist loses their certification prior to contract completion and must be performed by an approved successor.

#### 1.4.5 Communication With The Government

The Lead Commissioning Specialist must submit all plans, schedules,

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

reports, and documentation directly to the Contracting Officer's Representative concurrent with submission to the CQC System Manager. The Commissioning Specialists and Contracting Officer's Representative must have direct communication with each other regarding all elements of the commissioning process; however, the Government has no direct contract authority with the Commissioning Specialists.

#### 1.5 COMMISSIONING STANDARD

Comply with the requirements of the commissioning standard under which the Commissioning Specialists qualifications are approved. When the firm and specialists are certified by BCA, AEE, or the University of Wisconsin-Madison, comply with the requirements of one of the acceptable standards unless otherwise stated herein. The acceptable standards are [ACG Commissioning Guideline](#), [NEBB Commissioning Standard](#), [ANSI/SMACNA 014-2013](#), or [ASHRAE 202](#).

- a. Implement all recommendations and suggested practices contained in the Commissioning Standard and electrical test standards.
- b. Use the Commissioning Standard for all aspects of Commissioning, including calibration of instruments.
- c. Where the instrument manufacturer calibration recommendations are more stringent than those listed in the Commissioning Standard, adhere to the manufacturer calibration recommendations.
- d. All quality assurance provisions of the Commissioning Standard such as performance guarantees are part of this contract.
- e. The Commissioning Specialists must develop commissioning procedures for any systems or system components not covered in the Commissioning Standard.
- f. Use any new requirements, recommendations, and procedures published or adopted prior to contract solicitation by the body responsible for the Commissioning Standard.

#### 1.6 SUSTAINABILITY THIRD PARTY CERTIFICATION (TPC)

Not Used.

#### 1.7 ISSUES LOG

The Lead Commissioning Specialist must develop and maintain an Issues Log for tracking and resolution of all deficiencies discovered through submittal review, inspection, and testing. Include the date of final resolution of issues as confirmed by the Commissioning Specialists. Submit the Issues Log on a monthly basis at a minimum. At any point during construction, any commissioning team member finding deficiencies may communicate those deficiencies in writing to the Lead Commissioning Specialist for including into the Issues Log.

#### 1.8 CERTIFICATE OF READINESS

Prior to scheduling Functional Performance Tests for each system, issue a Certificate of Readiness certifying that the building system is ready for Functional Performance Testing. The Certificate of Readiness must include, for each system to be commissioned, all equipment and system start-up

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

reports; Performance Verification Test Reports; completed Building Envelope Inspection Checklists; completed Pre-Functional Checklists; Testing, Adjusting, and Balancing (TAB) Report; Trend Log Review Report; and the Building Air Barrier Air Leakage Test Reports and Diagnostic Test Reports. The Contractor; the Lead Commissioning Specialist; the Contractor's Quality Control Representative; and the Mechanical, Electrical, Controls, and TAB subcontractor representatives must sign and date the Certificate of Readiness. Do not schedule and perform Functional Performance Tests prior to Government approval of the Certificate of Readiness.

#### 1.9 PROJECT SCHEDULE

Include the following tasks in the [Project Schedule](#) provided in accordance with [Section 01 32 01.00 06 PROJECT SCHEDULE](#). Ensure sufficient time is scheduled to accommodate the requirements of this specification section. The order of items listed are not intended to imply a specified sequence:

- a. Pre-Construction Conference (UFGS Section [07 27 10.00 10 BUILDING TELECOMMUNICATIONS CABLING SYSTEM](#)).
- b. Electrical system energization.
- c. Electrical system tests and inspections (UFGS Section [26 20 00 INTERIOR DISTRIBUTION SYSTEM](#)).
- d. Building Enclosure Construction
- e. Building Envelope Inspection Checklist Submittal
- f. Air Barrier Leakage Test
- g. Operational Tests of the plumbing systems (UFGS [22 00 00](#))
- h. Duct Air Leakage Tests
- i. Testing, Adjusting, and Balancing (TAB)
- j. TAB Field Acceptance Testing
- k. Performance Verification Tests
- l. HVAC Trend Log Report
- m. Pre-Functional Checklist Submittal
- n. Functional Performance Testing
- o. Demand Response Tests
- p. Post-Test Deficiency Correction
- q. Re-Testing
- r. Training for each system to be commissioned
- s. Systems Manual, Maintenance Plan, and Service Life Plan Submission
- t. Submission and approval of the Commissioning Report

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- u. Seasonal Tests
- v. Monitoring Based Commissioning
- w. Monitoring Based Commissioning Report Submission
- x. Post-Construction Trend Log Reports
- y. Post-Construction Building Site Visit

#### 1.10 FUNCTIONAL PERFORMANCE TEST PREREQUISITES

Complete the following prior to starting Functional Performance Tests of the mechanical systems:

- a. The building envelope is enclosed according to contract documents with final construction completed, the Air Barrier Pressure Tests have been completed and the Air Leakage Test Reports and Diagnostic Test Reports have been submitted and approved in accordance with Section 07 05 23 PRESSURE TESTING AN AIR BARRIER SYSTEM FOR AIR TIGHTNESS.
- b. All equipment and systems have been completed, cleaned, flushed, disinfected, calibrated, tested, and operate in accordance with the contract documents and construction plans and specifications.
- c. Testing, Adjusting, and Balancing has been completed and the Testing, Adjusting, and Balancing Report has been submitted and approved in accordance with Section 23 30 00 HVAC AIR DISTRIBUTION.
- d. Performance Verification Tests of the controls systems have been completed and the Performance Verification Tests Report has been submitted and approved in accordance with Specification Section 23 09 00 INSTRUMENTATION AND CONTROL FOR HVAC.
- e. The Pre-Functional Checklists have been submitted and approved.
- f. The Certificate of Readiness for the mechanical systems has been submitted and approved.

Complete the following prior to starting Functional Performance Tests of the electrical systems:

- a. The building envelope is enclosed according to contract documents with final construction completed.
- b. All electrical, power generation, and lighting equipment and systems have been completed, calibrated, tested, and operate in accordance with contract documents and construction plans and specifications.
- c. Ceiling tiles, floor coverings, and window coverings are in place.
- d. The Certificate of Readiness for electrical systems has been submitted and approved.
- f. Furniture is in place.

#### 1.11 PHASING

Not Used.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 DESIGN PHASE

Not Used.

3.2 CONSTRUCTION PHASE

3.2.1 Construction Commissioning Coordination Meeting

The Lead Commissioning Specialist must lead a Construction Commissioning Coordination Meeting no later than 14 calendar days after approval of the Commissioning Specialists 30 calendar days following construction notice to proceed to discuss the commissioning process including contract requirements, lines of communication, roles and responsibilities, schedules, documentation requirements, inspection and test procedures, and logistics as specified in this specification section. The Contractor's Superintendent or Project Manager, the Contractor's Quality Control Representative, and the Government must attend this meeting. Invite the User and Base Civil Engineer Representative to attend this meeting.

3.2.2 Commissioning Progress Meetings

The Lead Commissioning Specialist must lead Commissioning Progress Meetings to discuss the progress of commissioning process activities, upcoming commissioning activities, and any issues and deficiencies. The Contractor's Superintendent or Project Manager, the Contractor's Quality Control Representative, and the Government must attend this meeting. A representative from each of the sub-contractors involved in the systems to be commissioned must attend this meeting. Invite the User and Base Civil Engineer Representative to attend these meetings.

The Mechanical, Electrical, and Architectural designers of record must participate in the Commissioning Progress Meetings, at the request of the Lead Commissioning Specialist, to address any design issues or issues regarding technical adequacy.

Commissioning Progress Meetings must occur monthly following the Construction Commissioning Coordination Meeting. When installation of interior mechanical or electrical systems begins, the Commissioning Progress Meetings must occur every 2 weeks.

3.2.3 Construction Phase Commissioning Plan

The Lead Commissioning Specialist must prepare the Construction Phase Commissioning Plan identifying the commissioning and testing standards to be used and outlining the overall commissioning process, the commissioning schedule, the commissioning team members and responsibilities, lines of communication, and the documentation requirements for the construction phase of the project. Include the template building envelope inspection checklists, pre-functional checklists, demand response test plan, monitoring based commissioning plan, and Functional Performance Test checklists.

Download example checklists at the following location:

<http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/>

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

forms-graphics-tables. The checklists submitted with the Construction Phase Commissioning Plan are required to have the same level of detail as the example checklists, but are not required to match the format of the examples.

The construction phase commissioning plan must include the monitoring and control points, sample frequency, and duration of trends for the trend log reviews.

#### 3.2.3.1 Pre-Functional Checklists

The Commissioning Specialists must develop the Pre-Functional Checklists. Pre-Functional Checklists include items for physical inspection or testing that demonstrate that installation and start-up of all equipment and systems is complete. Refer to paragraph "Pre-Functional Checks" for more information.

#### 3.2.3.2 Functional Performance Test Checklists

The Commissioning Specialists must develop the Functional Performance Test Checklists including procedures that explain, step-by-step, the actions and expected results that will demonstrate that the system performs in accordance with the contract. Refer to paragraph "Functional Performance Tests" for more information.

Include the following sections and details appropriate to the systems being tested:

- a. Notable system features including information about controls to facilitate understanding of system operation.
- b. Conclusions and recommendations. Conclusions must clearly indicate if system does or does not perform in accordance with contract requirements. Recommendation must clearly indicate that the system should or should not be accepted by the Government.
- c. Test conditions including date, beginning and ending time, and beginning and ending outdoor air conditions.
- d. Attendees.
- e. Identification of the equipment involved in the test.
- f. Control system feature identification.
- g. Point-to-point observations including demonstrating system sensors and flow meters have been calibrated and are correctly displayed on the Operator workstation.
- h. Actuator operation observations demonstrating actuator responses to commands from the control system.
- i. As-found condition of the system operation.
- j. List of test items with step numbers along with the corresponding feature or control operation, intended test procedure, expected system response, and pass/fail indication.
- k. Space for comments for each test item.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 3.2.4 Design Review

The Commissioning Specialists must review the construction contract plans and specifications, the Owner's Project Requirements, and the Basis of Design. The Owner's Project Requirement Document is attached as Appendix A. The Basis of Design is attached as Appendix B. The Demand Response Plan is attached as Appendix C. The Owner's Project Requirements and Basis of Design documents are not contract documents and are provided for commissioning review purposes only. The Commissioning Specialists must identify any discovered discrepancies between the Basis of Design and the Owner's Project Requirements, any deficiencies of the design to comply with the Owner's Project Requirements or Basis of Design, deficiencies that would impact Monitoring Based Commissioning, deficiencies that would impact Demand Response Tests, and any deficiencies that would prevent the building systems and features from operating or performing effectively or from being adequately maintainable.

The Commissioning Specialists must provide a **Design Review Report** individually listing each deficiency and the corresponding proposed corrective action necessary for proper system operation or performance.

The Lead Commissioning Specialist must lead a meeting with the Contracting Officer's Representative and Contractor's Quality Control Representative to discuss any items contained in the report no later than 14 calendar days after submission of the report. Invite the designers of record for the commissioned systems to attend.

#### 3.2.5 Construction Submittals

Provide all submittals associated with the systems to be commissioned, including shop drawings; equipment submittals; test plans, procedures, and reports; and resubmittals to the Commissioning Specialists. The Commissioning Specialists must review the submittals to the extent necessary verify that the equipment and system installation will comply with the contract requirements and the requirements of the Basis of Design and the Owner's Project Requirements Document.

#### 3.2.6 Inspection and Testing

Demonstrate that all system components have been installed, that each control device and item of equipment operates, and that the systems operate and perform in accordance with contract documents and the Owner's Project Requirements. Requirements in related Sections are independent from the requirements of this Section and do not satisfy any of the requirements specified in this specification section. Provide all materials, services, and labor required to perform and submit the Pre-Functional Checks, **Building Envelope Inspection**, HVAC system trend logs, and Functional Performance Tests.

##### 3.2.6.1 Commissioning Team

Provide a commissioning representative for each sub-contractor associated with the systems to be commissioned. Each commissioning representative is responsible for coordination of their respective sub-contractor's execution of the commissioning activities and participation in the inspection and testing required by this specification section. **The designers listed below must be the designer of record for the respective system.** Substitutes must be approved by the Contracting Officer's Representative.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Designate team members to participate in the building envelope inspections, Pre-Functional checks, and the Functional Performance Testing specified herein.

#### 3.2.6.1.1 Building Envelope Inspections Team

The following team members must participate in building envelope inspections:

Designation	Function
CxB	Building Envelope Commissioning Specialist
QAR	Contracting Officer's Quality Assurance Representative
CQC	Contractor's Quality Control Personnel
BEC	Contractor's Building Envelope Commissioning Representative

#### 3.2.6.1.2 Mechanical Systems Team

The following team members must participate in Pre-Functional Checks and Functional Performance Testing of mechanical systems. The CxC, QAR, CQC, MC, EC, and CC must participate in Demand Response Tests:

Designation	Function
CxC	Lead Commissioning Specialist
QAR	Contracting Officer's Quality Assurance Representative
CQC	Contractor's Quality Control Personnel
MC	Contractor's Mechanical Commissioning Representative
EC	Contractor's Electrical Commissioning Representative
CC	Contractor's Controls Commissioning Representative
TABC	Contractor's TAB Commissioning Representative
PC	Contractor's Plumbing Commissioning Representative
IC	Contractor's Irrigation Commissioning Representative

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

MD	Mechanical Designer (Functional Performance Tests Only)

#### 3.2.6.1.3 Electrical Systems Team

The following team members must participate in Pre-Functional Checks and Functional Performance Testing of electrical systems:

Designation	Function
CxE	Electrical Commissioning Specialist
QAR	Contracting Officer's Quality Assurance Representative
CQC	Contractor's Quality Control Personnel
EC	Contractor's Electrical Commissioning Representative

#### 3.2.6.1.4 Other Pre-Functional and Functional Performance Participants

The following may participate as team members during Pre-Functional Checks and Functional Performance Testing:

Designation	Function
BCE	Base Civil Engineer Office Representative
User	Using Agent's Representative

#### 3.2.6.2 Building Envelope Inspection and Pressure Tests

Document building envelope inspection by the commissioning team using the approved Template Building Envelope Inspection Checklists. Indicate commissioning team member inspection and acceptance of each Building Envelope Inspection Checklist item by initials at the time they are inspected and found to be in conformance with contract requirements. Inspect checklist items before they become hidden as construction progresses. Submit the completed and initialed Building Envelope Inspection Checklists no later than 7 calendar days after completion of inspection of all checklist items.

The Building Envelope Technical Commissioning Specialist must make at least two site visits to the site to observe construction of the building envelope in-progress. On each visit, the Building Envelope Commissioning Specialist must review the Contractor's in-progress checklists to ensure that the commissioning team is inspecting the building envelope as required.

The Building Envelope Technical Commissioning Specialist must witness the building envelope pressure tests and diagnostic tests specified in Specification Section 07 05 23 PRESSURE TESTING AN AIR BARRIER SYSTEM FOR AIR TIGHTNESS. The Building Envelope Technical Commissioning Specialist must review the resulting reports and provide recommendations for correction of any deficiencies or further testing.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.2.6.3 Pre-Functional Checks

**Pre-Functional Checklists** from the approved Construction Phase Commissioning Plan must be completed by the commissioning team. Complete one Pre-Functional Checklist for each individual item of equipment or system for each system required to be commissioned including, but not limited to, ductwork, piping, equipment, fixtures (lighting and plumbing), panels, and controls. Indicate commissioning team member inspection and acceptance of each Pre-Functional Checklist item by initials. Acceptance of each Pre-Functional Checklist item by each team member indicates that item has been installed correctly and conforms to the construction contract and accepted design requirements in their area of responsibility. Commissioning Specialist acceptance of each Pre-Functional Checklist item indicates that each item has been installed correctly and in accordance with contract documents and the Owner's Project Requirements. Submit the completed and initialed Pre-Functional Checklists upon completion. Include manufacturer start-up checklists associated with the equipment with the submission of the Pre-Functional Checklists.

### 3.2.6.4 Testing, Adjusting, and Balancing (TAB) Verification

The Lead Commissioning Specialist must witness the TAB Field Acceptance Testing performed in accordance with UFGS section 23 05 93 TESTING, ADJUSTING, AND BALANCING OF HVAC. Identify any deficiencies in the Issues Log.

Following the testing, adjusting, and balancing of the systems and submission of a TAB Report and prior to scheduling Functional Performance Tests, perform a TAB verification with the Contracting Officer's Quality Assurance Representative present. The Lead Commissioning Specialist must witness the TAB verification.

Recheck a minimum of 10% of all readings listed in the TAB report during TAB verification. The Contracting Officer's Quality Assurance Representative will select the readings to be rechecked. If over 20% of the measurements rechecked fall outside of the specified tolerance from design requirements specified, recheck an additional 10% sample with selection of readings by the Contracting Officer's Quality Assurance Representative. If over 20% of the total rechecked readings fall outside of the required tolerance, the TAB Report will be considered invalid and all contract required testing, adjusting, and balancing work must be repeated.

Repair all insulation following completion of TAB Verification.

### 3.2.6.5 Building Control System Performance Verification Tests

The controls contractor must perform a Performance Verification Test (PVT) of the building control systems demonstrating that the control systems are in compliance with the requirements of the construction contract and accepted design. Show, step-by-step, the actions and results demonstrating that the systems perform in accordance with the sequences of operation. A one-point accuracy check will be performed for each sensor.

Prepare and submit **PVT Procedures** that list the step-by-step procedures to be performed during the tests and the expected results from each step that demonstrate contract and accepted design compliance. Start the Performance Verification Tests only after approval of the PVT Procedures.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Provide a [PVT Report](#) documenting all tests performed during the PVT and the results. Document all failures and associated repairs in the PVT Report.

The Lead Commissioning Specialist must review the PVT Procedures or Test Plan and the PVT Report required by Specification Section 23 09 00 INSTRUMENTATION AND CONTROL FOR HVAC. Include a certification by the Lead Commissioning Specialist with each of these submittals that the submittals do not indicate any deficiencies in the HVAC systems or HVAC control systems.

#### 3.2.6.6 HVAC System Trend Logs

Following approval of the Performance Verification Test (PVT) Report and prior to Functional Performance Testing, the Lead Commissioning Specialist must review trend logs from the heating, ventilation, air-conditioning, and refrigeration control systems to ensure that the systems have stable operation and operate as required by construction contract, [the accepted design](#), and the Owner's Project Requirements. Review trends for all items of equipment including sensor inputs; valve and damper positions (command or feedback); equipment status, modes, and commands; and variable frequency drive commands. Control and monitoring points, sample frequency, and duration of trends must be in accordance with the approved Construction Phase Commissioning Plan. Provide a [Trend Log Report](#) that identifies any deficiencies noted in operation and includes a graphical representation of the trends.

#### 3.2.6.7 Tests

##### 3.2.6.7.1 Functional Performance Tests

Schedule personnel to attend the Functional Performance Tests for each system only after the Certificate of Readiness has been approved by the Government for the system and all deficiencies identified through any prior review, inspection, or test activity have been corrected. Functional Performance Tests must be performed with the Contracting Officer's Quality Assurance Representative present. The Lead Commissioning Specialist must lead and document all Functional Performance Tests for the systems to be commissioned with the Contractor and appropriate sub-contractors performing the Functional Performance Tests. The representatives listed in the paragraph "Commissioning Team" must attend the Functional Performance Tests. Abort the Functional Performance Tests when any required commissioning team member is not present for the test.

Abort Functional Performance Tests when any system deficiency prevents the successful completion of the test.

##### 3.2.6.7.1.1 Checklists

Use the Functional Performance Test Checklists from the approved Construction Phase Commissioning Plan to guide the Functional Performance Tests. Functional Performance Tests must be performed for each item of equipment and each system required to be commissioned and verify all sensor calibrations, control responses, safeties, interlocks, operating modes, sequences of operation, capacities, lighting levels, and all other system performance requirements comply with the construction contract [and accepted design](#) requirements regardless of the specific items listed within the Functional Performance Test Checklists provided. Testing must progress from equipment or components to subsystems to systems to interlocks and connections between systems. The order of components and systems to be tested must be determined by the Lead Commissioning Specialist, and by the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Electrical Commissioning Specialist for power distribution and generation systems.

#### 3.2.6.7.1.2 Acceptance

Indicate acceptance of each item of equipment and systems tested by signature of each commissioning team member for each Functional Performance Test. The Contractor's Quality Control Representative and the Lead Commissioning Specialist must indicate acceptance after the equipment and systems are free of deficiencies.

#### 3.2.6.7.2 Sample Strategy

Perform Functional Performance Tests using the following sample strategy. Prepare and complete a Functional Performance Test Checklist for each item of equipment or system to be tested. For sample sizes less than 100 percent for all similar equipment, the Government will select the specific equipment or system to be tested during testing. Equipment Identifiers are as indicated on the design drawings:

Equipment Identifier	Sample Size (Percent)
AHU	_____
VAV	_____
CUH	_____
CWP	_____
DWH	_____
P-3 Water Closet	_____
Lighting Controls	_____
Renewable Energy Systems/Equipment	_____

Perform Functional Performance Tests for all equipment and systems. Prepare and complete a Functional Performance Test Checklist for each item of equipment or system.

#### 3.2.6.7.3 Seasonal Tests

Regardless of the season, perform initial Functional Performance Tests of equipment and systems at the time of system completion. Develop and implement means of artificial loading to demonstrate, to a reasonable level of confidence, the ability of the HVAC systems to handle peak seasonal loads.

In addition to the initial Functional Performance Tests, perform Functional Performance Tests of the HVAC systems during peak heating and cooling seasons during outdoor air condition design extremes. Schedule the seasonal Functional Performance Tests in coordination with the Government.

Systems may be partially accepted by the Government prior to seasonal testing if they comply with all construction contract and accepted design requirements that can be tested during the initial Functional Performance Tests. All Functional Performance Test procedures must be completed prior

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

to full systems acceptance.

#### 3.2.6.7.4 Aborted Tests and Re-Testing

Abort Functional Performance Tests or Seasonal Tests if any deficiency prevents successful completion of the test or if any required commissioning team member is not present for the test. Reimburse the Government for all costs associated with effort lost caused by re-testing due to test failures and aborted tests. These costs must include salary, travel costs, and per diem for Government commissioning team members. Re-test only after all deficiencies identified during the original tests have been corrected.

##### 3.2.6.7.4.1 100% Sample

Systems or items of equipment for which 100% sample are tested fail if one or more of the test procedures results in a discovery of a deficiency and the deficiency can not be resolved within 5 minutes during the test. Upon test failure, abort the test of the system or item of equipment. Schedule a re-test, in coordination with the Government, only after all deficiencies for all failed equipment and systems have been corrected.

Re-test to the extent necessary to confirm that the deficiencies have been corrected. At the sole discretion of the Government, all test procedures for the failed item of equipment or system must be repeated to confirm that no deficiencies remain within that equipment or system.

##### 3.2.6.7.4.2 Less than 100% Sample

For systems or equipment tests with a sample size less than 100 percent, if one or more of the test procedures for an item of equipment or system results in discovery of a deficiency, regardless of whether the deficiency is corrected during the sample tests, the item of equipment or system fails the test. Correction of the deficiencies during Functional Performance Testing may be performed only at the sole discretion of the Government.

If the system failure rate is 5 percent or less, meaning that 5 percent or less of the equipment or systems had at least one deficiency, re-test only the items which experienced the initial failures.

If the system failure rate is higher than 5 percent, meaning that more than 5 percent of the equipment or systems tested had at least one deficiency, re-test the items which experience the initial failures. In addition, test another sample of the same size as the initial sample for the first time. If the second sample set has any failures, re-test those failed items and all remaining equipment and systems to complete 100 percent testing of that system type.

### 3.3 SYSTEMS TRAINING

The training specified by the specification sections associated with commissioned systems must be provided by factory certified technicians or trainers. Include both demonstration of proper equipment and system operation both at the equipment and classroom training. For the classroom training, include proper operating and maintenance procedures, preventative maintenance requirements and procedures, trouble-shooting procedures, and calibration frequency and procedures. Include identification of the equipment and system warranties and procedures for correction under the warranties. Include a review of the draft systems manual, maintenance plan, and service life plans.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Visibly and audibly record the systems training. All instruction on the recording must be clear and intelligible.

### 3.4 TRAINING PLAN

Develop a training plan which identifies all training required by specification sections associated with commissioned systems. Include a matrix listing each training requirement, content of the training, the trainer name, trainer contact information, and schedule and location of training.

Document training attendance using [Training Attendance Rosters](#) and provide completed attendance rosters to the Lead Commissioning Specialist and the Government.

### 3.5 SYSTEMS MANUAL

Prepare and submit a Systems Manual including a signed certification or letter from the Lead Commissioning Specialist and Electrical Commissioning Specialist stating that the Systems Manual is complete, clear, and accurate. The Systems Manual, for all commissioned systems, must conform to Appendix A SYSTEMS MANUAL ORGANIZATION AND CONTENT to [ER 25-345-1](#), available at the USACE Publications website at the following location: <https://www.publications.usace.army.mil/USACE-Publications/Engineer-Regulations/> Update and resubmit the Systems Manual based on any corrective action taken during the warranty period.

### 3.6 MAINTENANCE AND SERVICE LIFE PLANS

Prepare and submit a Maintenance Plan for the project mechanical, electrical, plumbing, and fire protection systems. Prepare the Maintenance Plan in accordance with [ASHRAE 180](#) for heating, ventilation, air conditioning, and refrigeration systems. Develop required inspection and maintenance tasks similar to Section 5 of [ASHRAE 180](#) for the other commissioned systems and fire protection systems.

Prepare and submit a Service Life Plan for the building envelope, structural systems, and site hardscape that includes the following for each assembly or component:

- a. A description of each including the materials or products.
- b. The estimated service life, in years.
- c. The estimated maintenance frequency and description of maintenance tasks.
- d. The point of maintenance access for the components with estimated service life less than service life of the building.

### 3.7 CURRENT FACILITIES REQUIREMENTS AND O&M PLAN

Prepare and submit a Current Facilities Requirements and O&M Plan document that contains information necessary to operate the building efficiently. Include the following:

- a. Sequences of operation for all commissioned systems.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- b. Building occupancy schedule.
- c. Equipment run-time schedules.
- d. Setpoints for all HVAC equipment.
- e. Set lighting levels throughout the building.
- f. Minimum outside air requirements.
- g. Changes in schedules or setpoints for different seasons, days of the week, and times of the day.
- h. Systems narrative describing the mechanical and electrical systems and equipment.
- i. Preventative maintenance plan for building equipment described in the systems narrative.
- j. Commissioning program including periodic commissioning requirements, ongoing commissioning tasks, and continuous tasks for critical facilities.

Information from other submitted documents may be referenced from the current facilities requirements and O&M plan in lieu of repeating information provided that the reference includes the location of the information in those other submitted documents such as page number or chapter or part and section.

### 3.8 COMMISSIONING REPORT

Following the completion of Functional Performance Tests, with the exception of Seasonal Tests, the Lead Commissioning Specialist must prepare a Commissioning Report including an executive summary describing the overall commissioning process, describing the results of the commissioning process, listing any outstanding deficiencies and recommended resolutions, and describing any seasonal testing and monitoring based commissioning that must be scheduled for a later date. Indicate, in the executive summary, whether the systems meet the requirements of the construction contract and accepted design and the Owner's Project Requirements.

Detail any deficiencies discovered during the commissioning process and the corrective actions taken. Include the completed Building Envelope Inspection Checklists, Pre-Functional Checklists, Functional Performance Test Checklists, Demand Response Test Checklists, the Construction Phase Commissioning Plan, the Issues Log, Performance Verification Test Reports, Trend Log Reports, Training Attendance Rosters, the Design Review Report, and the final TAB Report.

Following any Seasonal Tests or Post-Construction Activities, update the Commissioning Report to reflect any changes and resubmit.

### 3.9 POST-CONSTRUCTION SUPPORT

Submit a Post-Construction Commissioning Report and Post-Construction Systems Manual that supplement the original Commissioning Report and Systems Manual with documentation of the results of the post-construction site visit and HVAC trend log review. Include Post-Construction Trend Log Report in the Post-Construction Commissioning Report. Submit a

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Post-Construction Commissioning Report and Post-Construction Systems Manual with documentation of the results of the post-construction site visit and monitoring based commissioning. Include the Monitoring Based Commissioning Report in the Post-Construction Commissioning Report.

#### 3.9.1 Post-Construction HVAC Trend Logging

Provide Trend Logs from the heating, ventilation, air conditioning, and refrigeration control systems to the Lead Commissioning Specialist once during peak heating season and once during peak cooling season. Selected control and monitoring points, sample frequency, and duration of trends must be in accordance with the Construction Phase Commissioning Plan.

The Lead Commissioning Specialist must review trends for all items of equipment including all sensor inputs; valve and damper positions (commands or feedback); equipment status, modes, and commands; and variable frequency drive commands to ensure that the systems have stable operation and operate as required by the construction contract, the accepted design, and the Owner's Project Requirements. The Lead Commissioning Specialist must provide a Post-Construction Trend Log Report that identifies any deficiencies noted in operation and includes a graphical representation of the trends. Provide one Trend Log Report for the peak cooling season and one Trend Log Report for the peak heating season.

#### 3.9.2 Post-Construction Site Visit

The Lead Commissioning Specialist must visit the building site to inspect building system equipment and review building operation with the building operating/maintenance staff. The Lead Commissioning Specialist must identify any deficiency of the building systems to operate in accordance with the contract and accepted design requirements and the Owner's Project Requirements. The Lead Commissioning Specialist must advise the Contracting Officer's Representative of any identified deficiencies and the proposed corrective action.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

**APPENDIX A - OWNER'S PROJECT REQUIREMENTS DOCUMENT**

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

**OWNER'S PROJECT REQUIREMENTS DOCUMENT**

Project: Project, Location, PN #####

Approved:	<u>Branden Schneider</u>	<u>7-19-2022</u>
	Name Design Agent's Representative	Date
	<u>Dan Corrigan, USACE</u>	<u>7-19-2022</u>
	Name Owner's Representative	Date

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## OWNER'S PROJECT REQUIREMENTS DOCUMENT

### Contents

1. Owner and User Requirements
  - a. Primary Purpose, Program, and Use
  - b. Project History
  - c. Broad Goals
    - i. Future Expansion
    - ii. Flexibility
    - iii. Quality of Materials
    - iv. Construction Costs
    - v. Operational Costs
2. Environmental and Sustainability Goals
  - a. LEED or Green Globes Goal
  - b. Other
3. Energy Efficiency Goals
  - a. Goals/Policy
  - b. Systems and Feature Energy Impact
4. Indoor Environmental Quality Requirements
  - a. Space Type 1
    - i. Intended Use
    - ii. Occupancy Schedule
    - iii. Environmental Requirements
    - iv. Occupant System Control Ability
    - v. Type of Lighting
    - vi. After-hour Use Accommodation
  - b. Space Type 2
    - i. Intended Use
    - ii. Occupancy Schedule
    - iii. Environmental Requirements
    - iv. Occupant System Control Ability
    - v. Type of Lighting
    - vi. After-hour Use Accommodation
5. Equipment and System Expectations
  - a. HVAC Systems
    - i. Quality and Reliability
    - ii. Type
    - iii. Automation
    - iv. Flexibility
    - v. Maintenance Requirements
  - b. Lighting Systems
    - i. Quality and Reliability
    - ii. Type
    - iii. Automation
    - iv. Flexibility
    - v. Maintenance Requirements
  - c. Domestic Hot Water Systems
    - i. Quality and Reliability
    - ii. Type
    - iii. Automation
    - iv. Flexibility
    - v. Maintenance Requirements

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Contents (continued)

- d. On-site Power Systems
  - i. Quality and Reliability
  - ii. Type
  - iii. Automation
  - iv. Flexibility
  - v. Maintenance Requirements
- e. Other Systems
  - i. Quality and Reliability
  - ii. Type
  - iii. Automation
  - iv. Flexibility
  - v. Maintenance Requirements
- 6. Building Occupant and O&M Personnel Requirements
  - a. Facility Operation
  - b. UMCS (EMCS or FMCS)
  - c. Occupant Training and Orientation
  - d. O&M Staff Training and Orientation

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 1. Owner and User Requirements

### a. Primary Purpose, Program, and Use

Explain the purpose, program, and use of the facility. (i.e. Army Reserve Center used for training reserve units. Training includes spaces such as weapons, medical, vehicle repair, cooking, etc.)

### b. Project History

Explain the history of the project related to design/construction (i.e. D/B/B, D/B, IDIQ, JOC, COE in-house, A/E, etc.). Explain any additional project background that would impact energy/sustainability goals.

### c. Broad Goals

i. Future Expansion: Explain goals related to potential future expansion.

ii. Flexibility: Explain goals related to flexibility for layout and use of the building. (i.e. high rate of office churn, expected frequency of renovation, etc.)

iii. Quality of Materials: Explain goals related to quality of materials. (i.e. highest quality materials, 50 yr life, 25 yr life, highest quality within budget, etc.)

iv. Construction Costs: Explain goals related to construction costs. (i.e. how low can you go, set project amount, select simplest systems for low cost, etc.)

v. Operational Costs: Explain goals related to operational costs. (i.e. low utilities based on water and energy conservation, trade-off allowable on maintenance costs to reduce utility cost, utility cost unimportant compared to construction cost, etc.)

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 2. Environmental and Sustainability Goals

### a. LEED/Green Globes Goal

Set LEED/Green Globes goal and explain sustainable features permissible or preferred to be incorporated. Explain relative importance of LEED/Green Globes goal within project scope. Indicate requirement from service or agency specific criteria and policy.

### b. Other

Explain any special sustainability or environmental goals associated with the project. Identify specific sustainability features that may be required or desired. (i.e. hydro-power, solar power, on-site water treatment, on-site water infiltration, impervious cover reduction, parking capacity, etc.)



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3. Energy Efficiency Goals

#### a. Goals/Policy

Explain the specific project goals and requirements regarding energy efficiency. Incorporate the requirements of UFC 1-200-02 High Performance and Sustainable Building Requirements and/or other relevant agency policies.

#### b. Systems and Feature Energy Impacts

Identify and explain envelope, system, or site and building features that will be incorporated to maximize energy efficiency. Identify features that must be incorporated that will reduce or limit energy efficiency.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 4. Indoor Environmental Quality Requirements

##### a. Space Type 1

i. Intended Use: Explain how the space will be used (i.e. classroom occasionally used as conference room).

ii. Occupancy Schedule: Describe the occupancy including number of people at various times (i.e. drill weekend-maximum capacity, weekdays-20 percent; or 0700-0900 - none, 0900-1400 - 30 people, 1400-1600 - none).

iii. Environmental Requirements: Describe the environmental requirements of the space. Include description of temperatures, humidity levels, ventilation rates, air quality, lighting levels, or any other specific parameters desired (i.e. 75 deg F, 50 percent rh, 30 fc, etc.).

iv. Occupant System Control Ability: Describe the desired level of control the occupants will have over the thermal comfort and lighting systems. (i.e. adjustable thermostat for every person, adjustable thermostat in all private offices, no adjustable thermostats, adjustable thermostat in senior rank also controlling other offices, occupancy sensors for lighting, adjustable dimming, etc.)

v. Type of Lighting: Describe the type of lighting desired (i.e. task lighting with minimal overhead, maximize daylight with dimming on overhead, accent lighting, particular fixtures, etc.).

vi. After-hour Use Accommodations: Describe whether and how often the space may be used after hours. Describe the systems that activate when an occupant uses the building after-hours. Describe the level of control of after-hour use HVAC.

(Example: Space is rarely used after-hours by few occupants. HVAC and lighting system should activate when occupants enter after-hours. The HVAC operation will be limited to that required to provide heating, A/C, and ventilation to the occupied space alone.) (Example: Space is rarely used after-hours by few occupants. Lighting and heating systems should activate. Ventilation and cooling should remain in normal after-hour operation.)

##### b. Space Type 2

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 5. Equipment and System Expectations

### a. HVAC Systems

i. Quality and Reliability: Explain the level of quality and reliability required of the HVAC systems.

(Example: Equipment efficiency should meet ASHRAE \_\_\_\_\_ and FEMP/Energy Star requirements. Due to critical nature of facility, additional redundancy in the cooling and heating systems is required, i.e. multiple chillers, boilers, and pumps.) (Example: No specific quality or reliability requirements specified. Equipment should remain serviceable over life of building or to the extent typical of the type of equipment.)

ii. Type: Explain the type of equipment desired.

(Example: Boilers should be condensing type. Use hydronic heating and cooling. Use self-contained A/C units in computer rooms.)

iii. Automation: Explain the level of automation in the HVAC System desired.

(Example: Single loop HVAC systems permissible. Use packaged controls only.) (Example: Control HVAC systems from DDC system connected to the base UMCS.) (Example: Boilers should have packaged controls connected to the DDC system.)

iv. Flexibility: Describe the desired level of flexibility of the HVAC system.

(Example: System should accommodate frequent office layout changes including private office wall movement.) (Example: Layout will remain mostly unchanged; no flexibility required.) (Example: Accommodate potential for conference and classrooms to change to offices.)

v. Maintenance Requirements: Describe the level of maintenance available or the requirements of the equipment regarding maintainability.

(Example: Equipment should be located to allow easy maintenance access. Equipment vendors or repair service should be able to respond within 24 hrs.)

### b. Lighting Systems

i. Quality and Reliability: Explain the level of quality and reliability required of the lighting system controls.

(Example: The building lighting system should meet [ASHRAE 90.1 - IP](#) requirements.)

ii. Type: Explain the type of lighting or control equipment desired.

(Example: High-efficiency fluorescent lamps with high-efficiency ballasts will be specified. Indirect lighting will be used in all office and classroom spaces. Lighting foot-candle levels may be reduced to 45 foot-candles in lieu of the typical 50 foot-candles when indirect lighting is used.)

iii. Automation: Explain the level of automation in the lighting control

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

system desired.

(Example: Provide occupancy sensors in restrooms, corridors, and storage areas.)

iv. Flexibility: Describe the desired level of flexibility of the lighting system and control systems.

(Example: Provide dual level switching in classrooms and conference rooms.)

v. Maintenance Requirements: Describe the level of maintenance available or the requirements of the equipment regarding maintainability.

(Example: )

#### c. Domestic Hot Water Systems

i. Quality and Reliability: Explain the level of quality and reliability required of the domestic hot water systems.

(Example: Equipment efficiency should meet ASHRAE and FEMP/Energy Star requirements. Due to critical nature of facility, additional redundancy in the water heating systems is required, i.e. multiple hot water heaters and circulation pumps.) (Example: No specific quality or reliability requirements specified. Equipment should remain serviceable over life of building or to the extent typical of the type of equipment.)

ii. Type: Explain the type of equipment desired.

(Example: Gas-fired storage tank water heater with mixing valve for temperature control.) (Example: Instantaneous electric water heater at lavatories.) (Example: Instantaneous electric water heater with integral control system for eyewash/showers.)

iii. Automation: Explain the level of automation in the domestic hot water control system desired.

(Example: Occupancy schedule control for recirculation loop and gas burner. Connect package controls to DDC system.)

iv. Flexibility: Describe the desired level of flexibility of the domestic hot water systems.

(Example: No anticipated changes to restroom layout; no additional flexibility required.)

v. Maintenance Requirements: Describe the level of maintenance available or the requirements of the equipment regarding maintainability.

(Example: Equipment should be located to allow easy maintenance access. Equipment vendors or repair service should be able to respond within 24 hrs.)

#### d. On-site Power Systems

i. Quality and Reliability: Explain the level of quality and reliability required of the on-site power system.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- ii. Type: Explain the type of on-site power system desired.
  - iii. Automation: Explain the level of automation in the on-site power system desired.
  - iv. Flexibility: Describe the desired level of flexibility of the on-site power system.
  - v. Maintenance Requirements: Describe the level of maintenance available or the requirements of the on-site power system regarding maintainability.
- e. Other Systems
- i. Quality and Reliability: Explain the level of quality and reliability required of the system.
  - ii. Type: Explain the type of system desired.
  - iii. Automation: Explain the level of automation in the system desired.
  - iv. Flexibility: Describe the desired level of flexibility of the system.
  - v. Maintenance Requirements: Describe the level of maintenance available or the requirements of the system regarding maintainability.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 6. Building Occupant and O&M Personnel Requirements

### a. Facility Operation

Describe how the facility will be operated. Who operates the facility? Who maintains the facility? Who pays the utility bills?

### b. UMCS (EMCS or FMCS)

Will the building be tied to an UMCS/EMCS/FMCS? What system will be connected to? Provide information regarding connection requirements, protocols, and control, scheduling and monitoring points.

### c. Occupant Training and Orientation

How much training and orientation is desired for building occupants? Will training need to be provided for all systems? To what extent do the occupants need to understand and use the systems?

### d. O&M Staff Training and Orientation

How much training and orientation is desired for building occupants? Will training need to be provided for all systems? To what extent do the occupants need to understand and use the systems?

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## APPENDIX B - BASIS OF DESIGN

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 50 00

## TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

11/20, CHG 1: 08/21

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

## AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C511 (2017) Reduced-Pressure Principle Backflow Prevention Assembly

## NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (2020; ERTA 20-1 2020; ERTA 20-2 2020; TIA 20-1; TIA 20-2; TIA 20-3; TIA 20-4)  
National Electrical Code

NFPA 241 (2022) Standard for Safeguarding Construction, Alteration, and Demolition Operations

## U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2014) Safety -- Safety and Health Requirements Manual

## U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD (2009; Rev 2012) Manual on Uniform Traffic Control Devices

## 1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

Construction Site Plan; G

Traffic Control Plan; G

Haul Road Plan; G

Contractor Computer Cybersecurity Compliance Statements; G

Contractor Temporary Network Cybersecurity Compliance Statements; G



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### SD-06 Test Reports

##### Backflow Preventer Tests

#### SD-07 Certificates

##### Backflow Tester Certification

##### Backflow Preventers Certificate of Full Approval

### 1.3 CONSTRUCTION SITE PLAN

Prior to the start of work, submit for Government approval a site plan showing the locations and dimensions of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area and details of the fence installation. Identify any areas which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

### 1.4 BACKFLOW PREVENTERS CERTIFICATE

#### 1.4.1 Backflow Tester Certificate

Prior to testing, submit to the Contracting Officer certification issued by the State or local regulatory agency attesting that the **backflow tester** has successfully completed a certification course sponsored by the regulatory agency. Tester must not be affiliated with a company participating in other phases of this Contract.

#### 1.4.2 Backflow Prevention Training Certificate

Submit a certificate recognized by the State or local authority that states the Contractor has completed at least 10 hours of training in backflow preventer installations. The certificate must be current.

### 1.5 DOD CONDITION OF READINESS (COR)

DOD will set the Condition of Readiness (COR) based on the weather forecast for sustained winds 50 knots (**58 mph**) or greater. Contact the Contracting Officer for the current COR setting.

Monitor weather conditions a minimum of twice a day and take appropriate actions according to the approved Emergency Plan in the accepted Accident Prevention Plan, **EM 385-1-1** Section 01 Emergency Planning and the instructions below.

Unless otherwise directed by the Contracting Officer, comply with:

- a. Condition FOUR (Sustained winds of **58 mph** or greater expected within 72 hours): Normal daily jobsite cleanup and good housekeeping practices. Collect and store in piles or containers scrap lumber, waste material, and rubbish for removal and disposal at the close of each work day. Maintain the construction site including storage areas, free of

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

accumulation of debris. Stack form lumber in neat piles less than 3.3 feet high. Remove all debris, trash, or objects that could become missile hazards. Review requirements pertaining to "Condition THREE" and continue action as necessary to attain "Condition FOUR" readiness. Contact Contracting Officer for weather and COR updates and completion of required actions.

- b. Condition THREE (Sustained winds of 58 mph or greater expected within 48 hours): Maintain "Condition FOUR" requirements and commence securing operations necessary for "Condition ONE" which cannot be completed within 18 hours. Cease all routine activities which might interfere with securing operations. Commence securing and stow all gear and portable equipment. Make preparations for securing buildings. Reinforce or remove formwork and scaffolding. Secure machinery, tools, equipment, materials, or remove from the jobsite. Expend every effort to clear all missile hazards and loose equipment from general base areas. Contact Contracting Officer for weather and COR updates and completion of required actions. Review requirements pertaining to "Condition TWO" and continue action as necessary to attain "Condition THREE" readiness.
- c. Condition TWO (Sustained winds of 58 mph or greater expected within 24 hours): Secure the jobsite, and leave Government premises.
- d. Condition ONE. (Sustained winds of 58 mph or greater expected within 12 hours): Contractor access to the jobsite and Government premises is prohibited.

#### 1.6 CYBERSECURITY DURING CONSTRUCTION

{For Reference Only: This subpart (and its subparts) relates to AC-18, SA-3, CCI-00258.} Meet the following requirements throughout the construction process.

##### 1.6.1 Contractor Computer Equipment

Contractor owned computers may be used for construction. When used, contractor computers must meet the following requirements:

###### 1.6.1.1 Operating System

The operating system must be an operating system currently supported by the manufacturer of the operating system. The operating system must be current on security patches and operating system manufacturer required updates.

###### 1.6.1.2 Anti-Malware Software

The computer must run anti-malware software from a reputable software manufacturer. Anti-malware software must be a version currently supported by the software manufacturer, must be current on all patches and updates, and must use the latest definitions file. All computers used on this project must be scanned using the installed software at least once per day.

###### 1.6.1.3 Passwords and Passphrases

The passwords and passphrases for all computers must be changed from their default values. Passwords must be a minimum of eight characters with a minimum of one uppercase letter, one lowercase letter, one number and one special character.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.6.1.4 Contractor Computer Cybersecurity Compliance Statements

Provide a single submittal containing completed Contractor Computer Cybersecurity Compliance Statements for each company using contractor owned computers. Contractor Computer Cybersecurity Compliance Statements must use the template published at <http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/forms-graphics-tables>. Each Statement must be signed by a cybersecurity representative for the relevant company.

#### 1.6.2 Temporary IP Networks

Temporary contractor-installed IP networks may be used during construction. When used, temporary contractor-installed IP networks must meet the following requirements:

##### 1.6.2.1 Network Boundaries and Connections

The network must not extend outside the project site and must not connect to any IP network other than IP networks provided under this project or Government furnished IP networks provided for this purpose. Any and all network access from outside the project site is prohibited.

##### 1.6.3 Government Access to Network

Government personnel must be allowed to have complete and immediate access to the network at any time in order to verify compliance with this specification.

##### 1.6.4 Temporary Wireless IP Networks

In addition to the other requirements on temporary IP networks, temporary wireless IP (WiFi) networks must not interfere with existing wireless network and must use WPA2 security. Network names (SSID) for wireless networks must be changed from their default values.

##### 1.6.5 Passwords and Passphrases

The passwords and passphrases for all network devices and network access must be changed from their default values. Passwords must be a minimum 8 characters with a minimum of one uppercase letter, one lowercase letter, one number and one special character.

##### 1.6.6 Contractor Temporary Network Cybersecurity Compliance Statements

Provide a single submittal containing completed Contractor Temporary Network Cybersecurity Compliance Statements for each company implementing a temporary IP network. Contractor Temporary Network Cybersecurity Compliance Statements must use the template published at <http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/forms-graphics-tables>. Each Statement must be signed by a cybersecurity representative for the relevant company. If no temporary IP networks will be used, provide a single copy of the Statement indicating this.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## PART 2 PRODUCTS

### 2.1 TEMPORARY SIGNAGE

#### 2.1.1 Bulletin Board

Prior to the commencement of work activities, provide a clear weatherproof covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the Contract, Wage Rate Information poster, Safety and Health Information as required by EM 385-1-1 Section 01 and other information approved by the Contracting Officer. Coordinate requirements herein with 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Locate the bulletin board at the project site in a conspicuous place easily accessible to all employees, and in location as approved by the Contracting Officer.

#### 2.1.2 Project Identification Signs

The requirements for the signs, their content, and location are as specified in Section 00 80 00.00 06 SPECIAL PROVISIONS PROJECT IDENTIFICATION. Erect signs within 15 days after receipt of the notice to proceed. Correct the data required by the safety sign daily, with light colored metallic or non-metallic numerals.

#### 2.1.3 Warning Signs

Post temporary signs, tags, and labels to give workers and the public adequate warning and caution of construction hazards according to the EM 385-1-1 Section 04. Attach signs to the perimeter fencing every 150 feet warning the public of the presence of construction hazards. Signs must require unauthorized persons to keep out of the construction site. Correct the data required by safety signs daily. Post signs at all points of entry designating the construction site as a hard hat area.

### 2.2 TEMPORARY TRAFFIC CONTROL

#### 2.2.1 Haul Roads

Construct access and haul roads necessary for proper prosecution of the work under this Contract in accordance with EM 385-1-1 Section 04. Construct with suitable grades and widths; avoid sharp curves, blind corners, and dangerous cross traffic. Submit haul road plan for approval. Provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, must be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and haul roads are subject to approval by the Contracting Officer. Lighting must be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations.

#### 2.2.2 Barricades

Erect and maintain temporary barricades to limit public access to hazardous areas. Barricades are required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Securely place barricades clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 2.3 FENCING

Provide fencing along the construction site and at all open excavations and tunnels to control access by unauthorized personnel. Safety fencing must be highly visible to be seen by pedestrians and vehicular traffic. All fencing must meet the requirements of EM 385-1-1. Remove the fence upon completion and acceptance of the work.

### 2.3.1 Polyethylene Mesh Safety Fencing

Temporary safety fencing must be a high visibility orange colored, high density polyethylene grid, a minimum of 48 inches high and maximum mesh size of 2 inches. Fencing must extend from the grade to a minimum of 48 inches above the grade and be tightly secured to T-posts spaced as necessary to maintain a rigid and taut fence. Fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection.

### 2.3.2 Chain Link Panel Fencing

Temporary panel fencing must be galvanized steel chain link panels 6 feet high. Multiple fencing panels may be linked together at the bases to form long spans as needed. Each panel base must be weighted down using sand bags or other suitable materials in order for the fencing to withstand anticipated winds while remaining upright. Fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection.

### 2.3.3 Post-Driven Chain Link Fencing

Temporary post-driven fencing must be galvanized chain link fencing 6 feet high supported by an tightly secured to galvanized steel posts driven below grade. Fence posts must be located on minimum 10 foot centers. Posts may be set in various surfaces such as sand, soil, asphalt or concrete as necessary. Chain link fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection. Completely remove fencing and posts at the completion of construction and restore surfaces disturbed or damaged to its original condition. Locate and identify underground utilities prior to setting fence posts. Equip fence with a lockable gate. Gate must remain locked when construction personnel are not present.

## 2.4 TEMPORARY WIRING

Provide temporary wiring in accordance with EM 385-1-1 Section 11, NFPA 241 and NFPA 70. Include monthly inspection and testing of all equipment and apparatus.

## 2.5 BACKFLOW PREVENTERS

Certificate of Full Approval from FCCCHR List, University of Southern California, attesting that the design, size and make of each backflow preventer has satisfactorily passed the complete sequence of performance testing and evaluation for the respective level of approval. Certificate of Provisional Approval is not acceptable.

Reduced pressure principle type conforming to the applicable requirements AWWA C511. Provide backflow preventers complete with 150 pound flanged

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

cast iron, bronze, brass mounted gate valve and strainer, stainless steel or bronze, internal parts.

### PART 3 EXECUTION

#### 3.1 EMPLOYEE PARKING

Construction Contract employees must park privately owned vehicles in an area designated by the Contracting Officer. Employee parking must not interfere with existing and established parking requirements of the Government installation.

#### 3.2 AVAILABILITY AND USE OF UTILITY SERVICES

##### 3.2.1 Temporary Utilities

Provide temporary utilities required for construction. Materials may be new or used, must be adequate for the required usage, not create unsafe conditions, and not violate applicable codes and standards.

##### 3.2.2 Sanitation

Provide and maintain within the construction area minimum field-type sanitary facilities in accordance with [FM 385-1-1](#) Section 02. Locate the facilities behind the construction fence or out of the public view. Clean units and empty wastes at least once a week or more frequently into a municipal, district, or station sanitary sewage system, or remove waste to a commercial facility. Obtain approval from the system owner prior to discharge into a municipal, district, or commercial sanitary sewer system. Penalties or fines associated with improper discharge will be the responsibility of the Contractor. Coordinate with the Contracting Officer and follow station regulations and procedures when discharging into the station sanitary sewer system. Maintain these conveniences at all times. Include provisions for pest control and elimination of odors. Government toilet facilities will not be available to Contractor's personnel.

##### 3.2.3 Telephone

Make arrangements and pay all costs for telephone facilities desired.

##### 3.2.4 Fire Protection

Provide temporary fire protection equipment for the protection of personnel and property during construction. Remove debris and flammable materials daily to minimize potential hazards.

#### 3.3 TRAFFIC PROVISIONS

##### 3.3.1 Maintenance of Traffic

- a. Conduct operations in a manner that will not close a thoroughfare or interfere with traffic on railways or highways except with written permission of the Contracting Officer at least 15 calendar days prior to the proposed modification date, and provide a [Traffic Control Plan](#) for Government approval detailing the proposed controls to traffic movement for approval. The plan must be in accordance with State and local regulations and the [MUTCD](#), Part VI. Contractor may move oversized and slow-moving vehicles to the worksite provided requirements of the highway authority have been met.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- b. Conduct work so as to minimize obstruction of traffic, and maintain traffic on at least half of the roadway width at all times. Obtain approval from the Contracting Officer prior to starting any activity that will obstruct traffic.
- c. Provide, erect, and maintain, at Contractor's expense, lights, barriers, signals, passageways, detours, and other items, that may be required by the Life Safety Signage, overhead protection authority having jurisdiction.
- d. Provide cones, signs, barricades, lights, or other traffic control devices and personnel required to control traffic. Do not use foil-backed material for temporary pavement marking because of its potential to conduct electricity during accidents involving downed power lines.

### 3.3.2 Protection of Traffic

Maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by the State and local authorities having jurisdiction. Provide self-illuminated (lighted) barricades during hours of darkness. Brightly-colored (orange) vests are required for all personnel working in roadways. Protect the traveling public from damage to person and property. Minimize the interference with public traffic on roads selected for hauling material to and from the site. Investigate the adequacy of existing roads and their allowable load limit. Contractor is responsible for the repair of damage to roads caused by construction operations.

### 3.3.3 Rush Hour Restrictions

Do not interfere with the peak traffic flows preceding and during normal operations without notification to and approval by the Contracting Officer.

### 3.3.4 Dust Control

Dust control methods and procedures must be approved by the Contracting Officer. Coordinate dust control methods with 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS.

## 3.4 REDUCED PRESSURE BACKFLOW PREVENTERS

Provide an approved reduced pressure backflow prevention assembly at each location where the Contractor taps into the Government potable water supply.

Perform backflow preventer tests using test equipment, procedures, and certification forms conforming to those outlined in the latest edition of the Manual of Cross-Connection Control published by the FCCCHR Manual. Test and tag each reduced pressure backflow preventer upon initial installation (prior to continued water use) and quarterly thereafter. Tag must contain the following information: make, model, serial number, dates of tests, results, maintenance performed, and signature of tester. Record test results on certification forms conforming to requirements cited

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

earlier in this paragraph.

### 3.5 CONTRACTOR'S TEMPORARY FACILITIES

Contractor-owned or -leased trailers must be identified by Government assigned numbers. Size and location of the number will comply with direction from the Contracting Officer. Apply the number to the trailer within 14 calendar days of notification, or sooner, if directed by the Government. Temporary facilities must meet requirements as identified in [EM 385-1-1](#) Section 04.

Contractor is responsible for security of their property. Provide adequate outside security lighting at the temporary facilities. Trailers must be anchored to resist high winds and meet applicable state or local standards for anchoring mobile trailers. Coordinate anchoring with [EM 385-1-1](#) Section 04. The Contract Clause entitled "FAR 52.236-10, Operations and Storage Areas" and the following apply:

#### 3.5.1 Administrative Field Offices

Provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

In the event a new building is constructed for the temporary project field office, it must be a minimum [12 feet](#) in width, [16 feet](#) in length and have a minimum of [7 feet](#) headroom. Equip the building with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. Provide a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building must be waterproof, supplied with a heater, have a minimum of two doors, electric lights, a telephone, a battery-operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. Provide approved sanitary facilities. Screen the windows and doors and provide the doors with deadbolt type locking devices or a padlock and heavy-duty hasp bolted to the door. Door hinge pins must be non-removable. Arrange the windows to open and to be securely fastened from the inside. Protect glass panels in windows by bars or heavy mesh screens to prevent easy access. In warm weather, provide air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature [20 degrees F](#) below the outside temperature when the outside temperature is [95 degrees F](#). Unless otherwise directed by the Contracting Officer, remove the building from the site upon completion and acceptance of the work.

#### 3.5.2 Quality Control Manager Records and Field Office

Provide on the jobsite an office with approximately [100 square feet](#) of useful floor area for the exclusive use of the QC Manager. Provide a weathertight structure with adequate heating and cooling, toilet facilities, lighting, ventilation, a [4 by 8 foot](#) plan table, a standard size office desk and chair, computer station, and working communications facilities. Provide a door with a cylinder lock and windows with locking hardware. Make utility connections. Locate as directed. File quality control records in the office and make available at all times to the Government. After completion of the work, remove the entire structure from the site.



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.5.3 Storage Area

Construct a temporary 6 foot high chain link fence around trailers and materials. Include plastic strip inserts, colored as directed by the Contracting Officer, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Do not place or store trailers, materials, or equipment outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site but within the installation boundaries. Trailers, equipment, or materials must not be open to public view with the exception of those items which are in support of ongoing work on the current day. Do not stockpile materials outside the fence in preparation for the next day's work. Park mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment within the fenced area at the end of each work day.

Keep fencing in a state of good repair and proper alignment. Grassed or unpaved areas, which are not established roadways, and will be traversed with construction equipment or other vehicles, must be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways, should the Contractor elect to traverse them with construction equipment or other vehicles. Mow and maintain grass located within the boundaries of the construction site for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers must be edged or trimmed neatly.

### 3.5.4 Supplemental Storage Area

Upon request, and pending availability, the Contracting Officer will designate another or supplemental area for the use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but will be within the installation boundaries. Maintain the area in a clean and orderly fashion and secured if needed to protect supplies and equipment. Utilities will not be provided to this area by the Government.

### 3.5.5 Appearance of Trailers

- a. Trailers must be roadworthy and comply with all appropriate state and local vehicle requirements. Trailers which are rusted, have peeling paint or are otherwise in need of repair will not be allowed on Installation property. Trailers must present a clean and neat exterior appearance and be in a state of good repair.
- b. Maintain the temporary facilities. Failure to do so will be sufficient reason to require their removal at the Contractor's expense.

### 3.5.6 Safety Systems

Protect the integrity of all installed safety systems or personnel safety devices. Obtain prior approval from the Contracting Officer if entrance into systems serving safety devices is required. If it is temporarily necessary to remove or disable personnel safety devices in order to accomplish Contract requirements, provide alternative means of protection prior to removing or disabling any permanently installed safety devices or equipment and obtain approval from the Contracting Officer.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.5.7 Weather Protection of Temporary Facilities and Stored Materials

Take necessary precautions to ensure that roof openings and other critical openings in the building are monitored carefully. Take immediate actions required to seal off such openings when rain or other detrimental weather is imminent, and at the end of each workday. Ensure that the openings are completely sealed off to protect materials and equipment in the building from damage.

#### 3.5.7.1 Building and Site Storm Protection

When a warning of gale force winds is issued, take precautions to minimize danger to persons, and protect the work and nearby Government property. Precautions must include, but are not limited to, closing openings; removing loose materials, tools and equipment from exposed locations; and removing or securing scaffolding and other temporary work. Close openings in the work when storms of lesser intensity pose a threat to the work or any nearby Government property.

### 3.6 PLANT COMMUNICATIONS

Whenever the individual elements of the plant are located so that operation by normal voice between these elements is not satisfactory, install a satisfactory means of communication, such as telephone or other suitable devices and make available for use by Government personnel.

### 3.7 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, furnish and erect temporary project safety fencing at the work site. Maintain the safety fencing during the life of the Contract and, upon completion and acceptance of the work, remove from the work site.

### 3.8 CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. Store all salvageable materials resulting from demolition activities within the fenced area described above or at the supplemental storage area. Neatly stack stored materials not in trailers, whether new or salvaged.

### 3.9 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletin board, signs, barricades, haul roads, and all other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence. Restore areas used during the performance of the Contract to the original or better condition. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil and seeding as necessary.

-- End of Section --

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 57 19.00 06

## TEMPORARY ENVIRONMENTAL CONTROLS AND PERMITS

04/20

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

## Army Regulations

AR 200-1 Environmental Protection and Enhancement

## ASTM INTERNATIONAL (ASTM)

ASTM E1527 (2021) Standard Practice for Environmental  
Site Assessments: Phase I Environmental  
Site Assessment Process

## U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA SW-846 (Third Edition; Update IV) Test Methods  
for Evaluating Solid Waste:  
Physical/Chemical Methods

## U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2014) Safety -- Safety and Health  
Requirements Manual

EM 385-1-97 (2013) Explosives -- Safety and Health  
Requirements Manual

ER 200-2-2 (1988) Environmental Quality - Procedures  
for Implementing NEPA

WETLANDS DELINEATION MANUAL (1987) Corps of Engineers Wetlands  
Delineation Manual

Wetland Supplement Regional Supplement to the Corps of  
Engineers Wetland Delineation Manual;  
Midwest Region (Version 2.0) April 2010  
ERDC/R; TR-10-16

## U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1910.120 Hazardous Waste Operations and Emergency  
Response

29 CFR 1915 Confined and Enclosed Spaces and Other  
Dangerous Atmospheres in Shipyard

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

	Employment
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 1926.62	Lead
40 CFR 112	Oil Pollution Prevention
40 CFR 241	Guidelines for Disposal of Solid Waste
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste
40 CFR 258	Subtitle D Landfill Requirements
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 261.7	Residues of Hazardous Waste in Empty Containers
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 262.31	Standards Applicable to Generators of Hazardous Waste-Labeling
40 CFR 262.34	Standards Applicable to Generators of Hazardous Waste-Accumulation Time
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 273	Standards for Universal Waste Management
40 CFR 273.2	Standards for Universal Waste Management - Batteries
40 CFR 273.4	Standards for Universal Waste Management - Mercury Containing Equipment

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

40 CFR 273.5	Standards for Universal Waste Management - Lamps
40 CFR 279	Standards for the Management of Used Oil
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 300.125	National Oil and Hazardous Substances Pollution Contingency Plan - Notification and Communications
40 CFR 355	Emergency Planning and Notification
40 CFR 372-SUBPART D	Specific Toxic Chemical Listings
40 CFR 403	General Pretreatment Regulations for Existing and New Sources of Pollution
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards
40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 63	National Emission Standards for Hazardous Air Pollutants for Source Categories
40 CFR 64	Compliance Assurance Monitoring
40 CFR 745	Lead-Based Paint Poisoning Prevention in Certain Residential Structures
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
40 CFR 82	Protection of Stratospheric Ozone
44 CFR 60.3	Flood Plain Management Criteria
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 172.101	Hazardous Material Regulation-Purpose and Use of Hazardous Material Table
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
49 CFR 178	Specifications for Packagings

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 1.2 DEFINITIONS

### 1.2.1 Class I and II Ozone Depleting Substance (ODS)

Class I ODS is defined in Section 602(a) of The Clean Air Act. A list of Class I ODS can be found on the EPA website at the following weblink.

<http://www.epa.gov/ozone/science/ods/classone.html>.

Class II ODS is defined in Section 602(s) of The Clean Air Act. A list of Class II ODS can be found on the EPA website at the following weblink.

<http://www.epa.gov/ozone/science/ods/classtwo.html>.

### 1.2.2 Contractor Generated Hazardous Waste

Contractor generated hazardous waste is materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene), waste thinners, excess paints, excess solvents, waste solvents, excess pesticides, and contaminated pesticide equipment rinse water.

### 1.2.3 Electronics Waste

Electronics waste is discarded electronic devices intended for salvage, recycling, or disposal.

### 1.2.4 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally or historically.

### 1.2.5 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

### 1.2.6 Hazardous Debris

As defined in paragraph SOLID WASTE, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) in accordance with 40 CFR 261. Hazardous debris also includes debris that exhibits a characteristic of hazardous waste in accordance with 40 CFR 261.

### 1.2.7 Hazardous Materials

Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172.

Hazardous material is any material that: Is regulated as a hazardous

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

material in accordance with 49 CFR 173; or requires a Safety Data Sheet (SDS) in accordance with 29 CFR 1910.120; or during end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D. Designation of a material by this definition, when separately regulated or controlled by other sections or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this section for "control" purposes. Such material includes ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs).

#### 1.2.8 Hazardous Waste

Hazardous Waste is any material that meets the definition of a solid waste and exhibit a hazardous characteristic (ignitability, corrosivity, reactivity, or toxicity) as specified in 40 CFR 261, Subpart C, or contains a listed hazardous waste as identified in 40 CFR 261, Subpart D.

#### 1.2.9 Land Application

Land Application means spreading or spraying discharge water at a rate that allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" must occur. Comply with federal, state, and local laws and regulations.

#### 1.2.10 Municipal Separate Storm Sewer System (MS4) Permit

MS4 permits are those held by installations to obtain NPDES permit coverage for their stormwater discharges.

#### 1.2.11 National Pollutant Discharge Elimination System (NPDES)

The NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

#### 1.2.12 Oily Waste

Oily waste are those materials that are, or were, mixed with Petroleum, Oils, and Lubricants (POLs) and have become separated from that POLs. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, POLs and may be appropriately tested and discarded in a manner which is in compliance with other state and local requirements.

This definition includes materials such as oily rags, "kitty litter" sorbent clay and organic sorbent material. These materials may be land filled provided that: It is not prohibited in other state regulations or local ordinances; the amount generated is "de minimus" (a small amount); it is the result of minor leaks or spills resulting from normal process operations; and free-flowing oil has been removed to the practicable extent possible. Large quantities of this material, generated as a result of a major spill or in lieu of proper maintenance of the processing equipment, are a solid waste. As a solid waste, perform a hazardous waste

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

determination prior to disposal. As this can be an expensive process, it is recommended that this type of waste be minimized through good housekeeping practices and employee education.

#### 1.2.13 Regulated Waste

Regulated waste are solid wastes that have specific additional federal, state, or local controls for handling, storage, or disposal.

#### 1.2.14 Sediment

Sediment is soil and other debris that have eroded and have been transported by runoff water or wind.

#### 1.2.15 Solid Waste

Solid waste is a solid, liquid, semi-solid or contained gaseous waste. A solid waste can be a hazardous waste, non-hazardous waste, or non-Resource Conservation and Recovery Act (RCRA) regulated waste. Types of solid waste typically generated at construction sites may include:

##### 1.2.15.1 Debris

Debris is non-hazardous solid material generated during the construction, demolition, or renovation of a structure that exceeds 2.5-inch particle size that is: a manufactured object; plant or animal matter; or natural geologic material (for example, cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.

##### 1.2.15.2 Green Waste

Green waste is the vegetative matter from landscaping, land clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.

##### 1.2.15.3 Material not regulated as solid waste

Material not regulated as solid waste is nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

##### 1.2.15.4 Non-Hazardous Waste

Non-hazardous waste is waste that is excluded from, or does not meet, hazardous waste criteria in accordance with 40 CFR 263.

##### 1.2.15.5 Recyclables

Recyclables are materials, equipment and assemblies such as doors, windows,



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable, wiring, insulated/non-insulated copper wire cable, wire rope, and structural components. It also includes commercial-grade refrigeration equipment with Freon removed, household appliances where the basic material content is metal, clean polyethylene terephthalate bottles, cooking oil, used fuel oil, textiles, high-grade paper products and corrugated cardboard, stackable pallets in good condition, clean crating material, and clean rubber/vehicle tires. Metal meeting the definition of lead contaminated or lead based paint contaminated may be included as recyclable if sold to a scrap metal company. Paint cans that meet the definition of empty containers in accordance with 40 CFR 261.7 may be included as recyclable if sold to a scrap metal company.

#### 1.2.15.6 Surplus Soil

Surplus soil is existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars, and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included and must be managed in accordance with paragraph HAZARDOUS MATERIAL MANAGEMENT.

#### 1.2.15.7 Scrap Metal

This includes scrap and excess ferrous and non-ferrous metals such as reinforcing steel, structural shapes, pipe, and wire that are recovered or collected and disposed of as scrap. Scrap metal meeting the definition of hazardous material or hazardous waste is not included.

#### 1.2.15.8 Wood

Wood is dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included. Treated wood includes, but is not limited to, lumber, utility poles, crossties, and other wood products with chemical treatment.

#### 1.2.16 Surface Discharge

Surface discharge means discharge of water into drainage ditches, storm sewers, creeks or "waters of the United States". Surface discharges are discrete, identifiable sources and require a permit from the governing agency. Comply with federal, state, and local laws and regulations.

#### 1.2.17 Wastewater

Wastewater is the used water and solids from a community that flow to a treatment plant.

##### 1.2.17.1 Stormwater

Stormwater is any precipitation in an urban or suburban area that does not evaporate or soak into the ground, but instead collects and flows into storm drains, rivers, and streams.

#### 1.2.18 Waters of the United States

Waters of the United States means Federally jurisdictional waters, including wetlands, that are subject to regulation under Section 404 of the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Clean Water Act or navigable waters, as defined under the Rivers and Harbors Act.

#### 1.2.19 Wetlands

Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Official determination of whether or not an area is classified as a wetland must be done in accordance with the [WETLANDS DELINEATION MANUAL](#) and [Wetland Supplement](#).

#### 1.2.20 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (for example, thermostats), and lamps (for example, fluorescent bulbs). The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier for universal waste handlers to collect these items and send them for recycling or proper disposal. These regulations can be found at [40 CFR 273](#).

### 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with LRL Section [01 33 00 SUBMITTAL PROCEDURES](#):

#### [SD-01 Preconstruction Submittals](#)

[Preconstruction Survey](#)

[Solid Waste Management Permit; G](#)

[Regulatory Notifications; G](#)

[Environmental Protection Plan; G](#)

[Dirt and Dust Control Plan; G](#)

[Employee Training Records; G](#)

[Environmental Manager Qualifications; G](#)

#### [SD-06 Test Reports](#)

[Laboratory Analysis](#)

[Solid Waste Management Report; G](#)

#### [SD-07 Certificates](#)

[Employee Training Records; G](#)

#### [SD-11 Closeout Submittals](#)

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Waste Determination Documentation; G

Disposal Documentation for Hazardous and Regulated Waste; G

Assembled Employee Training Records; G

Solid Waste Management Permit; G

Solid Waste Management Report; G

Hazardous Waste/Debris Management; G

Regulatory Notifications; G

Sales Documentation; G

Contractor Certification

#### 1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Protect the environmental resources within the project boundaries and those affected outside the limits of permanent work during the entire duration of this Contract. Comply with federal, state, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

Tests and procedures assessing whether construction operations comply with Applicable Environmental Laws may be required. Analytical work must be performed by qualified laboratories; and where required by law, the laboratories must be certified.

##### 1.4.1 Conformance with the Environmental Management System

Perform work under this contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS). Perform work in a manner that conforms to objectives and targets of the environmental programs and operational controls identified by the EMS. Support Government personnel when environmental compliance and EMS audits are conducted by escorting auditors at the Project site, answering questions, and providing proof of records being maintained. Provide monitoring and measurement information as necessary to address environmental performance relative to environmental, energy, and transportation management goals. In the event an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, take corrective and preventative actions. In addition, employees must be aware of their roles and responsibilities under the installation EMS and of how these EMS roles and responsibilities affect work performed under the contract.

Coordinate with the installation's EMS coordinator to identify training needs associated with environmental aspects and the EMS and arrange training or take other action to meet these needs. Provide training documentation to the Contracting Officer. The Installation Environmental

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Office will retain associated environmental compliance records. Make EMS Awareness training completion certificates available to Government auditors during EMS audits and include the certificates in the Employee Training Records. See paragraph EMPLOYEE TRAINING RECORDS.

#### 1.5 SPECIAL ENVIRONMENTAL REQUIREMENTS

Not Used.

#### 1.6 QUALITY ASSURANCE

##### 1.6.1 Preconstruction Survey and Protection of Features

This paragraph supplements the Contract FAR 52.236-9 - Protection of Existing Vegetation, Structures, Equipment, Utilities and Improvements. Prior to start of any onsite construction activities, perform a [Preconstruction Survey](#) of the project site with the Contracting Officer, and take photographs showing existing environmental conditions in and adjacent to the site. Submit a report for the record. Include in the report a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. The Contractor and the Contracting Officer will sign this survey report upon mutual agreement regarding its accuracy and completeness. Protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference that their preservation may cause to the work under the Contract.

##### 1.6.2 [Regulatory Notifications](#)

Provide regulatory notification requirements in accordance with federal, state and local regulations. In cases where the Government will also provide public notification (such as stormwater permitting), coordinate with the Contracting Officer. Submit copies of regulatory notifications to the Contracting Officer within 14 days prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all-inclusive): demolition, renovation, NPDES defined site work, construction, removal or use of a permitted air emissions source, and remediation of controlled substances (asbestos, hazardous waste, lead paint).

##### 1.6.3 Environmental Brief

Attend an environmental brief to be included in the preconstruction meeting. Provide the following information: types, quantities, and use of hazardous materials that will be brought onto the installation; and types and quantities of wastes/wastewater that may be generated during the Contract. Discuss the results of the Preconstruction Survey at this time.

Prior to initiating any work on site, meet with the Contracting Officer and installation Environmental Office to discuss the proposed Environmental Protection Plan (EPP). Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural and cultural resources, required reports, required permits, permit requirements (such as mitigation measures), and other measures to be taken.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.6.4 Environmental Manager

Appoint in writing an Environmental Manager for the project site. The Environmental Manager is directly responsible for coordinating contractor compliance with federal, state, local, and installation requirements. The Environmental Manager must ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, manifesting, and disposal); implement the EPP; ensure environmental permits are obtained, maintained, and closed out; ensure compliance with Stormwater Program requirements; ensure compliance with Hazardous Materials (storage, handling, and reporting) requirements; and coordinate any remediation of regulated substances (lead, asbestos, PCB transformers). This can be a collateral position; however, the person in this position must be trained to adequately accomplish the following duties: ensure waste segregation and storage compatibility requirements are met; inspect and manage Satellite Accumulation areas; ensure only authorized personnel add wastes to containers; ensure Contractor personnel are trained in 40 CFR requirements in accordance with their position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out. Submit [Environmental Manager Qualifications](#) to the Contracting Officer.

#### 1.6.5 Employee Training Records

Prepare and maintain [Employee Training Records](#) throughout the term of the contract meeting applicable 40 CFR requirements. Provide Employee Training Records in the Environmental Records Binder. Ensure every employee completes a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures compliance with federal, state and local regulatory requirements for RCRA Large Quantity Generator. Provide a Position Description for each employee, by subcontractor, based on the Davis-Bacon Wage Rate designation or other equivalent method, evaluating the employee's association with hazardous and regulated wastes. This Position Description will include training requirements as defined in [40 CFR 265](#) for a Large Quantity Generator facility. Submit these [Assembled Employee Training Records](#) to the Contracting Officer at the conclusion of the project, unless otherwise directed.

Train personnel to meet state requirements. Conduct environmental protection/pollution control meetings for personnel prior to commencing construction activities. Contact additional meetings for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, waters of the United States, and endangered species and their habitat that are known to be in the area.

#### 1.6.6 Non-Compliance Notifications

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with federal, state or local environmental laws or regulations, permits, and other elements of the Contractor's EPP. After receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions will be granted or equitable adjustments allowed for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

#### 1.7 ENVIRONMENTAL PROTECTION PLAN

The purpose of the EPP is to present an overview of known or potential environmental issues that must be considered and addressed during construction. Incorporate construction related objectives and targets from the installation's EMS into the EPP. Include in the EPP measures for protecting natural and cultural resources, required reports, and other measures to be taken. Meet with the Contracting Officer or Contracting Officer Representative to discuss the EPP and develop a mutual understanding relative to the details for environmental protection including measures for protecting natural resources, required reports, and other measures to be taken. Submit the EPP within fifteen (15) days after notice to proceed and not less than ten (10) days before the preconstruction meeting. Revise the EPP throughout the project to include any reporting requirements, changes in site conditions, or contract modifications that change the project scope of work in a way that could have an environmental impact. No requirement in this section will relieve the Contractor of any applicable federal, state, and local environmental protection laws and regulations. During Construction, identify, implement, and submit for approval any additional requirements to be included in the EPP. Maintain the current version onsite.

The EPP includes, but is not limited to, the following elements:

##### 1.7.1 General Overview and Purpose

###### 1.7.1.1 Descriptions

A brief description of each specific plan required by environmental permit or elsewhere in this Contract such as spill control plan, solid waste management plan, wastewater management plan, air pollution control plan, contaminant prevention plan, a historical, archaeological, cultural resources, biological resources and wetlands plan, traffic control plan Hazardous, Toxic and Radioactive Waste (HTRW) Plan, Non-Hazardous Solid Waste Disposal Plan, borrowing material plan.

###### 1.7.1.2 Duties

The duties and level of authority assigned to the person(s) on the job site who oversee environmental compliance, such as who is responsible for adherence to the EPP, who is responsible for spill cleanup and training personnel on spill response procedures, who is responsible for manifesting hazardous waste to be removed from the site (if applicable), and who is responsible for training the Contractor's environmental protection personnel.

###### 1.7.1.3 Procedures

A copy of any standard or project-specific operating procedures that will be used to effectively manage and protect the environment on the project site.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.7.1.4 Communications

Communication and training procedures that will be used to convey environmental management requirements to Contractor employees and subcontractors.

#### 1.7.1.5 Contact Information

Emergency contact information contact information (office phone number, cell phone number, and e-mail address).

#### 1.7.2 General Site Information

##### 1.7.2.1 Drawings

Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, jurisdictional wetlands, material storage areas, structures, sanitary facilities, storm drains and conveyances, and stockpiles of excess soil.

##### 1.7.2.2 Work Area

Work area plan showing the proposed activity in each portion of the area and identify the areas of limited use or nonuse. Include measures for marking the limits of use areas, including methods for protection of features to be preserved within authorized work areas and methods to control runoff and to contain materials on site, and a traffic control plan.

##### 1.7.2.3 Documentation

A letter signed by an officer of the firm appointing the Environmental Manager and stating that person is responsible for managing and implementing the Environmental Program as described in this contract. Include in this letter the Environmental Manager's authority to direct the removal and replacement of non-conforming work.

##### 1.7.2.4 Munitions and Explosives of Concern

The Contractor shall ensure that each employee is familiar with and complies with these procedures and USACE EM 385-1-97, Chapter III Munitions and Explosives of Concern (MEC) Encountered during USACE Activities. As such the following should appear in the contractor's Accident Prevention Plan:

**Recognize:** Recognize the hazard and do not touch, disturb, or move the item as it could detonate with movement or ground vibrations.

**Retreat:** Stop work, mark the general location, and have everyone retreat from the area.

**Report:** Report the situation immediately to the appropriate local emergency response authority (i.e., call 911 or the equivalent on DoD installations), providing as much information as possible about the items encountered. USACE personnel should also notify their project chain of command, District Safety Office, and installation staff as appropriate.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

1.7.3 Management of Natural Resources

- a. Land resources
- b. Tree protection
- c. Replacement of damaged landscape features
- d. Temporary construction
- e. Stream crossings
- f. Fish and wildlife resources
- g. Wetland areas

1.7.4 Protection of Historical and Archaeological Resources

- a. Objectives
- b. Methods

1.7.5 Stormwater Management and Control

- a. Ground cover
- b. Erodible soils
- c. Temporary measures
  - (1) Structural Practices
  - (2) Temporary and permanent stabilization
- d. Effective selection, implementation and maintenance of Best Management Practices (BMPs).

1.7.6 Protection of the Environment from Waste Derived from Contractor Operations

Control and disposal of solid and sanitary waste. Control and disposal of hazardous waste.

If the project is located on a military installation, management procedures for hazardous waste to be generated shall be followed. The elements of those procedures will coincide with the Installation Hazardous Waste Management Plan. The Contracting Officer will provide a copy of the Installation Hazardous Waste Management Plan. For all projects, as a minimum, include the following:

- a. List of the types of hazardous wastes expected to be generated
- b. Procedures to ensure a written waste determination is made for appropriate wastes that are to be generated
- c. Sampling/analysis plan, including laboratory method(s) that will be used for waste determinations and copies of relevant laboratory certifications



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- d. Methods and proposed locations for hazardous waste accumulation/storage (that is, in tanks or containers)
- e. Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless specifically noted)
- f. Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions (40 CFR 268)
- g. Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and similar
- h. Used oil management procedures in accordance with 40 CFR 279; Hazardous waste minimization procedures
- i. Plans for the disposal of hazardous waste by permitted facilities; and Procedures to be employed to ensure required employee training records are maintained.

#### 1.7.7 Prevention of Releases to the Environment

Procedures to prevent releases to the environment

Notifications in the event of a release to the environment

#### 1.7.8 Regulatory Notification and Permits

List what notifications and permit applications must be made. Some permits require up to 180 days to obtain. Demonstrate that those permits have been obtained or applied for by including copies of applicable environmental permits. The EPP will not be approved until the permits have been obtained.

#### 1.7.9 Clean Air Act Compliance

##### 1.7.9.1 Haul Route

Submit truck and material haul routes along with a [Dirt and Dust Control Plan](#) for controlling dirt, debris, and dust on Installation roadways. As a minimum, identify in the plan the subcontractor and equipment for cleaning along the haul route and measures to reduce dirt, dust, and debris from roadways.

##### 1.7.9.2 Pollution Generating Equipment

Identify air pollution generating equipment or processes that may require federal, state, or local permits under the Clean Air Act. Determine requirements based on any current installation permits and the impacts of the project. Provide a list of all fixed or mobile equipment, machinery or operations that could generate air emissions during the project to the Installation Environmental Office (Air Program Manager).

##### 1.7.9.3 Stationary Internal Combustion Engines

Identify portable and stationary internal combustion engines that will be supplied, used or serviced. Comply with 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ, and local regulations as applicable. At minimum, include the make, model, serial number, manufacture date, size (engine brake horsepower), and EPA emission certification status of each

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

engine. Maintain applicable records and log hours of operation and fuel use. Logs must include reasons for operation and delineate between emergency and non-emergency operation.

#### 1.7.9.4 Refrigerants

Identify management practices to ensure that heating, ventilation, and air conditioning (HVAC) work involving refrigerants complies with 40 CFR 82 requirements. Technicians must be certified, maintain copies of certification on site, use certified equipment and log work that requires the addition or removal of refrigerant. Any refrigerant reclaimed is the property of the Government, coordinate with the Installation Environmental Office to determine the appropriate turn in location.

#### 1.7.9.5 Air Pollution-engineering Processes

Identify planned air pollution-generating processes and management control measures (including, but not limited to, spray painting, abrasive blasting, demolition, material handling, fugitive dust, and fugitive emissions). Log hours of operations and track quantities of materials used.

#### 1.7.9.6 Monitoring

For the protection of public health, monitor and control contaminant emissions to the air from Hazardous, Toxic, and Radioactive Waste remedial action area sources to minimize short-term risks that might be posed to the community during implementation of the remedial alternative in accordance with the following.

- a. Perimeter Air Contaminant of Concern.
- b. Time Averaged Perimeter Action Levels.

Concentration

Time

- c. Perimeter Sampling/Monitoring Locations.
- d. Monitoring Instruments/Sampling and Analysis Methods.
- e. Staffing.

#### 1.7.9.7 Compliant Materials

Provide the Government a list of and SDSs for all hazardous materials proposed for use on site. Materials must be compliant with all Clean Air Act regulations for emissions including solvent and volatile organic compound contents, and applicable National Emission Standards for Hazardous Air Pollutants requirements. The Government may alter or limit use of specific materials as needed to meet installation permit requirements for emissions.

### 1.8 LICENSES AND PERMITS

Obtain licenses and permits required for the construction of the project and in accordance with FAR 52.236-7 - Permits and Responsibilities. Notify the Government of all general use permitted equipment the Contractor plans

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

to use on site. This paragraph supplements the Contractor's responsibility under FAR 52.236-7 - Permits and Responsibilities. Part 4 of this Section provides a list of typical preconstruction permits.

#### 1.9 ENVIRONMENTAL RECORDS BINDER

Maintain on-site a separate three-ring Environmental Records Binder and submit at the completion of the project. Make separate parts within the binder that correspond to each submittal listed under paragraph CLOSEOUT SUBMITTALS in this section.

#### 1.10 Not Used

#### 1.11 SOLID WASTE MANAGEMENT PERMIT

Provide the Contracting Officer with written notification of the quantity of anticipated solid waste or debris that is anticipated or estimated to be generated by construction. Include in the report the locations where various types of waste will be disposed or recycled. Include letters of acceptance from the receiving location or as applicable; submit one copy of the receiving location state and local Solid Waste Management Permit or license showing such agency's approval of the disposal plan before transporting wastes off Government property.

##### 1.11.1 Solid Waste Management Report

Monthly, submit a solid waste disposal report to the Contracting Officer. For each waste, the report will state the classification (using the definitions provided in this section), amount, location, and name of the business receiving the solid waste.

#### 1.12 BORROW SOILS

It is the responsibility of the Contractor to have any off site fill material certified that the fill material is suitable and meets environmental fill requirements, if applicable. The fill material shall be deemed suitable via sampling by an environmental engineering firm acceptable to the Contracting Officer's Representative (COR). This confirmation shall include obtaining and testing representative samples from the proposed borrow source. The engineering firm will submit certification of environmentally suitable material signed by a licensed professional engineer. This certification along with all proposed borrow sources, borrow materials, sampling and analysis plans and reports shall be deemed acceptable to the COR prior to transportation of borrow material to the site.

#### 1.13 MANAGEMENT OF BORROW MATERIAL AND EXCESS SOIL

1. Under this contract, the intent is that all excavated soils are to be reused on-site to the greatest extent practicable and economically justified and the use of borrow from off-site sources shall be avoided to the greatest extent practicable and economically justified. (If available, the Government will identify on the contract drawings disposal areas and/or borrow areas outside the construction work limits on the Government installation where excess soils may be taken. Any compaction or grading requirements will be noted on the drawings or in the specifications.)

2. If reuse of all excavated soils is not practical or economical and disposal on the Government installation is not available, then all soil

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

removed from the project site will be disposed of at a State permitted RCRA Subtitle D disposal facility in accordance with all applicable federal, state and local laws and regulations.

3. If reuse of all excavated soils is not practical or economical and disposal on the Government installation is not available, the Contractor may place excess excavated soil material on a receiving property that has been approved by the Government. The action of placing excess soil on the receiving property shall have had the appropriate level of National Environmental Policy Act (NEPA) compliance activity performed and deemed acceptable. If the NEPA assessment has not evaluated placement of spoils off-site, then compliance with NEPA will need to be demonstrated through the preparation of a Record of Environmental Consideration (REC) or a Supplemental Environmental Assessment (EA). NEPA documents shall be prepared using an inter-disciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act). The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process.

A written certification signed by the contractor shall be furnished to the Government indicating the soil was placed on the approved receiving site prior to payment for this effort. The certification shall identify dates and quantities of soils placed.

4. If borrow material is required and borrow is not available from the project site or the Government installation, the Contractor shall obtain borrow material from an off-site borrow source that has been approved by the Government. The action of acquiring borrow and transporting that material to the project shall have had the appropriate level of National Environmental Policy Act (NEPA) compliance activity performed and deemed acceptable. If the NEPA assessment has not evaluated the acquisition of borrow, then compliance with NEPA will need to be demonstrated through the preparation of a Record of Environmental Consideration (REC) or a Supplemental Environmental Assessment (EA). NEPA documents shall be prepared using an inter-disciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act). The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process.

The Supplemental EA shall meet the requirements of [ASTM E1527](#) and was performed no earlier than two months prior to award of the contract and by a qualified environmental professional as defined by X2.1 of [ASTM E1527](#). The findings of the Supplemental EA shall state that no indications of contamination were found on or adjacent to the property and that no additional investigation is warranted. A copy of the ESA report shall be furnished by the Contractor to the Government.

#### 1.14 FACILITY HAZARDOUS WASTE GENERATOR STATUS

Meet the regulatory requirements of this generator designation for any work conducted within the boundaries of this Installation. Comply with provisions of federal, state, and local regulatory requirements applicable to this generator status regarding training and storage, handling, and disposal of construction derived wastes.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.15 SUBCONTRACTORS

Ensure compliance with this section by subcontractors.

#### 1.16 PAYMENT

No separate payment will be made for work covered under this section. Payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor, and payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations are the Contractor's responsibility. All costs associated with this section must be included in the contract price.

### PART 2 PRODUCTS

Not Used

### PART 3 EXECUTION

#### 3.1 PROTECTION OF NATURAL RESOURCES

Minimize interference with, disturbance to, and damage to fish, wildlife, and plants, including their habitats. Prior to the commencement of activities, consult with the Installation Environmental Office, regarding rare species or sensitive habitats that need to be protected. The protection of rare, threatened, and endangered animal and plant species identified, including their habitats, is the Contractor's responsibility.

Preserve the natural resources within the project boundaries and outside the limits of permanent work. Restore to an equivalent or improved condition upon completion of work that is consistent with the requirements of the Installation Environmental Office or as otherwise specified. Confine construction activities to within the limits of the work indicated or specified.

##### 3.1.1 Flow Ways

Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as specified and permitted.

##### 3.1.2 Vegetation

Except in areas to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without the Contracting Officer's permission. Do not fasten or attach ropes, cables, or guys to existing nearby trees for anchorages unless authorized by the Contracting Officer. Where such use of attached ropes, cables, or guys is authorized, the Contractor is responsible for any resultant damage.

Protect existing trees that are to remain to ensure they are not injured, bruised, defaced, or otherwise damaged by construction operations. Remove displaced rocks from uncleared areas. Coordinate with the Contracting Officer and Installation Environmental Office to determine appropriate action for trees and other landscape features scarred or damaged by equipment operations.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.1.3 Streams

Stream crossings must allow movement of materials or equipment without violating water pollution control standards of the federal, state, and local governments. Construction of stream crossing structures must be in compliance with any required permits including, but not limited to, Clean Water Act Section 404, and Section 401 Water Quality.

The Contracting Officer's approval and appropriate permits are required before any equipment will be permitted to ford live streams. In areas where frequent crossings are required, install temporary culverts or bridges. Obtain Contracting Officer's approval prior to installation. Remove temporary culverts or bridges upon completion of work, and repair the area to its original condition unless otherwise required by the Contracting Officer.

### 3.2 STORMWATER

Do not discharge stormwater from construction sites to the sanitary sewer. If the water is noted or suspected of being contaminated, it may only be released to the storm drain system if the discharge is specifically permitted. Obtain authorization in advance from the Installation Environmental Office for any release of contaminated water.

#### 3.2.1 Erosion and Sediment Control Measures

Provide erosion and sediment control measures in accordance with state and local laws and regulations. Preserve vegetation to the maximum extent practicable.

Erosion control inspection reports may be compiled as part of a stormwater pollution prevention plan inspection reports.

##### 3.2.1.1 Erosion Control

Prevent erosion by mulching, Compost Blankets, Geotextiles, temporary slope drains. Stabilize slopes by chemical stabilization, sodding, seeding, or such combination of these methods necessary for effective erosion control. Use of hay bales is prohibited.

Provide seeding in accordance with UFGS Section 32 92 19 SEEDING.

##### 3.2.1.2 Sediment Control Practices

Implement sediment control practices to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Implement sediment control practices prior to soil disturbance and prior to creating areas with concentrated flow, during the construction process to minimize erosion and sediment laden runoff. Include the following devices: silt fence, temporary diversion dikes, storm drain inlet protection. Location and details of installation and construction are indicated on the drawings.

##### 3.2.2 Work Area Limits

Mark the areas that need not be disturbed under this Contract prior to commencing construction activities. Mark or fence isolated areas within the general work area that are not to be disturbed. Protect monuments and markers before construction operations commence. Where construction

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

operations are to be conducted during darkness, any markers must be visible in the dark. Personnel must be knowledgeable of the purpose for marking and protecting particular objects.

### 3.2.3 Contractor Facilities and Work Areas

Place field offices, staging areas, stockpile storage, and temporary buildings in areas designated on the drawings or as directed by the Contracting Officer. Move or relocate the Contractor facilities only when approved by the Government. Provide erosion and sediment controls for onsite borrow and spoil areas to prevent sediment from entering nearby waters. Control temporary excavation and embankments for plant or work areas to protect adjacent areas.

## 3.3 SURFACE AND GROUNDWATER

### 3.3.1 Cofferdams, Diversions, and Dewatering

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure must be constantly controlled to maintain compliance with existing state water quality standards and designated uses of the surface water body. Comply with the State of [Alabama](#) water quality standards and anti-degradation provisions and the Clean Water Act. Do not discharge excavation ground water to the sanitary sewer, storm drains, or to surface waters without prior specific authorization in writing from the Installation Environmental Office. Discharge of hazardous substances will not be permitted under any circumstances. Use sediment control BMPs to prevent construction site runoff from directly entering any storm drain or surface waters.

If the construction dewatering is noted or suspected of being contaminated, it may only be released to the storm drain system if the discharge is specifically permitted. Obtain authorization for any contaminated groundwater release in advance from the Installation Environmental Officer and the federal or state authority, as applicable. Discharge of hazardous substances will not be permitted under any circumstances.

### 3.3.2 Waters of the United States

Do not enter, disturb, destroy, or allow discharge of contaminants into waters of the United States.

## 3.4 PROTECTION OF CULTURAL RESOURCES

### 3.4.1 Archaeological Resources

If, during excavation or other construction activities, any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, activities that may damage or alter such resources will be suspended. Resources covered by this paragraph include, but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. Cease all activities that may result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

from trespassing on, removing, or otherwise disturbing such resources. The Government retains ownership and control over archaeological resources.

### 3.5 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with 40 CFR 64 and state air emission and performance laws and standards.

#### 3.5.1 Preconstruction Air Permits

Notify the Air Program Manager, through the Contracting Officer, at least 6 months prior to bringing equipment, assembled or unassembled, onto the Installation, so that air permits can be secured. Necessary permitting time must be considered in regard to construction activities. Clean Air Act (CAA) permits must be obtained prior to bringing equipment, assembled or unassembled, onto the Installation.

#### 3.5.2 Oil or Dual-fuel Boilers and Furnaces

Provide product data and details for new, replacement, or relocated fuel fired boilers, heaters, or furnaces to the Installation Environmental Office (Air Program Manager) through the Contracting Officer. Data to be reported include: equipment purpose (water heater, building heat, process), manufacturer, model number, serial number, fuel type (oil type, gas type) size (MMBTU heat input). Provide in accordance with paragraph PRECONSTRUCTION AIR PERMITS.

#### 3.5.3 Burning

Burning is prohibited on the Government premises.

#### 3.5.4 Class I and II ODS Prohibition

Class I and II ODS are Government property and must be returned to the Government for appropriate management. Coordinate with the Installation Environmental Office to determine the appropriate location for turn in of all reclaimed refrigerant.

#### 3.5.5 Accidental Venting of Refrigerant

Accidental venting of a refrigerant is a release and must be reported immediately to the Contracting Officer.

#### 3.5.6 EPA Certification Requirements

Heating and air conditioning technicians must be certified through an EPA-approved program. Maintain copies of certifications at the employees' places of business; technicians must carry certification wallet cards, as provided by environmental law.

#### 3.5.7 Dust Control

Keep dust down at all times, including during nonworking periods. Sprinkle or treat, with dust suppressants, the soil at the site, haul roads, and other areas disturbed by operations. Dry power brooming will not be permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing will be permitted only for cleaning nonparticulate debris such as steel reinforcing bars. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Do not



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

unnecessarily shake bags of cement, concrete mortar, or plaster.

#### 3.5.7.1 Particulates

Dust particles, aerosols and gaseous by-products from construction activities, and processing and preparation of materials (such as from asphaltic batch plants) must be controlled at all times, including weekends, holidays, and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates that would exceed 40 CFR 50, state, and local air pollution standards or that would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators, or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with state and local visibility regulations.

#### 3.5.7.2 Abrasive Blasting

Blasting operations cannot be performed without prior approval of the Installation Air Program Manager. The use of silica sand is prohibited in sandblasting.

Provide tarpaulin drop cloths and windscreens to enclose abrasive blasting operations to confine and collect dust, abrasive agent, paint chips, and other debris. Perform work involving removal of hazardous material in accordance with 29 CFR 1910.

#### 3.5.8 Odors

Control odors from construction activities. The odors must be in compliance with state regulations and local ordinances and may not constitute a health hazard.

### 3.6 WASTE MINIMIZATION

Minimize the use of hazardous materials and the generation of waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the EPP. Obtain a copy of the installation's Pollution Prevention/Hazardous Waste Minimization Plan for reference material when preparing this part of the EPP. If no written plan exists, obtain information by contacting the Contracting Officer. Describe the anticipated types of the hazardous materials to be used in the construction when requesting information.

#### 3.6.1 Salvage, Reuse and Recycle

Identify anticipated materials and waste for salvage, reuse, and recycling. Describe actions to promote material reuse, resale or recycling. To the extent practicable, all scrap metal must be sent for reuse or recycling and will not be disposed of in a landfill.

Include the name, physical address, and telephone number of the hauler, if transported by a franchised solid waste hauler. Include the destination and, unless exempted, provide a copy of the state or local permit (cover)

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

or license for recycling.

### 3.6.2 Nonhazardous Solid Waste Diversion Report

Maintain an inventory of nonhazardous solid waste diversion and disposal of construction and demolition debris. Submit a report to the Contracting Officer on the first working day after each fiscal year quarter, starting the first quarter that nonhazardous solid waste has been generated. Include the following in the report:

Construction and Demolition (C&D) Debris Disposed	tons as appropriate
C&D Debris Recycled	tons as appropriate
Total C&D Debris Generated	tons as appropriate
Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount)	tons as appropriate

## 3.7 WASTE MANAGEMENT AND DISPOSAL

### 3.7.1 Waste Determination Documentation

Complete a Waste Determination form (provided at the pre-construction conference) for Contractor-derived wastes to be generated. All potentially hazardous solid waste streams that are not subject to a specific exclusion or exemption from the hazardous waste regulations (e.g. scrap metal, domestic sewage) or subject to special rules, (lead-acid batteries and precious metals) must be characterized in accordance with the requirements of [40 CFR 261](#) or corresponding applicable state or local regulations. Base waste determination on user knowledge of the processes and materials used, and analytical data when necessary. Consult with the Installation environmental staff for guidance on specific requirements. Attach support documentation to the Waste Determination form. As a minimum, provide a Waste Determination form for the following waste (this listing is not inclusive): oil- and latex -based painting and caulking products, solvents, adhesives, aerosols, petroleum products, and containers of the original materials.

#### 3.7.1.1 Sampling and Analysis of Waste

##### 3.7.1.1.1 Waste Sampling

Sample waste in accordance with [EPA SW-846](#). Clearly mark each sampled drum or container with the Contractor's identification number, and cross reference to the chemical analysis performed.

##### 3.7.1.1.2 Laboratory Analysis

Follow the analytical procedure and methods in accordance with the [40 CFR 261](#). Provide analytical results and reports performed to the

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Contracting Officer.

#### 3.7.1.1.3 Analysis Type

Identify hazardous waste by analyzing for the following characteristics: ignitability, corrosivity, reactivity, toxicity based on TCLP results.

#### 3.7.2 Solid Waste Management

##### 3.7.2.1 Solid Waste Management Report

Provide copies of the waste handling facilities' weight tickets, receipts, bills of sale, and other sales documentation. In lieu of sales documentation, a statement indicating the disposal location for the solid waste that is signed by an employee authorized to legally obligate or bind the firm may be submitted. The sales documentation Contractor certification must include the receiver's tax identification number and business, EPA or state registration number, along with the receiver's delivery and business addresses and telephone numbers. For each solid waste retained for the Contractor's own use, submit the information previously described in this paragraph on the solid waste disposal report. Prices paid or received do not have to be reported to the Contracting Officer unless required by other provisions or specifications of this Contract or public law.

##### 3.7.2.2 Control and Management of Solid Wastes

Pick up solid wastes, and place in covered containers that are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, leave the areas clean. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with non-hazardous solid waste. Transport solid waste off Government property and dispose of it in compliance with 40 CFR 260, state, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill is the minimum acceptable offsite solid waste disposal option. Verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Segregate and separate treated wood components disposed at a lined landfill approved to accept this waste in accordance with local and state regulations. Solid waste disposal offsite must comply with most stringent local, state, and federal requirements, including 40 CFR 241, 40 CFR 243, and 40 CFR 258.

Manage hazardous material used in construction, including but not limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and used rags, in accordance with 49 CFR 173.

##### 3.7.3 Chemicals and Chemical Wastes

Dispense chemicals ensuring no spillage to the ground or water. Perform and document periodic inspections of dispensing areas to identify leakage and initiate corrective action. This documentation will be periodically reviewed by the Government. Collect chemical waste in corrosion resistant, compatible containers. Collection drums must be monitored and removed to a staging or storage area when contents are within 150 mm (6 inches) of the top. Wastes will be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.7.4 Control and Management of Hazardous Waste

Do not dispose of hazardous waste on Government property. Do not discharge any waste to a sanitary sewer, storm drain, or to surface waters or conduct waste treatment or disposal on Government property without written approval of the Contracting Officer.

#### 3.7.4.1 Hazardous Waste/Debris Management

Identify construction activities that will generate hazardous waste or debris. Provide a documented waste determination for resultant waste streams. Identify, label, handle, store, and dispose of hazardous waste or debris in accordance with federal, state, and local regulations, including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268.

Manage hazardous waste in accordance with the approved Hazardous Waste Management Section of the EPP. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. Hazardous waste generated within the confines of Government facilities is identified as being generated by the Government. Prior to removal of any hazardous waste from Government property, hazardous waste manifests must be signed by personnel from the Installation Environmental Office. Do not bring hazardous waste onto Government property. Provide the Contracting Officer with a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D.

#### 3.7.4.2 Waste Storage/Satellite Accumulation/90 Day Storage Areas

Accumulate hazardous waste at satellite accumulation points and in compliance with 40 CFR 262.34 and applicable state or local regulations. Individual waste streams will be limited to 55 gallons of accumulation (or 1 quart for acutely hazardous wastes). If the Contractor expects to generate hazardous waste at a rate and quantity that makes satellite accumulation impractical, the Contractor may request a temporary 90 day accumulation point be established. Submit a request in writing to the Contracting Officer and provide the following information (Attach Site Plan to the Request):

Contract Number	_____
Contractor	_____
Haz/Waste or Regulated Waste POC	_____
Phone Number	_____
Type of Waste	_____
Source of Waste	_____
Emergency POC	_____
Phone Number	_____
Location of the Site	_____

Attach a Waste Determination form for the expected waste streams. Allow ten (10) working days for processing this request. Additional compliance requirements (e.g. training and contingency planning) that may be required are the responsibility of the Contractor. Barricade the designated area where waste is being stored and post a sign identifying as follows:

"DANGER - UNAUTHORIZED PERSONNEL KEEP OUT"

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.7.4.3 Hazardous Waste Disposal

#### 3.7.4.3.1 Responsibilities for Contractor's Disposal

Provide hazardous waste manifest to the Installations Environmental Office for review, approval, and signature prior to shipping waste off Government property.

##### 3.7.4.3.1.1 Services

Provide service necessary for the final treatment or disposal of the hazardous material or waste in accordance with 40 CFR 260, local, and state, laws and regulations, and the terms and conditions of the Contract within sixty (60) days after the materials have been generated. These services include necessary personnel, labor, transportation, packaging, detailed analysis (if required for disposal or transportation, include manifesting or complete waste profile sheets, equipment, and compile documentation).

##### 3.7.4.3.1.2 Samples

Obtain a representative sample of the material generated for each job done to provide waste stream determination.

##### 3.7.4.3.1.3 Analysis

Analyze each sample taken and provide analytical results to the Contracting Officer. See paragraph WASTE DETERMINATION DOCUMENTATION.

##### 3.7.4.3.1.4 Labeling

Determine the Department of Transportation's (DOT's) proper shipping names for waste (each container requiring disposal) and demonstrate to the Contracting Officer how this determination is developed and supported by the sampling and analysis requirements contained herein. Label all containers of hazardous waste with the words "Hazardous Waste" or other words to describe the contents of the container in accordance with 40 CFR 262.31 and applicable state or local regulations.

#### 3.7.4.3.2 Contractor Disposal Turn-In Requirements

Hazardous waste generated must be disposed of in accordance with the following conditions to meet installation requirements:

- a. Drums must be compatible with waste contents and drums must meet DOT requirements for 49 CFR 173 for transportation of materials.
- b. Band drums to wooden pallets.
- c. No more than three 55 gallon drums or two 85 gallon over packs are to be banded to a pallet.
- d. Band using 1-1/4 inch minimum band on upper third of drum.
- e. Provide label in accordance with 49 CFR 172.101.
- f. Leave 3 to 5 inches of empty space above volume of material.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 3.7.4.4 Universal Waste Management

Manage the following categories of universal waste in accordance with federal, state, and local requirements and installation instructions:

- a. Batteries as described in 40 CFR 273.2
- b. Lamps as described in 40 CFR 273.5
- c. Mercury-containing equipment as described in 40 CFR 273.4

Mercury is prohibited in the construction of this facility, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in rubbish containers is prohibited. Remove without breaking, pack to prevent breakage, and transport out of the activity in an unbroken condition for disposal as directed.

#### 3.7.4.5 Electronics End-of-Life Management

Recycle or dispose of electronics waste, including, but not limited to, used electronic devices such computers, monitors, hard-copy devices, televisions, mobile devices, in accordance with 40 CFR 260-262, state, and local requirements, and installation instructions.

#### 3.7.4.6 Disposal Documentation for Hazardous and Regulated Waste

Contact the Contracting Officer for the facility RCRA identification number that is to be used on each manifest.

Submit a copy of the applicable EPA and or state permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities. Hazardous or toxic waste manifests must be reviewed, signed, and approved by the Contracting Officer before the Contractor may ship waste.

#### 3.7.5 Releases/Spills of Oil and Hazardous Substances

##### 3.7.5.1 Response and Notifications

Exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated in accordance with 40 CFR 300. Maintain spill cleanup equipment and materials at the work site. In the event of a spill, take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the Installation Fire Department, the Installation Command Duty Officer, the Installation Environmental Office, the Contracting Officer and the state or local authority.

Submit verbal and written notifications as required by the federal (40 CFR 300.125 and 40 CFR 355), state, local regulations and instructions. Provide copies of the written notification and documentation that a verbal notification was made within twenty (20) days. Spill response must be in accordance with 40 CFR 300 and applicable state and local regulations. Contain and clean up these spills without cost to the Government.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 3.7.5.2 Clean Up

Clean up hazardous and non-hazardous waste spills. Reimburse the Government for costs incurred including sample analysis materials, clothing, equipment, and labor if the Government will initiate its own spill cleanup procedures, for Contractor- responsible spills, when: Spill cleanup procedures have not begun within one hour of spill discovery/occurrence; or, in the Government's judgment, spill cleanup is inadequate and the spill remains a threat to human health or the environment.

#### 3.7.6 Mercury Materials

Immediately report to the Environmental Office and the Contracting Officer instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Contracting Officer.

Do not recycle a mercury spill cleanup; manage it as a hazardous waste for disposal.

#### 3.7.7 Wastewater

##### 3.7.7.1 Disposal of wastewater must be as specified below.

##### 3.7.7.1.1 Treatment

Do not allow wastewater from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, and forms to enter water ways or to be discharged prior to being treated to remove pollutants. Dispose of the construction- related waste water off-Government property in accordance with 40 CFR 403, state, regional, and local laws and regulations.

##### 3.7.7.1.2 Surface Discharge

Surface discharge in accordance with the requirements of the NPDES or state STORMWATER DISCHARGES FROM CONSTRUCTION SITES permit.

##### 3.7.7.1.3 Land Application

Water generated from the flushing of lines must be discharged into the sanitary sewer with prior approval and notification to the Wastewater Treatment Plant's Operator.

#### 3.8 HAZARDOUS MATERIAL MANAGEMENT

Include hazardous material control procedures in the Safety Plan. Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. Do not bring hazardous material onto Government property that does not directly relate to requirements for the performance of this contract. Submit an SDS and estimated quantities to be used for each hazardous material to the Contracting Officer prior to bringing the material on the installation. Typical materials requiring SDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. Use hazardous materials in a manner that minimizes the amount of hazardous waste generated. Containers of hazardous materials must have National Fire Protection Association labels or their equivalent. Certify

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

that hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste, in accordance with 40 CFR 261.

### 3.9 PREVIOUSLY USED EQUIPMENT

Clean previously used construction equipment prior to bringing it onto the project site. Equipment must be free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. Consult with the U.S. Department of Agriculture jurisdictional office for additional cleaning requirements.

### 3.10 CONTROL AND MANAGEMENT OF ASBESTOS-CONTAINING MATERIAL (ACM)

Not Used.

### 3.11 CONTROL AND MANAGEMENT OF LEAD-BASED PAINT (LBP)

Manage and dispose of lead-contaminated waste in accordance with 40 CFR 745 and UFGS Section 02 83 00 LEAD REMEDIATION. Manifest any lead-contaminated waste and provide the manifest to the Contracting Officer. For the purposes of this contract, all painted surfaces are assumed to contain lead and as such must be handled in accordance with 29 CFR 1926.62.

### 3.12 CONTROL AND MANAGEMENT OF POLYCHLORINATED BIPHENYLS (PCBS)

Manage and dispose of PCB-contaminated waste in accordance with 40 CFR 761 and UFGS Section 02 84 33 REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBS).

### 3.13 CONTROL AND MANAGEMENT OF LIGHTING BALLAST AND LAMPS CONTAINING PCBS

Manage and dispose of contaminated waste in accordance with 40 CFR 761. Refer to UFGS Section 02 84 16 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBS AND MERCURY.

### 3.14 MILITARY MUNITIONS

In the event military munitions, as defined in 40 CFR 260, are discovered or uncovered, immediately stop work in that area and immediately inform the Contracting Officer.

- A. Recognize- recognize the hazard and do not touch, disturb, or move the item as it could detonate with movement of ground vibrations.
- B. Retreat - stop work, mark the general location, and have everyone retreat from the area.
- C. Report - report the situation immediately to the appropriate local emergency authority) i.e. call 911 or the equivalent on DOD Installations), providing as much information as possible about the items encountered. USACE Safety Office. And installation staff as appropriate.

### 3.15 PETROLEUM, OIL, LUBRICANT (POL) STORAGE AND FUELING

POL products include flammable or combustible liquids, such as gasoline, diesel, lubricating oil, used engine oil, hydraulic oil, mineral oil, and cooking oil. Store POL products and fuel equipment and motor vehicles in a manner that affords the maximum protection against spills into the



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

environment. Manage and store POL products in accordance with EPA 40 CFR 112, and other federal, state, regional, and local laws and regulations. Use secondary containments, dikes, curbs, and other barriers, to prevent POL products from spilling and entering the ground, storm or sewer drains, stormwater ditches or canals, or navigable waters of the United States. Describe in the EPP (see paragraph ENVIRONMENTAL PROTECTION PLAN) how POL tanks and containers must be stored, managed, and inspected and what protections must be provided. Storage of fuel on the project site must be in accordance with EPA, state, and local laws and regulations and paragraph OIL STORAGE INCLUDING FUEL TANKS.

#### 3.15.1 Used Oil Management

Manage used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while onsite exhibits a characteristic of hazardous waste. Used oil containing 1,000 parts per million of solvents is considered a hazardous waste and disposed of at the Contractor's expense. Used oil mixed with a hazardous waste is also considered a hazardous waste. Dispose in accordance with paragraph HAZARDOUS WASTE DISPOSAL.

#### 3.15.2 Oil Storage Including Fuel Tanks

Provide secondary containment and overfill protection for oil storage tanks. A berm used to provide secondary containment must be of sufficient size and strength to contain the contents of the tanks plus 5 inches freeboard for precipitation. Construct the berm to be impervious to oil for 72 hours that no discharge will permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Use drip pans during oil transfer operations; adequate absorbent material must be onsite to clean up any spills and prevent releases to the environment. Cover tanks and drip pans during inclement weather. Provide procedures and equipment to prevent overfilling of tanks. If tanks and containers with an aggregate aboveground capacity greater than 1320 gallons will be used onsite (only containers with a capacity of 55 gallons or greater are counted), provide and implement a SPCC plan meeting the requirements of 40 CFR 112. Do not bring underground storage tanks to the installation for Contractor use during a project. Submit the SPCC plan to the Contracting Officer for approval.

Monitor and remove any rainwater that accumulates in open containment dikes or berms. Inspect the accumulated rainwater prior to draining from a containment dike to the environment, to determine there is no oil sheen present.

#### 3.16 INADVERTENT DISCOVERY OF PETROLEUM-CONTAMINATED SOIL OR HAZARDOUS WASTES

If petroleum-contaminated soil, or suspected hazardous waste is found during construction that was not identified in the Contract documents, immediately notify the Contracting Officer. Do not disturb this material until authorized by the Contracting Officer.

#### 3.17 PEST MANAGEMENT (Not Used)

#### 3.18 CHLORDANE

Evaluate excess soils and concrete foundation debris generated during the demolition of housing units or other wooden structures for the presence of

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

chlordane or other pesticides prior to reuse or final disposal.

### 3.19 SOUND INTRUSION

Make the maximum use of low-noise emission products, as certified by the EPA. Blasting or use of explosives are not permitted without written permission from the Contracting Officer, and then only during the designated times. Confine pile-driving operations to the period between 8 a.m. and 4 p.m., Monday through Friday, exclusive of holidays, unless otherwise specified.

Keep construction activities under surveillance and control to minimize environment damage by noise. Comply with the provisions of the State of **Alabama** rules.

### 3.20 RADON MITIGATION SYSTEMS

**Not Used.**

### 3.21 POST CONSTRUCTION CLEANUP

Clean up areas used for construction in accordance with FAR 52.236-12 - Cleaning Up. Unless otherwise instructed in writing by the Contracting Officer, remove traces of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. Grade parking area and similar temporarily used areas to conform with surrounding contours.

## PART 4 ENVIRONMENTAL PERMITS AND COMMITMENTS

### 4.1 LIST OF PRECONSTRUCTION PERMITS

Obtaining and complying with all environmental permits and commitments required by Federal, State, regional, local, and Installation/Facility environmental laws and regulations are the Contractor's responsibility. Prior to beginning of construction, the Contractor shall, upon review of the project and this specification section, make a list of all permits and construction-related commitments/and requirements required for the duration of the construction phase to be attached to the Environmental Protection Plan, or other similar documentation if an Environmental Protection Plan is not required. The Contractor, in conjunction with the Designer of Record (DOR), shall prepare a List of Preconstruction Permits (LOPP) with construction-related commitments/and requirements. The LOPP shall include, but is not be limited to the following: permit name, the address of the permitting agency, cost of submittal/Permit fee, and the name of the permittee. The LOPP should also include specifics of each permit such as the purpose/reason permit is needed, regulatory requirements, applicability to the project, schedule for obtaining permit, and other information such as authorized or permit restrictions. The LOPP should also list specific commitments (i.e., dust control measures, tree cutting restrictions, erosion control measures) that are not inherent to a specific permit or may apply to multiple permits, or are required for proper construction and compliance.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 4.2 ENVIRONMENTAL REGULATIONS AND OTHER DOCUMENTS THAT MAY CONTAIN INFORMATION TO IDENTIFY PRECONSTRUCTION PERMITS AND CONSTRUCTION-RELATED COMMITMENTS

##### 4.2.1 National Environmental Policy Act (NEPA)

The National Environmental Policy Act establishes policies and goals for the protection of the environment. The NEPA process includes systematic examination of possible and probable environmental consequences of implementing a Proposed Action. ER 200-2-2 provides additional guidance on NEPA documentation. It is the responsibility of the Contractor to obtain and review copies of NEPA documentation related to the project prior to beginning of construction. This may include but is not limited to the Record of Environmental Consideration (REC), an Environmental Assessment (EA), a Finding of No Significant Impact (FONSI), an Environmental Impact Statement (EIS), a Life Cycle Environmental Document (LCED), a Record of Decision (ROD), and a Categorical Exclusion (CX). These documents may also contain commitments, such as Environmental Impacts and Minimization/Avoidance Measures for the Proposed Action that must be followed and incorporated into the Environmental Protection Plan or other appropriate documentation, and included in the LOPP.

##### 4.2.2 Endangered Species Act

Construction should be completed in compliance with the Endangered Species Act of 1973. The Endangered Species Act provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they reside. In the case that a proposed construction action could be harmful to a threatened or endangered species or its habitat, the Contractor will be required to review and follow federal, state, regional, and local regulations pertaining to threatened and endangered species. For work taking place on a military installation, the Contractor will be required to obtain and review a copy of any Endangered Species Management Plans (ESMP) or other related commitments from the appropriate base personnel, or State Fish and Wildlife personnel relative to the Installation.

Projects that may affect threatened or endangered species will likely have had a Biological Evaluation and may also have a Biological Assessment completed for the action. The Biological Evaluation and Biological Assessment provides site-specific information regarding potential impacts to federally threatened or endangered species in compliance with Section 7 (a)(2) of the Endangered Species Act. If a Biological Evaluation or a Biological Assessment has been completed for the proposed action, the Contractor should obtain and review it and use it to help develop species specific protection measures to be included in the Environmental Protection Plan.

If a threatened or endangered species is encountered during construction, the Contractor should immediately stop construction in the area and contact the appropriate authorities. Even if endangered species are not located at a construction site, the facility ESMP may have avoidance measures required of any construction at the facility. The Contractor should thoroughly review and follow requirements of the ESMP.

##### 4.2.3 National Historic Preservation Act

The National Historic Preservation Act is intended to protect the nation's historic and cultural resources. Section 106 of the National Historic

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Preservation Act requires any government agency with jurisdiction over an undertaking to take into account its effects on any district, site, building, structure, or object included on or eligible for inclusion on the National Register. Construction should be completed in compliance with the National Historic Preservation Act. It is the responsibility of the Contractor to obtain and review a copy of any pertinent Integrated Cultural Resources Management Plan from the appropriate authorities. If at any time during construction cultural resources are discovered, the Contractor will immediately stop any construction that may damage the newly discovered resource. It is the responsibility of the Contractor to review any additional State, regional, or local regulations and obtain necessary permits.

#### 4.2.4 Clean Water Act

The Clean Water Act is the primary federal law of the United States governing water pollution. The purpose of the Clean Water Act is to eliminate release of high amounts of pollution into waters of the United States.

##### 4.2.4.1 National Pollutant Discharge Elimination System (NPDES)

Section 402 of the Clean Water Act authorizes the National Pollutant Discharge Elimination System (NPDES) permit program. Compliance with NPDES will be required on any construction project with at least one acre of land disturbance. The Government has already acquired the NPDES permit for this construction activity. It is the responsibility of the Contractor to determine if a general permit has been issued covering construction activities. Additionally, the Contractor is to follow the NPDES and Notice of Intent (NOI) requirements throughout the construction duration. In compliance with NPDES, a Storm Water Pollution Prevention Plan (SWPPP) or a Soil Erosion and Sediment Control Plan must be in place and followed for the duration of construction. The project specific SWPPP is attached at this section. A Storm Water Best Management Practices (SWBMP) Plan should also be included as part of the Environmental Protection Plan. After construction is finished, a Notice of Termination must be submitted within thirty (30) days after all land disturbing activity is complete.

##### 4.2.4.2 Section 404 Permit for Dredge/Fill Operations

Construction resulting in the discharge of fill or dredge material into wetlands or waters of the United States must be authorized by a permit pursuant to section 404 of the Clean Water Act. It is the responsibility of the Contractor to obtain and review the Federal, State, or Regional general permits pertaining to construction, or to obtain an individual permit if construction activity is not covered by a general permit.

##### 4.2.4.3 Waste Water Discharge Permits

NPDES authorizes permitting requirements for waste water discharge. Any non-exempt facilities that will discharge waste water to the local sanitary sewer system (ex. on-site concrete plant, on-site sewage treatment plant, water treatment plant, equipment wash rack) will require permits in accordance with any Federal, State, regional, and local regulations.

##### 4.2.4.4 Aquatic Resources Alteration Permit (NOT APPLICABLE - Tennessee Permit)

State, Regional, or Local regulations may also require an Aquatic Resources Alteration Permit for any construction that alters a stream, lake, river,

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

or wetland. It is the responsibility of the Contractor to review the regulations of jurisdictions covering the construction site and to obtain any necessary permits in compliance with these jurisdictions.

#### 4.2.5 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) is the principal Federal law of the United States covering the disposal of solid and hazardous waste. The RCRA also provides regulation on underground storage tanks (USTs). The objectives of the RCRA are to protect human health and the environment from potential hazards of waste disposal, to conserve energy and natural resources, to reduce waste generation, and to ensure wastes are managed in an environmentally sound way. Construction should be completed in compliance with RCRA Part C (hazardous waste) and RCRA Part D (non-hazardous solid wastes).

##### 4.2.5.1 Solid Waste Disposal

The Contractor is responsible for including a Solid Waste Minimization Plan and a Contaminant Prevention Plan as part of the Environmental Protection Plan. These plans are to ensure the proper handling of solid waste generated during construction. In general, the Contractor is required to divert a minimum of 60 percent of solid waste generated during construction from landfills, but this amount may vary between Installations. Refer to the UFGS SECTION 01 74 19 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT for more information regarding solid waste disposal and requirements. It is the responsibility of the Contractor to obtain a Solid Waste Permit or a Beneficial Reuse Permit from the State and local authorities.

##### 4.2.5.2 Hazardous Waste Disposal

Hazardous wastes are as defined in 40 CFR 261. The Contractor is responsible for developing a Spill Control Plan to be included in the Environmental Protection Plan. The Contractor may be required to obtain a Hazardous Waste Generator ID# from the EPA, and additional permitting requirements may have to be met in accordance with State, regional, and local regulations. If during construction any asbestos, lead based paint, Polychlorinated biphenyl, or any other material or substance hazardous to human health is encountered, that portion of work should be stopped immediately, the contracting officer should be contacted, and all necessary precautions to avoid human harm should be taken.

##### 4.2.5.2.1 Lead Based Paint

All painted surfaces are assumed to contain lead and must be handled in accordance with the OSHA Lead in Construction Standard 29 CFR 1926.62 and LRL Section 02 83 00 LEAD REMEDIATION.

#### 4.2.6 Safe Drinking Water Act (SDWA)

The purpose of the Safe Drinking Water Act (SDWA) is to protect public drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. Construction should be completed in compliance with requirements of the Safe Drinking Water Act, as stated by Army Regulation AR 200-1, Chapter 4 - Environmental Asset Management.

##### 4.2.6.1 Water Distribution

Any construction involving the installation of a water treatment system,

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

installation of water distribution lines, or the installation of a drinking water well will require permitting, usually issued by the State government and as coordinated with local and State regulatory authorities.

#### 4.2.6.2 Groundwater Protection

The Contractor will be required to develop and adhere to a groundwater protection plan for any construction that could result in groundwater contamination. The groundwater protection plan should be included as part of the Environmental Protection Plan. The Contractor should review Federal, State, regional, and local regulations concerning groundwater protection and obtain permits required by regulations. If the Contractor is required to use underground injection to dispose of fluids in the ground, and underground injection control permit will be required, which will likely be issued by the State. The Contractor should coordinate with State authorities to ensure that proper permitting is obtained and applicable regulations are followed.

#### 4.2.7 Occupational Safety and Health Act

The Occupational Safety and Health Act is the primary federal law governing occupational health and safety in the workplace. Its main goal is to ensure that employers provide employees with an environment free from recognized hazards, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. Many states have their own Occupational Safety and Health requirements which are at least as strict as the Federal requirements. The Contractor should adhere to 29 CFR 1926 which regulates construction activities as well as follow safety and health requirements specified in EM 385-1-1.

##### 4.2.7.1 Employee Right to Know

Employee Right to Know is an Occupational Safety and Health Administration (OSHA) regulation giving employees the right to know information about the hazards they may be exposed to in the workplace, or on a construction site. The Contractor should be in compliance with OSHA standards during the duration of construction. The Contractor should make available material safety data sheets (MSDS) on any hazardous material or product that may be present on the construction site. These sheets should include such information such as the specific product, hazards and safety risks related to the product, storage and disposal requirements, protective equipment requirements, and emergency response procedures.

##### 4.2.7.2 Occupational Exposure Limits (OELs)

The United States Army Corps of Engineers (USACE) uses enforceable occupational exposure limits (OELs) to protect employees against potential health effects of exposure to hazardous substances. The OELs are regulatory limits on the amount (concentration) of a substance in the air, or on the skin. It is the responsibility of the Contractor to ensure that the construction site remains within the OELs set by USACE. EM 385-1-1 defines the OELs as the most stringent standard published between the most recently published American Conference of Governmental Industrial Hygienists (ACGIH) guideline "Threshold Limit Values and Biological Exposure Indices," and the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) as defined by 29 CFR 1910, 29 CFR 1915, and 29 CFR 1926.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 4.2.7.3 Confined Spaces

A confined space has limited or restricted means for entry or exit, and is not designed for continuous employee occupancy. This includes areas such as underground vaults, tanks, storage bins, manholes, pits, silos, process vessels, and pipelines. A confined space may require a special permit for work to take place. A permit-required confined space as described by OSHA is a confined space with any of the following characteristics: contains or has the potential to contain a hazardous atmosphere; contains a material that has the potential to engulf an entrant; has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate an entrant; or contains any other recognized safety or health hazard, such as unguarded machinery, exposed live wires, or heat stressors. The Contractor should follow Federal, State, regional and local regulations and obtain necessary permits in regards to work in confined spaces.

#### 4.2.8 Coastal Zone Management Act

The Coastal Zone Management Act of 1972 establishes a voluntary national program to encourage coastal states to implement coastal zone management plans. The Contractor should be aware that the mentioned coastal zone management plans may exist in any coastal state, including the Great Lakes. It is the responsibility of the Contractor to obtain the coastal zone management plan from the State government where the project is located, and to follow all regulations set forth by the plan.

#### 4.2.9 Floodplain Construction Permits (applicable to both 401 and 404 permits)

In accordance with 44 CFR 60.3, Part 60.3 - Flood Plain Management Criteria for Flood-prone Areas, communities are required to issue permits for proposed construction and development activities within the community. This is to ensure the proper management of flood prone areas. It is the responsibility of the Contractor to obtain necessary Federal, State, regional, and local permits related to floodplain construction and to follow all related regulations.

#### 4.2.10 Air Quality Permits

The Contractor is responsible for developing a dirt and dust control plan prior to construction. It is the responsibility of the Contractor to obtain any State, Regional, and Local permits relating to air quality during construction. A permit may be required if there is any issue with emissions release during construction, detectable levels of radon, or dirt and dust control issues. Also, the Contractor may be required to obtain a permit for the use of any equipment with combustible sources. Appropriate radon mitigation measures should be used during construction in accordance with 29 CFR 1910.

#### 4.2.11 Excavation Permit

In addition to the Notice of Intent (NOI), an excavation permit from State, regional, local governments, and/or the facility/Installation may be required before excavation can commence on the project site. It is the responsibility of the Contractor to review State, regional, and local regulations pertaining to excavation and to obtain any necessary permits prior to initiation of construction.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 4.2.12 Vegetation and Revegetation Permit

Any construction activity that involves vegetation removal or re-vegetation may require a vegetation permit from State, regional, and local authorities. It is the responsibility to review State, regional, and local regulations pertaining to vegetation prior to construction and to follow through with responsibilities stated in the regulations.

Vegetation removal or vegetation plans may be restricted or limited by the presence of threatened or endangered species or by a pest management requirements. If the project could affect threatened and endangered species or is covered by a pest management plan, the Contractor may have special vegetation requirements to follow. These requirements would be included in the appropriate facility management plans or by Fish and Wildlife Service regulations.

#### 4.2.13 Water Withdrawal Permits

Withdrawal of water from any surface, spring, or groundwater source may require a Water Withdrawal Permit. It is the responsibility of the Contractor to review any relevant State, regional, and local regulations and to obtain any necessary permits for water withdrawal activities prior to initiation of construction.

#### 4.2.14 Zoning Permits

It is the responsibility of the Contractor to review any State, regional, and local regulations pertaining to zoning and to obtain necessary permits prior to initiation of construction.

#### 4.2.15 Noise Permits

Some local and state jurisdictions may enforce noise ordinances. Construction activity may be in violation of these ordinances and could require permit to exceed the ordinance levels. It is the responsibility of the Contractor to review local regulations regarding noise pollution and to obtain necessary permits prior to the initiation of construction.

#### 4.2.16 Munitions and Explosives of Concern (MEC)/Unexploded Ordnance (UXO)

In the event military munitions, as defined in 40 CFR 260, are discovered or uncovered, the Contractor will immediately stop work in that area and immediately inform the Contracting Officer. Any construction on a site that has the possibility of the existence of MEC or UXO must be coordinated through the Center of Expertise.

#### 4.2.17 Driveway / Curb Cut Permit

The construction of a driveway connecting to a public road may require permitting. The contractor should review all State, regional, and local regulations pertaining to driveway construction and curb cutting and obtain any necessary permits. In addition to driveway and curb cut Permits, a right-of-way Permit to be obtained by the Contractor may also be required if a sidewalk will be temporarily obstructed during the construction of a driveway entrance.

#### 4.2.18 Demolition/Renovation Permit

Construction projects that require the demolition or renovation of structures may require the Contractor to obtain permitting. The National



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects. Building demolition could release HAPs such as asbestos into the air if proper regulations are not followed. The presence of HAPs on a construction site will require the Contractor to develop appropriate plans for the removal of such pollutants prior to demolition, and may require additional permitting from State, regional, and local authorities.

Other considerations such as proper utility disconnection and safe building demolition are also considered and may require permits. If any demolition activity interferes with the public right-of-way, an obstruction permit will also need to be obtained from the appropriate authorities. It is the responsibility of the Contractor to follow all Federal, State, regional, and local regulations and obtain the appropriate permits dealing with building demolition and right-of-way obstruction.

#### 4.2.19 Utility Permits

Any project that requires utility construction or connection will likely require a permit from local authorities. It is the responsibility of the contractor to review all local regulations and obtain all permits and fees relating to utility construction and connections. Utility installations that will likely require permitting are electric, gas, drinking water, communication, and sanitary sewer utility installations. The Contractor is responsible for contacting the provider for each of the utilities and coordinate permitting and installation with the utility providers.

#### 4.2.20 Aquatic Resource Alteration Permits (Not Applicable - Tennessee Permit)

Construction involving the temporary or permanent alteration of aquatic resources will require State, regional, or local permitting. The Contractor is responsible for reviewing State, regional and local laws as well as regulations and coordinating with appropriate authorities to determine if an aquatic resource alteration permit is necessary. Actions such as the temporary or permanent diversion of a stream, depositing of fill material into a stream, pond, lake, or wetland, and other similar activities will likely trigger the need for a permit.

#### 4.2.21 Construction Permit

New construction may require a construction or building permit from State, regional, or local authorities prior to the beginning of construction. It is the responsibility of the Contractor to review State, regional and local laws and regulations and to obtain a construction permit if required.

#### 4.2.22 Permit Variances

State, regional, and local authorities may allow modifications to be made in areas covered by existing permits. The permitting agency may be able to issue a permit variance for either a temporary or one-time exceedance of conditions specified in the existing permit. The Contractor should coordinate with permitting authorities if a variance will be necessary for the completion of the project.

-- End of Section --

**Report of the Hazardous Materials Inspection of  
Building 1455 Hangar and Admin Area  
Maxwell Air Force Base  
Montgomery, Alabama**

**Prepared for:**

Erik Olness  
Project Manager  
Jacobs

**Prepared by:**

Matthew Call, CIH, CSP  
President  
Industrial Hygiene Resources

**Assessment Dates:**

August 17, 2021

**Report Date:**

September 14, 2021

**IHR Project Number:**

6764



## **Executive Summary**

Industrial Hygiene Resources (IHR) of Boise, Idaho was retained by Jacobs to conduct a hazardous materials inspection of Building 1455- Hangar and Admin Area at the Maxwell Air Force Base near Montgomery, Alabama. This inspection focused on identifying asbestos containing materials (ACM), lead (Pb) in paint, fluorescent lights, fluorescent light ballasts, mercury thermostats, tritium exit signs, and PCB oils in transformers.

This hazardous materials inspection was conducted on August 17, 2021. Matthew Call, President of IHR, was the project lead for this inspection. Mr. Call is a certified industrial hygienist (CIH) and a certified safety professional (CSP). Mr. Call is also an accredited EPA AHERA Asbestos Building Inspector and an accredited EPA Lead Risk Assessor.

## **Conclusions**

- No asbestos materials were present in building 1455:
- Lead was present in surface coatings in building 1455.
  - The yellow paint on bollards contained lead- 220 PPM.
- Twenty (20) fluorescent light bulbs were present in the restrooms (admin area). All other lighting was LED.
- Eleven (11) presumed PCB-containing ballasts were present in the restrooms (admin area) of building 1145.
- No mercury thermostats, tritium exit signs, or transformers were present in the building.
- No chlordane was present in surface soils around the perimeter of the building.

## **Recommendations**

- ✓ Notify facilities and maintenance staff, as well as contractors of the presence of hazardous building materials within these facilities.
- ✓ Provide or arrange for appropriate exposure assessment and exposure controls for workers involved in renovation, demolition, or cleanup of identified hazardous materials whenever workers may be exposed to these materials. At a minimum, ensure all potential worker exposures are controlled per federal, state, or local regulations (e.g., OSHA standards).
- ✓ Ensure that all waste material generated from demolition or renovation of these building is properly transported and disposed of in an approved landfill by the EPA or applicable state or local agency.

## Contents

Executive Summary.....	2
Conclusions.....	2
Recommendations.....	2
Background .....	4
Objective.....	5
Methods.....	5
Other Hazardous Materials .....	6
Results and Discussion .....	6
Asbestos-containing material (ACM).....	6
Lead Based Paint.....	12
Other Hazardous Materials .....	13
Conclusions .....	13
Appendix A- Figures and Sample Locations.....	15
Appendix B- Laboratory Reports.....	16
Appendix C- Consultant’s Certifications .....	17
Limitations/Disclaimer .....	18

## Background

Building 1455 is a hangar facility with an associated administrative area at Maxwell Air Force Base in Montgomery, Alabama. The building was scheduled for renovations that may impact any hazardous materials present in the building materials. This hazardous material inspection was completed to support the planned renovations for the building.

### Building description- Building 1455

Building 1455 included an 18,500 s.f. Hangar and a 4,400 s.f. administrative portion. The building consisted of a mechanical room, offices, restrooms, conference rooms, break rooms, storage rooms, and the hangar. The exterior construction consisted of concrete masonry block (CMU) on a concrete slab. The hangar and admin area roof was metal structured with metal roof paneling. The windows were metal-framed and sealed with caulk.

The admin area interior ceilings were 2' x 2' suspended ceiling tile in a grid system. The walls were drywall in the admin area and hangar office and CMU in the hangar. The floors were covered with floor tile (office areas) or bare concrete (hangar). The heating is supplied with a forced air ventilation system. Piping systems are insulated with fibrous glass with plastic elbows. A fire suppression system in hangar consisted of non-insulated, red-painted metal piping.

### Asbestos and Lead Regulations

Asbestos on federal facilities is regulated by the US Environmental Protection Agency (EPA). These regulations are listed below and are triggered when building materials contain greater than 1% asbestos (>1%).

- 1) National Emission Standards for Hazardous Air Pollutants (NESHAP-Asbestos) governs inspections, emission controls, and disposal at federal facilities.
- 2) Asbestos School Hazard Abatement Reauthorization Act (ASHARA-1992). This regulation extended AHERA regulations for training of asbestos workers to cover public and commercial buildings.
- 3) If disposing asbestos containing waste material outside of the NAWSCL site, the regulations relevant to the disposal site (EPA NESHAP, California DTSC, or other state authority) will apply.

The US Occupational Safety and Health Administration is charged with protecting the health of workers (OSHA: <https://www.osha.gov/SLTC/asbestos/index.html>). OSHA considers building materials that contain any amount of asbestos to have the potential to cause excessive asbestos fiber exposures to employees, contractors, and visitors. OSHA regulates operations and restoration work via its asbestos general industry and construction standards. The full standard applies when building materials contain greater than 1% asbestos (>1%). OSHA references the AHERA regulations for the asbestos training requirements depending on the Class work activities being conducted (Class I-IV).

OSHA also regulates worker exposures to lead. OSHA considers any amount of lead in paint to have the potential to cause excessive lead exposures to workers<sup>1</sup>. Where lead is present in building materials, OSHA requires employers to perform exposure assessments that consider the type of work that may disturb the lead.

#### Other Hazardous Materials

Other hazardous materials assessed in this survey include fluorescent lights, fluorescent light ballasts, mercury thermostats, tritium exit signs, and PCB oils in transformers. Renovation or demolition workers may have the potential to be exposed to these hazardous materials during their work. These materials must also be identified for disposal purposes.

#### Objective

The purpose of this work was to identify hazardous building materials to assist with any planned renovation of the facility. Ultimately, the purpose of this work was to protect building occupants and workers from building-related health hazards.

### **Methods**

#### Asbestos

Matthew Call is an accredited AHERA Asbestos Building Inspector. He performed the survey work on August 17, 2021. Mr. Call collected bulk samples of building materials suspected of containing asbestos during the inspection. The asbestos sampling scheme was developed to comply with both the AHERA and ASHARA<sup>2</sup> sampling requirements.

Asbestos containing materials (ACM) are defined as materials with an asbestos content greater than 1% by volume (>1%). If a sample is found to have a trace of asbestos, but less than 10% asbestos by polarized light microscopy (PLM), it is assumed to be asbestos. In order for a material to not be considered an ACM, the sample must be re-analyzed by the point-count method and documented to be 1% or less ( $\leq 1\%$ ). None (0) of the samples required use of the point-count method for this inspection.

Asbestos bulk samples were analyzed by DCM Science Lab, Inc. located at 12421 West 49<sup>th</sup> Ave., #6, Wheat Ridge, Colorado. DCM is accredited by the NVLAP/NIST<sup>3</sup> program for asbestos in bulk materials. DCM Science Laboratory and Reservoirs Environmental, Inc. are also accredited by the AIHA<sup>4</sup> for the analysis of asbestos air samples.

---

<sup>1</sup> And potentially employee's families from tracking lead into the car, home, etc.

<sup>2</sup> ASHARA: Asbestos School Abatement Re-Authorization Act - 1990 ("Asbestos in Public and Commercial Buildings").

<sup>3</sup> NVLAP/NIST: National Voluntary Laboratory Accreditation Program/National Institute of Standards and Technology (asbestos in bulk materials).

<sup>4</sup> AIHA: American Industrial Hygiene Association.

### Lead-Based Paint:

The sampling strategy was designed and conducted by Matthew Call, a certified industrial hygienist (CIH: [www.abih.org](http://www.abih.org)) and an EPA lead risk assessor. All sampling was conducted with standardized methods and good industrial hygiene practices. Mr. Call collected bulk paint chip samples to be analyzed for lead-based paint.

### Other Hazardous Materials

Matthew Call, CIH, CSP inspected the building for devices that may contain PCBs. Fluorescent lights, potential PCB-containing light ballasts, mercury thermostats, tritium exit signs, and potential PCB oils in transformers were identified and counted. Mr. Call did not disassemble any building components or perform any testing. Any of the listed components that were suspect were assumed to contain hazardous materials.

**Table I.** Sampling and analytical methods for asbestos, lead-based paint, and chlordane.

Potential Hazard	Sample Type	Analytical Method	Detection limit
Asbestos	Bulk Material	PLM Method 600	0.25%
Lead	Bulk Material	AAS USEPA SW 846 6010B	Various

### Sample Locations

All asbestos and lead sample locations are identified in the figures in the Appendix. The locations of other identified potentially hazardous materials are also identified on the figures.

## **Results and Discussion**

### Asbestos-containing material (ACM)

The following building materials contained greater than 1% asbestos and were characterized as *asbestos containing* material (ACM). ACM descriptions and locations are documented in the figures and Table III.

- Building 1455- Hangar and admin area
  - Thermal System Insulation (TSI)
    - None
  - Surfacing
    - None
  - Miscellaneous
    - None

Non-asbestos materials

The following materials were inspected, tested, and found to contain either *no asbestos* or point counted to be less than one percent (<1%) asbestos:

- Building 1455- Hangar and admin area
  - Drywall-orange peel texture finish
  - Cove base w/mastic
  - 12"x12" vinyl floor tile- all colors
  - 2'x2' suspended ceiling tile
  - Door caulking
  - Window caulking
  - Pipe Insulation (paper and tape) domestic cold water
  - Air duct insulation
  - Air duct sealant
  - Tape on hangar doors



Table II documents the concentrations of asbestos found in building materials sampled by IHR during this inspection.

**Table II:** Asbestos Content in Building Materials:

Sample Number	Description/Location	Asbestos Results*	Material Condition**
DC-1A	Hangar man door caulking		NA
	A. White paint	ND	
	B. Tan caulk	ND	
CB-1A	Grey Covebase and mastic- hangar		NA
	A. White concrete plaster	ND	
	B. White paint	ND	
	C. White mastic	ND	
	D. Grey basecove	ND	
CB-1B	Grey Covebase and mastic- hangar office		NA
	A. White plaster	ND	
	B. White paint	ND	
	C. White mastic	ND	
	D. Grey basecove	ND	
CB-2A	Brown Covebase and mastic- admin breakroom		NA
	A. White paint	ND	
	B. White fibrous	ND	
	C. White mastic	ND	
	D. Tan basecove	ND	
CB-2B	Brown Covebase and mastic- admin area		NA
	A. White plaster	ND	
	B. White paint	ND	
	C. Tan basecove	ND	
	D. White mastic	ND	

ND = none detected

\*Asbestos containing materials (ACM), under current EPA regulation are defined as material with an asbestos content greater than 1% by volume. OSHA regulation defines ACM as material with any amounts of asbestos content, including trace amounts. **Bolded numbers are above the regulatory threshold for regulated asbestos.**

\*\* Good condition: no visible damage or deterioration

Fair condition: damaged

Poor condition: significantly damaged

† Sample was point counted

**Table II (continued): Asbestos Content in Building Materials:**

Sample Number	Description/Location	Asbestos Results*	Material Condition**
CB-2C	Brown Covebase and mastic- admin hallway		NA
	A. Tan paint	ND	
	B. White fibrous	ND	
	C. Tan basecove	ND	
	D. White mastic	ND	
TSI-1A	Pipe insulation- domestic cold water		NA
	A. Grey paint	ND	
	B. White fibrous	ND	
	C. Yellow fibrous	ND	
TSI-1B	Pipe wrap seam tape		NA
	A. Clear mastic	ND	
	B. White fibrous woven	ND	
	C. White fibrous/yellow mastic (i)	ND	
	D. Silver foil	ND	
ADT-1A	Air duct insulation and tape		NA
	A. White fibrous woven	ND	
	B. White resin	ND	
	C. Silver foil	ND	
	D. Grey paint	ND	
	E. Tan fibrous/yellow mastic (i)	ND	
	F. Yellow fibrous	ND	
ADT-1B	Air duct insulation and tape- hangar office		NA
	A. White fibrous woven	ND	
	B. Silver foil	ND	
	C. White paint	ND	
	D. White resin	ND	
	E. White fibrous/yellow mastic (i)	ND	

ND = none detected

\*Asbestos containing materials (ACM), under current EPA regulation are defined as material with an asbestos content greater than 1% by volume. OSHA regulation defines ACM as material with any amounts of asbestos content, including trace amounts. **Bolded numbers are above the regulatory threshold for regulated asbestos.**

\*\* Good condition: no visible damage or deterioration

Fair condition: damaged

Poor condition: significantly damaged

† Sample was point counted

**Table II (continued): Asbestos Content in Building Materials:**

Sample Number	Description/Location	Asbestos Results*	Material Condition**
HDT-1A	Tape on hangar door bumpers		NA
	A. White mastic	ND	
	B. Yellow foam	ND	
	C. White fibrous woven	ND	
	D. Silver resin	ND	
VFT-1A	Grey 12x12 VFT in hangar office		NA
	A. Yellow mastic	ND	
	B. Grey/white tile	ND	
VFT-2A	Red 12x12 VFT- Admin hallway		NA
	A. Yellow mastic	ND	
	B. Red tile	ND	
VFT-2B	Grey 12x12 VFT- Admin breakroom		NA
	A. Yellow mastic	ND	
	B. Grey tile	ND	
VFT-2C	Grey 12x12- Admin entry		NA
	A. Black tar	ND	
	B. Yellow mastic	ND	
	C. Grey tile	ND	
DW-1A	Drywall system- hangar office		NA
	A. Tan fibrous	ND	
	B. White drywall	ND	
	C. Grey paint	ND	
	D. White texture	ND	

ND = none detected

\*Asbestos containing materials (ACM), under current EPA regulation are defined as material with an asbestos content greater than 1% by volume. OSHA regulation defines ACM as material with any amounts of asbestos content, including trace amounts. **Bolded numbers are above the regulatory threshold for regulated asbestos.**

\*\* Good condition: no visible damage or deterioration

Fair condition: damaged

Poor condition: significantly damaged

† Sample was point counted

**Table II (continued): Asbestos Content in Building Materials:**

Sample Number	Description/Location	Asbestos Results*	Material Condition**
DW-1B	Drywall system- Admin breakroom		NA
	A. Tan paint	ND	
	B. White texture	ND	
	C. Tan fibrous	ND	
	D. White drywall	ND	
DW-1C	Drywall system- Admin auxiliary space		NA
	A. Tan paint	ND	
	B. White drywall	ND	
	C. White fibrous	ND	
	D. White texture	ND	
CT-1A	2x2 ceiling tile- hangar office		NA
	A. White paint	ND	
	B. White ceiling tile	ND	
CT-1B	2x2 ceiling tile- admin breakroom		NA
	A. White paint	ND	
	B. White ceiling tile	ND	
CT-1C	2x2 ceiling tile- administration area		NA
	A. White paint	ND	
	B. White ceiling tile	ND	
DS-1A	Air supply duct- sealant		NA
	A. White resin	ND	
DS-1B	Air return duct- sealant		NA
	A. Grey resin	ND	
WC-1A	Window caulking		NA
	A. Brown caulk	ND	

ND = none detected

\*Asbestos containing materials (ACM), under current EPA regulation are defined as material with an asbestos content greater than 1% by volume. OSHA regulation defines ACM as material with any amounts of asbestos content, including trace amounts. **Bolded numbers are above the regulatory threshold for regulated asbestos.**

\*\* Good condition: no visible damage or deterioration

Fair condition: damaged

Poor condition: significantly damaged

† Sample was point counted

## Lead Based Paint

Table III documents the presence and concentrations of lead in paint on the painted surfaces within the building. One coating was found to have a measurable concentration of lead that may be covered by the OSHA Lead in construction standard depending on whether the coating is sanded, abraded, or otherwise made airborne. OSHA regulates lead in the workplace, but does not define a threshold amount in coatings. Best practices suggest that coatings with a lead concentration below 600 PPM do not require an exposure assessment, except during manual demolition activities, manual scraping, manual sanding, heat gun applications, and power tool cleaning with dust collection systems. An exposure assessment must be performed for all coatings that contain greater than 600 PPM, regardless of the method of paint disturbance.

- The following surface coatings contained lead in excess of 600 PPM.
  - None

All other coatings tested, except for samples which were BRL (below the reporting limit), may require an exposure assessment depending on the work methods used. Table IV documents the concentrations of lead-based paint on the painted surfaces.

**Table III:** Concentrations of lead in paint.

Sample	Location	Results (ppm)
Pb-1	Red paint on fire foam system	BRL
Pb-2	Blue paint in hangar office	BRL
Pb-3	White paint on CMU walls	BRL
Pb-4	Beige paint on air ducts and ceiling	BRL
Pb-5	Yellow paint on bollards	220
Pb-6	Grey floor paint- hangar	BRL
Pb-7	Tan paint on doors, ceiling, etc	BRL
Pb-8	Yellow paint on floor	BRL
Pb-9	Red paint on floor	BRL
Pb-10	Tan paint on metal walls	BRL
Pb-11	Tan paint on structural beams	BRL
Pb-12	Beige paint on admin breakroom walls	BRL
Pb-13	Beige paint on admin hallway walls	BRL
Pb-14	Beige paint with red primer- admin doors	BRL

Index:

ppm	Parts per million of lead in paint
BRL	Below reporting limit

## Other Hazardous Materials

*Fluorescent lights*- All building lighting was LED except for the restrooms.

- 13 Fluorescent bulbs in men's restroom
- 7 Fluorescent bulbs in women's restroom

*Fluorescent light ballasts*- All lighting was LED except for the restrooms

- 7 fixtures with suspect ballasts in men's restroom
- 4 fixtures with suspect ballasts in women's restroom

*Mercury Thermostats*- No mercury-containing thermostats were present in the building

*Tritium Exit Signs*- No tritium exit signs were present in the building

*Transformers*- No transformers were identified within the building

*Chlordane in soils*- Table IV lists the results of the chlordane soil sampling. xxxx.

**Table IV.** Results of soil sampling for chlordane

Samples	Location	Chlordane	Notes
SC-1	West side of 1455	ND	Collection depth 0-3 inches
SC-2	East side of 1455	ND	Collection depth 0-3 inches

ND = No chlordane detected

## **Conclusions**

- No asbestos materials were present in building 1455:
- Lead was present in surface coatings in building 1455.
  - The yellow paint on bollards contained lead- 220 PPM.
- Twenty (20) fluorescent light bulbs were present in the restrooms (admin area). All other lighting was LED.
- Eleven (11) presumed PCB-containing ballasts were present in the restrooms (admin area) of building 1145.
- No mercury thermostats, tritium exit signs, or transformers were present in the building.
- No chlordane was present in surface soils around the perimeter of the building.

## Recommendations

- ✓ Notify facilities and maintenance staff, as well as contractors of the presence of hazardous building materials within these facilities.
- ✓ Provide or arrange for appropriate exposure assessment and exposure controls for workers involved in renovation, demolition, or cleanup of identified hazardous materials whenever workers may be exposed to these materials. At a minimum, ensure all potential worker exposures are controlled per federal, state, or local regulations (e.g., OSHA standards).
- ✓ Ensure that all waste material generated from demolition or renovation of these building is properly transported and disposed of in an approved landfill by the EPA or applicable state or local agency.

Please feel free to call if you have any questions regarding this report.

Report by:

A handwritten signature in dark ink, appearing to read 'M + L Call', is positioned above the printed name.

Matthew Call, MS, CIH, CSP  
President

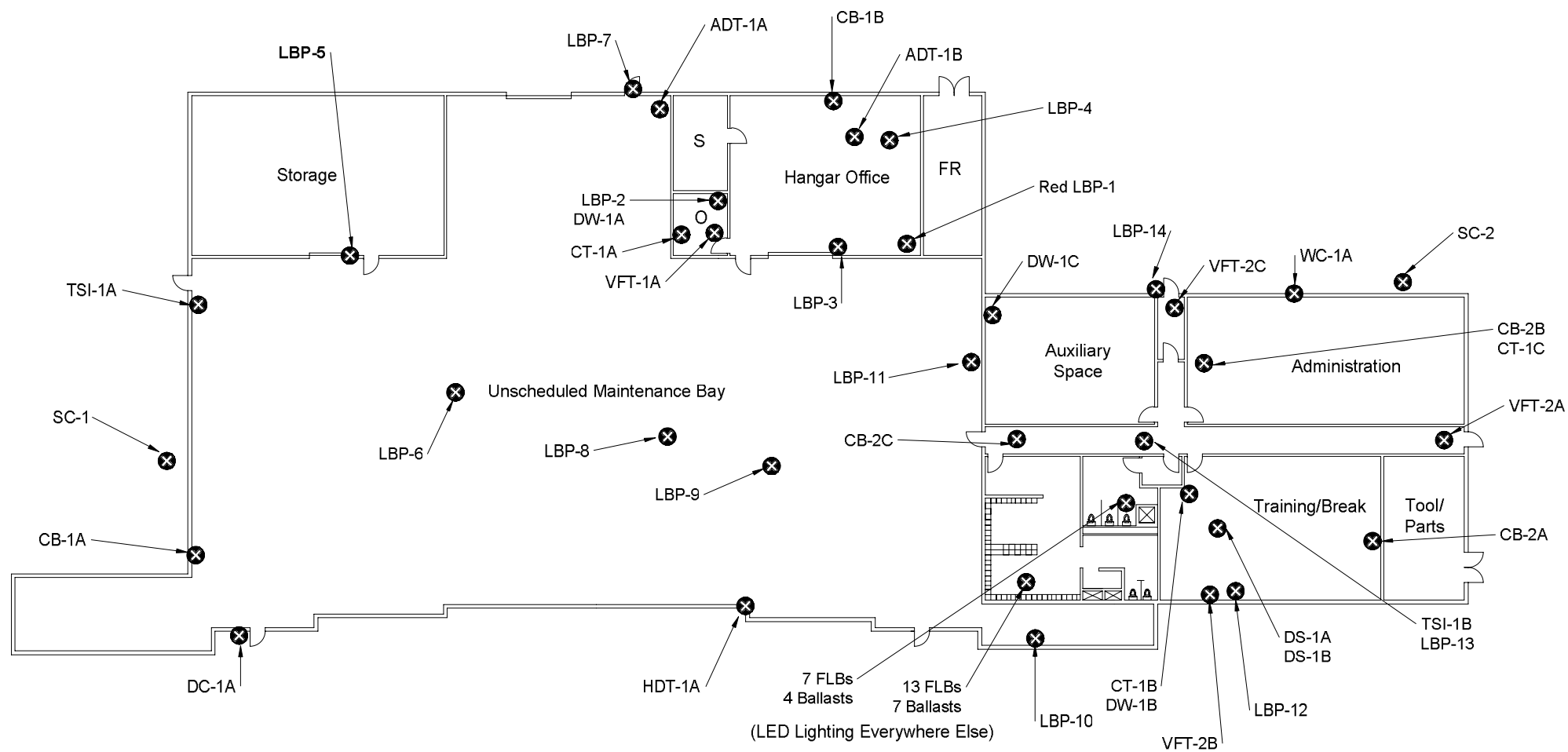
## **Appendix A- Figures and Sample Locations**



Key  
FLBs - Fluorescent Light Ballasts

Building 1455 Hangar and Admin Area  
Maxwell Air force Base  
Montgomery, Alabama  
Hazardous Material Inspection  
August 2021

W912QR23R0003\_Specs\_Vol1-0000



## **Appendix B- Laboratory Reports**



12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

W912QR23R0003\_Specs\_Vol1-0000

BULK ASBESTOS TEST REPORT  
PAGE 1 OF 6

CLIENT:

INDUSTRIAL HYGIENE RESOURCES  
8312 NORTHVIEW STREET, SUITE #100  
BOISE, ID 83704

ANALYSIS DATE: 8-24-21  
REPORTING DATE: 8-27-21  
RECEIPT DATE: 8-24-21  
CLIENT JOB NO.: 6764  
CLIENT PROJECT: JACOBS-MAXWELL AFB  
DCMSL PROJECT: IHR5536

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	SAMPLE NUMBER (C)	SAMPLE DATE (C)	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-1	DC-1A	8-17-21	A. WHITE PAINT B. TAN CAULK	6.0% 94.0%			ND ND	<hr/> ND	0.0 0.0	100.0 100.0	100.0 100.0
-2	CB-1A	8-17-21	A. WHITE CONCRETE PLASTER B. WHITE PAINT C. WHITE MASTIC D. GREY BASECOVE	4.0% 22.0% 35.0% 39.0%			ND ND ND ND	<hr/> ND	0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0	100.0 100.0 100.0 100.0
-3	CB-1B	8-17-21	A. WHITE PLASTER B. WHITE PAINT C. WHITE MASTIC D. GREY BASECOVE	1.0% 5.0% 40.0% 54.0%			ND ND ND ND	<hr/> ND	0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0	100.0 100.0 100.0 100.0
-4	CB-2A	8-17-21	A. WHITE PAINT B. WHITE FIBROUS C. WHITE MASTIC D. TAN BASECOVE	3.0% 8.0% 30.0% 59.0%			ND ND ND ND	<hr/> ND	0.0 100.0 0.0 0.0	100.0 0.0 100.0 100.0	100.0 100.0 100.0 100.0
-5	CB-2B	8-17-21	A. WHITE PLASTER B. WHITE PAINT C. TAN BASECOVE D. WHITE MASTIC	2.0% 6.0% 30.0% 62.0%			ND ND ND ND	<hr/> ND	0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0	100.0 100.0 100.0 100.0



12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

W912QR23R0003\_Specs\_Vol1-0000

BULK ASBESTOS TEST REPORT  
PAGE 2 OF 6

CLIENT:

INDUSTRIAL HYGIENE RESOURCES  
8312 NORTHVIEW STREET, SUITE #100  
BOISE, ID 83704

ANALYSIS DATE: 8-24-21  
REPORTING DATE: 8-27-21  
RECEIPT DATE: 8-24-21  
CLIENT JOB NO.: 6764  
CLIENT PROJECT: JACOBS-MAXWELL AFB  
DCMSL PROJECT: IHR5536

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	SAMPLE NUMBER (C)	SAMPLE DATE (C)	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-6	CB-2C	8-17-21	A. TAN PAINT	3.0%			ND		0.0	100.0	100.0
			B. WHITE FIBROUS	6.0%			ND		100.0	0.0	100.0
			C. TAN BASECOVE	40.0%			ND		0.0	100.0	100.0
			D. WHITE MASTIC	51.0%			ND		0.0	100.0	100.0
								ND			
-7	TSI-1A	8-17-21	A. GREY PAINT	10.0%			ND		0.0	100.0	100.0
			B. WHITE FIBROUS	15.0%			ND		100.0	0.0	100.0
			C. YELLOW FIBROUS	75.0%			ND		100.0	0.0	100.0
								ND			
-8	TSI-1B	8-17-21	A. CLEAR MASTIC	5.0%			ND		0.0	100.0	100.0
			B. WHITE FIBROUS WOVEN	7.0%			ND		100.0	0.0	100.0
			C. WHITE FIBROUS/YELLOW MASTIC (I)	40.0%			ND		90.0	10.0	100.0
			D. SILVER FOIL	48.0%			ND		0.0	100.0	100.0
								ND			
-9	ADT-1A	8-17-21	A. WHITE FIBROUS WOVEN	3.0%			ND		100.0	0.0	100.0
			B. WHITE RESIN	5.0%			ND		0.0	100.0	100.0
			C. SILVER FOIL	17.0%			ND		0.0	100.0	100.0
			D. GREY PAINT	20.0%			ND		0.0	100.0	100.0
			E. TAN FIBROUS/YELLOW MASTIC (I)	22.0%			ND		90.0	10.0	100.0
			F. YELLOW FIBROUS	33.0%			ND		100.0	0.0	100.0
								ND			
-10	ADT-1B	8-17-21	A. WHITE FIBROUS WOVEN	4.0%			ND		100.0	0.0	100.0
			B. SILVER FOIL	12.0%			ND		0.0	100.0	100.0
			C. WHITE PAINT	15.0%			ND		0.0	100.0	100.0
			D. WHITE RESIN	25.0%			ND		3.0	97.0	100.0
			E. WHITE FIBROUS/YELLOW MASTIC (I)	44.0%			ND		90.0	10.0	100.0
								ND			



12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

W912QR23R0003\_Specs\_Vol1-0000

BULK ASBESTOS TEST REPORT  
PAGE 3 OF 6

CLIENT:

INDUSTRIAL HYGIENE RESOURCES  
8312 NORTHVIEW STREET, SUITE #100  
BOISE, ID 83704

ANALYSIS DATE: 8-24-21  
REPORTING DATE: 8-27-21  
RECEIPT DATE: 8-24-21  
CLIENT JOB NO.: 6764  
CLIENT PROJECT: JACOBS-MAXWELL AFB  
DCMSL PROJECT: IHR5536

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	SAMPLE NUMBER (C)	SAMPLE DATE (C)	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-11	HDT-1A	8-17-21	A. WHITE MASTIC	2.0%			ND		0.0	100.0	100.0
			B. YELLOW FOAM	5.0%			ND		0.0	100.0	100.0
			C. WHITE FIBROUS WOVEN	30.0%			ND		100.0	0.0	100.0
			D. SILVER RESIN	63.0%			ND		0.0	100.0	100.0
								ND			
-12	VFT-1A	8-17-21	A. YELLOW MASTIC	0.5%			ND		0.0	100.0	100.0
			B. GREY/WHITE TILE	99.5%			ND		0.0	100.0	100.0
								ND			
-13	VFT-2A	8-17-21	A. YELLOW MASTIC	0.5%			ND		0.0	100.0	100.0
			B. RED TILE	99.5%			ND		0.0	100.0	100.0
								ND			
-14	VFT-2B	8-17-21	A. YELLOW MASTIC	0.5%			ND		0.0	100.0	100.0
			B. GREY TILE	99.5%			ND		0.0	100.0	100.0
								ND			
-15	VFT-2C	8-17-21	A. BLACK TAR	0.5%			ND		0.0	100.0	100.0
			B. YELLOW MASTIC	0.5%			ND		0.0	100.0	100.0
			C. GREY TILE	99.0%			ND		0.0	100.0	100.0
								ND			
-16	DW-1A	8-17-21	A. TAN FIBROUS	15.0%			ND		100.0	0.0	100.0
			B. WHITE DRYWALL	22.0%			ND		0.0	100.0	100.0
			C. GREY PAINT	24.0%			ND		0.0	100.0	100.0
			D. WHITE TEXTURE	39.0%			ND		0.0	100.0	100.0
								ND			



12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

W912QR23R0003\_Specs\_Vol1-0000

BULK ASBESTOS TEST REPORT  
PAGE 4 OF 6

CLIENT:

INDUSTRIAL HYGIENE RESOURCES  
8312 NORTHVIEW STREET, SUITE #100  
BOISE, ID 83704

ANALYSIS DATE: 8-24-21  
REPORTING DATE: 8-27-21  
RECEIPT DATE: 8-24-21  
CLIENT JOB NO.: 6764  
CLIENT PROJECT: JACOBS-MAXWELL AFB  
DCMSL PROJECT: IHR5536

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	SAMPLE NUMBER (C)	SAMPLE DATE (C)	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-17	DW-1B	8-17-21	A. TAN PAINT	4.0%			ND		0.0	100.0	100.0
			B. WHITE TEXTURE	12.0%			ND		0.0	100.0	100.0
			C. TAN FIBROUS	25.0%			ND		100.0	0.0	100.0
			D. WHITE DRYWALL	59.0%			ND		1.0	99.0	100.0
								ND			
-18	DW-1C	8-17-21	A. TAN PAINT	6.0%			ND		0.0	100.0	100.0
			B. WHITE DRYWALL	10.0%			ND		0.0	100.0	100.0
			C. WHITE FIBROUS	37.0%			ND		100.0	0.0	100.0
			D. WHITE TEXTURE	47.0%			ND		0.0	100.0	100.0
								ND			
-19	CT-1A	8-17-21	A. WHITE PAINT	6.0%			ND		0.0	100.0	100.0
			B. WHITE CEILING TILE	94.0%			ND		90.0	10.0	100.0
								ND			
-20	CT-1B	8-17-21	A. WHITE PAINT	7.0%			ND		0.0	100.0	100.0
			B. WHITE CEILING TILE	93.0%			ND		90.0	10.0	100.0
								ND			
-21	CT-1C	8-17-21	A. WHITE PAINT	6.0%			ND		0.0	100.0	100.0
			B. WHITE CEILING TILE	94.0%			ND		90.0	10.0	100.0
								ND			
-22	DS-1A	8-17-21	A. WHITE RESIN	100.0%			ND		0.0	100.0	100.0
								ND			
-23	DS-1B	8-17-21	A. GREY RESIN	100.0%			ND		0.0	100.0	100.0
								ND			
-24	WC-1A	8-17-21	A. BROWN CAULK	100.0%			ND		0.0	100.0	100.0
								ND			



12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

W912QR23R0003\_Specs\_Vol1-0000

BULK ASBESTOS TEST REPORT  
PAGE 5 OF 6

CLIENT:

INDUSTRIAL HYGIENE RESOURCES  
8312 NORTHVIEW STREET, SUITE #100  
BOISE, ID 83704

ANALYSIS DATE: 8-24-21  
REPORTING DATE: 8-27-21  
RECEIPT DATE: 8-24-21  
CLIENT JOB NO.: 6764  
CLIENT PROJECT: JACOBS-MAXWELL AFB  
DCMSL PROJECT: IHR5536

FOR CALCULATION PURPOSES, TRACE (TR) IS ASSUMED TO BE 0.5%.

(C) INFORMATION PROVIDED BY CLIENT

(I) INSEPARABLE LAYERS

ND - NONE DETECTED

THE SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION. THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED. THE RESULTS OF THIS REPORT APPLY TO THE SAMPLES AS RECEIVED FROM THE CLIENT. THIS REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY.

ALL INFORMATION PROVIDED BY OUR CLIENT, INCLUDING SAMPLE RESULTS, IS CONSIDERED PROPRIETARY AND CONFIDENTIAL. CLIENT RESULTS AND OTHER INFORMATION WILL NOT BE RELEASED TO ANYONE BUT THE CLIENT EXCEPT BY CLIENT REQUEST. WHEN THE LABORATORY IS REQUIRED BY LAW OR AUTHORIZED BY CONTRACTUAL ARRANGEMENT TO RELEASE CONFIDENTIAL INFORMATION, THE CLIENT OR INDIVIDUAL CONCERNED SHALL, UNLESS PROHIBITED BY LAW, BE NOTIFIED OF THE INFORMATION PROVIDED.



12421 W. 49th Avenue, Unit #6  
Wheat Ridge, CO 80033

DCM Project No.: IHR 5536

## Bulk Sample Analysis

Page 6 of 6

### BULK SAMPLE ANALYSIS PROCEDURES:

DCM Science Laboratory, Inc. analyzes bulk asbestos samples following procedures developed by the McCrone Research Institute and in compliance with guidelines established by the Environmental Protection Agency (EPA-600/M4-82-020, 1982 and EPA-600/R-93/116, July, 1993).

Bulk samples are prepared for analysis using a 10X-80X stereo microscope in a hepa filter hood which provides a contamination-free environment. The sample is then analyzed by polarized light microscopy (PLM) at 100X. When the sample consists of more than one layer, each layer is prepared and analyzed separately. Fiber and matrix materials are identified by the characterization of optical properties including color and pleochroism, form, cleavage, relief, birefringence, extinction, orientation, twinning, interference figure and other distinguishing features. Dispersion staining is also used to further aid in mineral identification. All percentages of asbestos, other fibers and non-fibrous constituents are calculated from the values obtained from analyses using the stereo and PLM microscopes. In-house and NIST standards as well as a chart prepared by R.D. Terry and G.V. Chilinger for "The Journal of Sedimentary Petrology", (Volume 24, pp. 229-234, 1955) provide a guide for estimating percentages. All samples are archived for six months unless other arrangements are made by the client.

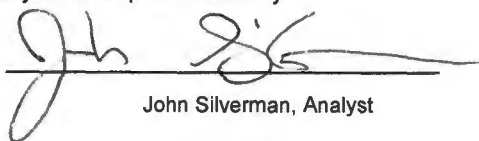
### ACCREDITATION:

DCMSL is accredited by NVLAP (since April 1, 1989). Our NVLAP Lab Code is 101258-0. DCMSL complies with NVLAP requirements unless otherwise noted.

### ENDORSEMENT:

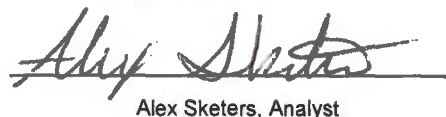
The results of this analysis must not be used by the client to claim endorsement by NVLAP or any agency of the U.S. Government.

The analysis was performed by :

  
John Silverman, Analyst

\_\_\_\_\_  
Jason Barnes, Analyst

\_\_\_\_\_  
Ron Schott, Analyst

  
Alex Sketers, Analyst



NVLAP Lab Code 101258-0

\_\_\_\_\_  
8-24-2021

Date  
Ron Schott  
Laboratory Director





1242 1W. 49th Avenue, Unit #6  
Wheat Ridge, CO 80033

(303) 463-8270/(800) 852-7340  
(303) 463-8267 - fax

Date/Time Received \_\_\_\_\_ DCMSL Group No. 2234 DCMSL Log No. IHR5536  
Field Data Sheet/Chain of Custody

## Samples Submitted By:

Company: Industrial Hygiene Resources Job/P.O. # 6764  
Address: 8312 W. Northview Street, Suite 100  
Boise, ID 83704 Project Title Jacobs- Maxwell AFB  
Contact: Matthew Call Archive: All Samples are archived for  
Phone: (208) 323-8287 6 months unless other  
Fax: (208) 323-0783 arrangements are made.  
Cell/Pager: (208) 949-8557 E-Mail matthewcall@industrialhygienresources.com

## Turnaround Time Requested:

☒ Standard (3 to 5 Business Days) ☐ 2 Hour Rush (Asbestos Only)  
☐ 24 Hour Rush ☐ Other \_\_\_\_\_

## Procedure Requested:

ASBESTOS		XRD		OTHER	
Bulk	<input checked="" type="checkbox"/> Standard EPA	<input type="checkbox"/>	Respirable Silica	<input type="checkbox"/>	Optical Microscopy
	<input type="checkbox"/> Progressive	<input type="checkbox"/>	Bulk Silica	<input type="checkbox"/>	Gravimetric
	<input type="checkbox"/> Point Count	<input type="checkbox"/>	Scan & Search	<input type="checkbox"/>	SEM
	<input type="checkbox"/> Other	<input type="checkbox"/>	Other	<input type="checkbox"/>	Other

Air ☐ NIOSH 7400 ☐ OHSA ID-160 ☐ Other  
ADDITIONAL INFORMATION Please send report in both .pdf and MS exce

Client Sample No.:	Sample Date	Air Volume	Other Information
1 DC-1a	8/17/2021		Door Caulking- hangar
2 CB-1a	8/17/2021		Cove base- hangar
3 CB-1b	8/17/2021		Cove base- hangar office
4 CB-2a	8/17/2021		Cove base- breakroom
5 CB-2b	8/17/2021		Cove base- admin
6 CB-2c	8/17/2021		Cove base- hallway
7 TSI-1a	8/17/2021		TSI- hangar
8 TSI-1b	8/17/2021		TSI- admin
9 ADT-1a	8/17/2021		Air duct tape- hanger
10 ADT-1b	8/17/2021		Air duct tape- hanger office

Relinquished By: Matthew Call Date/Time \_\_\_\_\_ Received By: D. Hawley Date/Time 8/24/21 10:14

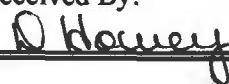
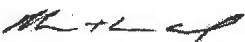
Client Sample No.:	Sample Date	Air Volume	Other Information
11 HDT-1a	8/17/2021		hangar door tape
12 VFT-1a	8/17/2021		12" grey tile- hangar office
13 VFT-2a	8/17/2021		12" red tile- admin hall
14 VFT-2b	8/17/2021		12" grey tile- admin breakrm
15 VFT-2c	8/17/2021		12" grey w/ mastic- entry
16 DW-1a	8/17/2021		Drywall- hangar office
17 DW-1b	8/17/2021		drywall- admin breakroom
18 DW-1c	8/17/2021		drywall- administration room
19 CT-1a	8/17/2021		2x2 ceiling tile-hangar office
20 CT-1b	8/17/2021		2x2 ceiling tile-admin breakr
21 CT-1c	8/17/2021		2x2 ceiling tile- admin room
22 DS-1a	8/17/2021		air duct sealant- supply
23 DS-1b	8/17/2021		air duct sealant- return
24 WC-1a	8/17/2021		window caulking- exterior
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			

Relinquished By:

Date/Time

Received By:

Date/Time



8/24/21 10:14



August 30, 2021

**Subcontractor Number:**

**Laboratory Report:** RES 503699-1

**Project #/P.O. #:** 6764

**Project Description:** Jacobs- Maxwell AFB

Matthew Call  
Industrial Hygiene Resources, LTD.  
8312 W. Northview, Suite 100  
Boise ID 83704

Dear Matthew,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association (AIHA LAP, LLC), Lab ID 101533. The laboratory is currently proficient in both IHPAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Inductively Coupled Plasma - Mass Spectrometry (ICP-MS) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

**RES 503699-1** is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed, as received by the customer. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

by Jeff Green

Robin Glover  
Vice President



## RESERVOIRS ENVIRONMENTAL, INC

NVLAP Lab Code 101896-0  
AIHA LAP, LLC. LAB ID 101533

TABLE: I ANALYSIS: LEAD IN PAINT

RES Job Number: **RES 503699-1**  
Client: **Industrial Hygiene Resources, LTD.**  
Client Project/P.O.: **6764**  
Client Project Description: **Jacobs- Maxwell AFB**  
Date Samples Received: **August 24, 2021**  
Analysis Type: **REI CHEMISTRY SOP / USEPA SW846 3050B/7420-M**  
Turnaround: **Standard**  
Date Samples Analyzed: **August 27, 2021**

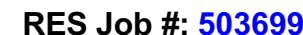
NA = Not Analyzed  
NR = Not Received  
ND = None Detected  
BAS = Below Analytical Sensitivity  
BRL = Below Reporting Limit

Laboratory Sample ID	Reporting Limit	LEAD CONCENTRATION
Client ID Number	(%)	(%)
503699 - LBP-1	0.019	BRL
503699 - LBP-2	0.022	BRL
503699 - LBP-3	0.021	BRL
503699 - LBP-4	0.018	BRL
503699 - LBP-5	0.020	0.022
503699 - LBP-6	0.023	BRL
503699 - LBP-7	0.015	BRL
503699 - LBP-8	0.019	BRL
503699 - LBP-9	0.023	BRL
503699 - LBP-10	0.021	BRL
503699 - LBP-11	0.023	BRL
503699 - LBP-12	0.018	BRL
503699 - LBP-13	0.014	BRL
503699 - LBP-14	0.023	BRL



\* Unless otherwise noted all quality control samples performed within specifications established by the laboratory

  
Jeff Green

Analyst



ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm				REQUESTED ANALYSIS				VALID MATRIX CODES				LAB NOTES		
PLM / PCM / TEM DTL RUSH PRIORITY STANDARD				<b>PLM</b> - Short Report, Long Report, CARB 435 <b>TEM - AHERRA</b> +/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Aherra <b>PCM</b> - 7400A, 7400B, OSHA <b>DUST</b> - Total, Respirable <b>METALS</b> - Analytes(s) Pb TCLP Lead Only by Flame AA (US EPA SW846 1311/3011A/7420), Lead by Flame AA (USEPA SW846 3050B/7420) <b>ORGANICS</b> - Methamphetamine, TSS <b>VIABLES</b> - Campylobacter, Bacillus, Salmonella (Culturable or 1-2), Listeria, E.coli O157:H7, E.coli/Colliforms - Plated, S.aureus, Yeast & Mol, Aerobic Plate Count, Coliforms/E.coli - (State Water, Drinking Water, Non-Drinking Water, +/-, Quantification), Lactic Acid, Viable Microbial Count (w/o ID or w/ID), Enterococcus (+/- or Quantification), Legionella (B, NP, C) <b>MEDICAL</b> - Biberiden, LAL <b>MOLD</b> - Spore Trap, Bulk Mold, Particulate Identification	Air = A Bulk = B		Dust = D Food = F		Paint = P Soil = S		Surface = SU Swab = SW		Tape = T Wipe = W	
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm					Drinking Water = DW		Waste Water = WW		**ASTM E1792 approved wipe media only**					
Dust RUSH PRIORITY STANDARD					Sample Volume (L) / Area	Length (or Aliquots) x Width (or Area per Aliquot)	Matrix Code	# of Containers	Date Collected mm/dd/yy	Time Collected hh:mm	Laboratory Analysis Instructions			
Metals RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT														
Organics* SAME DAY RUSH PRIORITY STANDARD														
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm														
Viable Analysis** PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH														
Medical Device Analysis RUSH STANDARD														
Mold Analysis RUSH PRIORITY STANDARD														
**Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.**														
Special Instructions: Samples LBP 1-14 are paint chips for Pb. Samples TCLP 1 and 2 are for TCLP-Pb.														
Client Sample ID Number (Sample ID's must be unique)				ASBESTOS	CHEMISTRY	MICROBIOLOGY								
1	LBP-1				X					P				
2	LBP-2				X					P				
3	LBP-3				X					P				
4	LBP-4				X					P				
5	LBP-5				X					P				
6	LBP-6				X					P				
7	LBP-7				X					P				
8	LBP-8				X					P				
9	LBP-9				X					P				
10	LBP-10				X					P				
11	LBP-11				X					P				
12	LBP-12				X					P				
13	LBP-13				X					P				

<small>Our analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5 % monthly interest surcharge.</small>			
Relinquished By:		<b>Matthew Call</b>	Date/Time: <b>08/23/2021 8:41:56</b> Sample Condition: <b>Acceptable</b>
Received By:		<b>Jessica Shapiro</b>	Date/Time: <b>08/24/2021 10:39:20</b> Carrier: <b>UPS</b>



Res Job#: 503699

Submitted By: Industrial Hygiene Resources, LTD.

W912QR23R0003 Specs Vol1-0000

REQUESTED ANALYSIS				VALID MATRIX CODES		LAB NOTES	
<b>PULM</b> - Short Report, Long Report, CARB435 <b>TEM</b> - AHERA (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, Yamate Level II, ISO 10312, ISO 13794, Chatfield, Drinking Water, Waste Water, Bulk +/-, CARB Modified Ahera <b>PCM</b> - 7400A, 7400B, OSHA <b>DUST</b> - Total, Respirable <b>METALS</b> - Analyte(s) Pb <b>TCLP</b> Lead Only by Flame AA (USEPA SW846 1311/3011 A/7420), Lead by Flame AA (USEPA SW846 3050 B/7420) <b>ORGANICS</b> - Methamphetamine, TSS <b>VIABLES</b> - Campylobacter, Bacillus, Salmonella (Culturable or +2), Listeria, E.coli O157:H7, E.coli/Colliforms - Plated, S.aureus, Yeast & Mold, Aerobic Plate Count, Coliforms/E.coli - (State Water, Drinking Water, Non-Drinking Water +/-, Quantification), Lactic Acid, Viable Microbial Count (woID or wID), Enterococcus (+/- or Quantification), Legionella (P, NP, C) <b>MEDICAL</b> - Bioburden, LAL <b>MOLD</b> - Spore Trap, Bulk Mold, Particulate Identification	<b>ASBESTOS</b>	<b>CHEMISTRY</b>	<b>MICROBIOLOGY</b>	Air = A      Bulk = B Dust = D      Food = F Paint = P      Soil = S Surface = SU      Swab = SW Tape = T      Wipe = W Drinking Water = DW Waste Water = WW <b>**ASTM E1792 approved wipe media only**</b>		<b>Laboratory Analysis Instructions</b>	
				Sample Volume (L) / Area			
				Length (or Aliquots) x Width (or Area per Aliquot)			
				Matrix Code			
				# of Containers			
				Date Collected mm/dd/yyyy			
				Time Collected hh:mm			
Client Sample ID Number (Sample ID's must be unique)							
14 LBP-14		X		P			
15 TCLP-1		X		B			
16 TCLP-2		X		B			

**Industrial Hygiene Resources, Ltd.**

Sample Delivery Group: L1395066  
Samples Received: 08/25/2021  
Project Number: 6764  
Description: Jacobs-MHAFB

Report To: Matthew Call  
8312 W. Northview Street  
Suite 100  
Boise, ID 83704

Entire Report Reviewed By:



Chris Ward  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# TABLE OF CONTENTS

W912QR23R0003\_Specs\_Vol1-0000

Cp: Cover Page	1	<sup>1</sup> Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	<sup>2</sup> Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	<sup>3</sup> Ss
SC-1 L1395066-01	5	
SC-2 L1395066-02	6	<sup>4</sup> Cn
Qc: Quality Control Summary	7	<sup>5</sup> Sr
Total Solids by Method 2540 G-2011	7	
Pesticides (GC) by Method 8081	8	<sup>6</sup> Qc
Gl: Glossary of Terms	9	
Al: Accreditations & Locations	10	<sup>7</sup> Gl
Sc: Sample Chain of Custody	11	<sup>8</sup> Al
		<sup>9</sup> Sc



# SAMPLE SUMMARY

W912QR23R0003\_Specs\_Vol1-0000

## SC-1 L1395066-01 Solid

Collected by  
Matthew Call

Collected date/time  
08/23/21 09:00

Received date/time  
08/25/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1732129	1	08/31/21 15:29	08/31/21 15:36	CMK	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1732512	1	09/01/21 08:47	09/03/21 14:02	MTJ	Mt. Juliet, TN

## SC-2 L1395066-02 Solid

Collected by  
Matthew Call

Collected date/time  
08/23/21 09:00

Received date/time  
08/25/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1732129	1	08/31/21 15:29	08/31/21 15:36	CMK	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1732512	1	09/01/21 08:47	09/03/21 14:11	MTJ	Mt. Juliet, TN



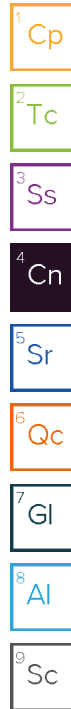
# CASE NARRATIVE

W912QR23R0003\_Specs\_Vol1-0000

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chris Ward  
Project Manager



## Total Solids by Method 2540 G-2011

Analyte	Result	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	82.9		1	08/31/2021 15:36	<a href="#">WG1732129</a>

## Pesticides (GC) by Method 8081

Analyte	Result (dry) ug/kg	<u>Qualifier</u>	RDL (dry) ug/kg	Dilution	Analysis date / time	<u>Batch</u>
alpha-Chlordane	ND		24.1	1	09/03/2021 14:02	<a href="#">WG1732512</a>
gamma-Chlordane	ND		24.1	1	09/03/2021 14:02	<a href="#">WG1732512</a>
Chlordane	ND		362	1	09/03/2021 14:02	<a href="#">WG1732512</a>
(S) Decachlorobiphenyl	70.9		10.0-135		09/03/2021 14:02	<a href="#">WG1732512</a>
(S) Tetrachloro-m-xylene	71.7		10.0-139		09/03/2021 14:02	<a href="#">WG1732512</a>

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Total Solids by Method 2540 G-2011

Analyte	Result	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.7		1	08/31/2021 15:36	<a href="#">WG1732129</a>

## Pesticides (GC) by Method 8081

Analyte	Result (dry) ug/kg	<u>Qualifier</u>	RDL (dry) ug/kg	Dilution	Analysis date / time	<u>Batch</u>
alpha-Chlordane	ND		23.1	1	09/03/2021 14:11	<a href="#">WG1732512</a>
gamma-Chlordane	ND		23.1	1	09/03/2021 14:11	<a href="#">WG1732512</a>
Chlordane	ND		346	1	09/03/2021 14:11	<a href="#">WG1732512</a>
(S) Decachlorobiphenyl	72.2		10.0-135		09/03/2021 14:11	<a href="#">WG1732512</a>
(S) Tetrachloro-m-xylene	72.8		10.0-139		09/03/2021 14:11	<a href="#">WG1732512</a>

1  
Cp2  
Tc3  
Ss4  
Cn5  
Sr6  
Qc7  
Gl8  
Al9  
Sc

Method Blank (MB)

(MB) R3698917-1 08/31/21 15:36

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

L1395066-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1395066-01 08/31/21 15:36 • (DUP) R3698917-3 08/31/21 15:36

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	82.9	85.6	1	3.11		10

Laboratory Control Sample (LCS)

(LCS) R3698917-2 08/31/21 15:36

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3700182-1 09/03/21 12:15

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
alpha-Chlordane	U		1.41	20.0
gamma-Chlordane	U		1.96	20.0
Chlordane	U		103	300
(S) Decachlorobiphenyl	71.0			10.0-135
(S) Tetrachloro-m-xylene	69.5			10.0-139

Laboratory Control Sample (LCS)

(LCS) R3700182-2 09/03/21 12:25

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
alpha-Chlordane	66.6	54.2	81.4	70.0-130	
gamma-Chlordane	66.6	54.6	82.0	70.0-130	
(S) Decachlorobiphenyl			73.3	10.0-135	
(S) Tetrachloro-m-xylene			73.6	10.0-139	

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

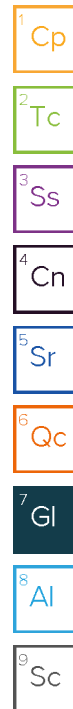
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

## Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

## Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



# ACCREDITATIONS & LOCATIONS

W912QR23R0003\_Specs\_Vol1-0000

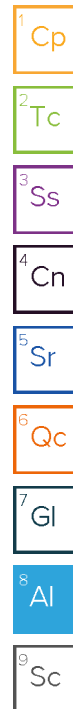
## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

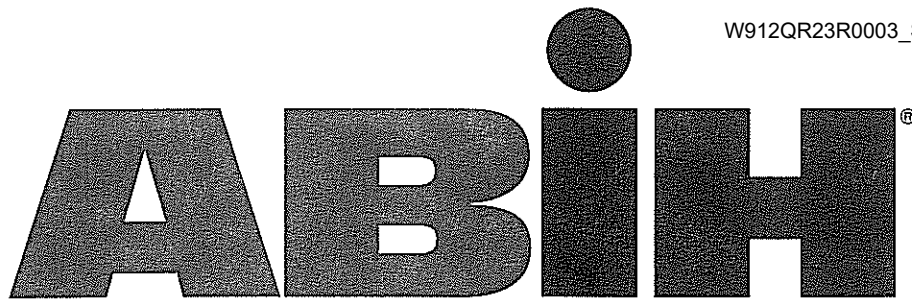
\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.





[illegible]

## **Appendix C- Consultant's Certifications**



**american board of industrial hygiene®**

organized to improve the practice of industrial hygiene  
proclaims that

*Matthew C. Call*

having met all requirements of  
education, experience and examination, and  
ongoing maintenance,  
is hereby certified in the

**COMPREHENSIVE PRACTICE  
of  
INDUSTRIAL HYGIENE**

and has the right to use the designations

**CERTIFIED INDUSTRIAL HYGIENIST**

**CIH**

**Certificate Number      9591 CP**

**Awarded:                      May 16, 2009**

**Expiration Date:            December 1, 2024**



*Dirk Yamamoto*  
\_\_\_\_\_  
Chair, ABIH

*Alvin K. Oliver*  
\_\_\_\_\_  
Chief Executive Officer, ABIH



# Certificate of Completion

## Matthew Call

Has attended and successfully completed the  
Asbestos Building Inspector  
AHERA 4 Hours Refresher Training Course  
In accordance with Title II of TSCA  
40 CFR Part 763, Appendix C to Subpart E  
Consistent with Utah Administrative Rule R307-801: Asbestos

Course Date: 5/3/21

Certificate Number: 6674-04

Expiration Date: 5/3/2022

Instructor: Dayle Lundy

# United States Environmental Protection Agency

This is to certify that

Matthew C Call

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires June 02, 2023

LBP-R-129314-2

Certification #

May 19, 2020

Issued On



Adrienne Priselac, Manager, Toxics Office

Land Division



## Limitations/Disclaimer

The scope of the investigation described in this report has been limited by agreement of the parties based upon financial and other considerations. Further, the scope of this report is limited to the matters expressly covered herein. The investigation, testing and analysis of compounds and materials at the site have been limited to those compounds and materials set out in the parties' agreement. Other compounds or materials not tested for could be present at the site.

The investigation, testing and analysis described in this report has been undertaken and performed in a professional manner in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by a Diplomat of the American Board of Industrial Hygiene (ABIH); a "Certified Industrial Hygienist (CIH)".

During the investigation and in preparing this report we have relied upon information provided by third parties, including independent laboratories and testing services (with appropriate accreditations). It is believed that the information obtained from others during the investigation is reasonable. However, it is not warranted or guaranteed that the information provided by others is complete or accurate.

The investigation and this report are limited to the conditions present at the time of the site visits and inspections, and to the information available at the time this report was prepared. However, there is a distinct possibility that conditions, compounds or materials may exist which could not be identified within the agreed scope of this investigation or which were not apparent during site inspections or testing. Should any additional information become available, or should additional site work be undertaken, consultant should be notified so that we can determine if modification should be made to this report.

Where indicated or implied in this report, or where mandated by the condition of the site including its structure/improvements, the conclusions of this report are based on visual observations of the site. The conclusions of this report do not apply to any areas of the site not available for inspection or testing.

It should be recognized that the investigation and evaluation of environmental conditions is a science and an art. Judgments leading to conclusions and recommendations are at times made with an incomplete knowledge of all conditions applicable to the site. More detailed, focused and/or extensive studies can tend to reduce the inherent uncertainties associated with the evaluation of environmental conditions. No warranty, express or implied, is given.

This report is prepared for and intended for the exclusive use of the company, organization or individual to whom it is addressed. It may not be used or relied upon in any manner or for any purpose whatsoever by any other party without written authorization by IHR.



Louisville District

# ENVIRONMENTAL PERMITS MATRIX

**PROJECT:** FY21 Repair Aircraft Maintenance B1455 for MH-138 Beddown

**INSTALLATION:** Maxwell Air Force Base, Alabama

**UPDATED AT** ☐ ☒ **CORRECTED FINAL DESIGN**

TYPE OF PERMIT	PERMITTING ACTION				PIECE OF EQUIPMENT OR OPERATION	PERMITTING AUTHORITY CONTACTED AND DATE	PERMIT FEE
	REQ'D Y/N	NUMBER OF PERMITS	TIME REQ'D FOR PERMIT (DAYS)				
			PREP	APP			
AIR QUALITY	N						
WATER QUALITY	N						
SOLID WASTE	N						
HAZARDOUS WASTE 1.	N						
HAZARDOUS WASTE 2.	N						
1. INCLUDES UNDERGROUND TANK PERMITS FOR FUELS AND OTHER HAZARDOUS MATERIALS.							
2. OTHER REQUIREMENTS CONTRATOR WILL NEED TO MEET:							
a. Maxwell AFB Excavation Permit (AF Form 103)							

3. Maxwell AFB will need to update:
- a. Stormwater Discharge Permit (post project completion) and Stormwater Pollution Prevention Plan
  - b. Air Permit
  - c. Wastewater permit





496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 74 19

### CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

02/19, CHG 3: 11/21

#### PART 1 GENERAL

##### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

##### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 273	Standards for Universal Waste Management
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
49 CFR 178	Specifications for Packagings

##### 1.2 DEFINITIONS

###### 1.2.1 Co-mingle

The practice of placing unrelated materials together in a single container, usually for benefits of convenience and speed.

###### 1.2.2 Construction Waste

Waste generated by construction activities, such as scrap materials, damaged or spoiled materials, temporary and expendable construction materials, and other waste generated by the workforce during construction activities.

###### 1.2.3 Demolition Debris/Waste

Waste generated from demolition activities, including minor incidental demolition waste materials generated as a result of Intentional dismantling of all or portions of a building, to include clearing of building contents that have been destroyed or damaged.

###### 1.2.4 Disposal

Depositing waste in a solid waste disposal facility, usually a managed landfill or incinerator, regulated in the US under the Resource Conservation and Recovery Act (RCRA).

###### 1.2.5 Diversion

The practice of diverting waste from disposal in a landfill or incinerator, by means of eliminating or minimizing waste, or reuse of materials.

###### 1.2.6 Final Construction Waste Diversion Report

A written assertion by a material recovery facility operator identifying constituent materials diverted from disposal, usually including summary

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

tabulations of materials, weight in short-ton.

#### 1.2.7 Recycling

The series of activities, including collection, separation, and processing, by which products or other materials are diverted from the solid waste stream for use in the form of raw materials in the manufacture of new products sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials, other than fuel.

#### 1.2.8 Reuse

The use of a product or materials again for the same purpose, in its original form or with little enhancement or change.

#### 1.2.9 Salvage

Usable, salable items derived from buildings undergoing demolition or deconstruction, parts from vehicles, machinery, other equipment, or other components.

#### 1.2.10 Source Separation

The practice of administering and implementing a management strategy to identify and segregate unrelated waste at the first opportunity.

### 1.3 CONSTRUCTION WASTE (INCLUDES DEMOLITION DEBRIS/WASTE)

Divert a minimum of 60 percent by weight of the project construction waste and demolition debris/waste from the landfill or incinerator. Follow applicable industry standards in the management of waste. Apply sound environmental principles in the management of waste. (1) Practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction waste and demolition debris/waste from landfills and incinerators and to facilitate the recycling or reuse of excess construction materials.

### 1.4 CONSTRUCTION WASTE MANAGEMENT

Implement a Construction Waste Management Program for the project. Take a pro-active, responsible role in the management of construction construction waste, recycling process, disposal of demolition debris/waste, and require all subcontractors, vendors, and suppliers to participate in the Construction Waste Management Program. Establish a process for clear tracking, and documentation of construction waste and demolition debris/waste.

#### 1.4.1 Implementation of Construction Waste Management Program

Develop and document how the Construction Waste Management Program will be implemented in a Construction Waste Management Plan. Submit a Construction Waste Management Plan to the Contracting Officer for approval. Construction waste and demolition debris/waste materials include un-used construction materials not incorporated in the final work, as well as demolition debris/waste materials from demolition activities or deconstruction activities. In the management of waste, consider the availability of viable markets, the condition of materials, the ability to provide material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

completion mandates.

#### 1.4.2 Oversight

The Environmental Manager, as specified in Section 01 57 19.00 06 TEMPORARY ENVIRONMENTAL CONTROLS AND PERMITS, is responsible for overseeing and documenting results from executing the Construction Waste Management Plan for the project.

#### 1.4.3 Special Programs

Implement special programs involving rebates or similar incentives related to recycling of construction waste and demolition debris/waste materials. Retain revenue or savings from salvaged or recycling, unless otherwise directed. Ensure firms and facilities used for recycling, reuse, and disposal are permitted for the intended use to the extent required by federal, state, and local regulations.

#### 1.4.4 Special Instructions

Provide on-site instruction of appropriate separation, handling, recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the projects. Designation of single source separating or commingling will be clearly marked on the containers.

#### 1.4.5 Waste Streams

Delineate waste streams and characterization, including estimated material types and quantities of waste, in the Construction Waste Management Plan. Manage all waste streams associated with the project. Typical waste streams are listed below. Include additional waste streams not listed:

- a. Land Clearing Debris
- b. Asphalt
- c. Masonry and CMU
- d. Concrete
- e. Metals (Includes, but is not limited to, banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized, stainless steel, aluminum, copper, zinc, bronze.)
- f. Wood (nails and staples allowed)
- g. Glass
- h. Paper
- i. Plastics (PET, HDPE, PVC, LDPE, PP, PS, Other)
- j. Gypsum
- k. Non-hazardous paint and paint cans
- l. Carpet
- m. Ceiling Tiles

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- n. Insulation
- o. Beverage Containers

#### 1.5 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Construction Waste Management Plan; G

##### SD-06 Test Reports

Quarterly Reports

##### SD-11 Closeout Submittals

Final Construction Waste Diversion Report; S

#### 1.6 MEETINGS

Conduct Construction Waste Management meetings. After award of the Contract and prior to commencement of work, schedule and conduct a meeting with the Contracting Officer to discuss the proposed Construction Waste Management Plan and to develop a mutual understanding relative to the management of the Construction Waste Management Program and how waste diversion requirements will be met.

#### 1.7 CONSTRUCTION WASTE MANAGEMENT PLAN

Submit Construction Waste Management Plan within 15 calendar days after notice to proceed. Revise and resubmit Construction Waste Management Plan as necessary, in order for construction to begin. Execute demolition or deconstruction activities in accordance with Section 02 41 00 DEMOLITION. Manage demolition debris/waste or deconstruction materials in accordance with the approved construction waste management plan.

An approved Construction Waste Management Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting project cumulative waste diversion requirement. Ensure all subcontractors receive a copy of the approved Construction Waste Management Plan. The plan demonstrates how to meet the project waste diversion requirement. Also, include the following in the plan:

- a. Identify the names of individuals responsible for waste management and waste management tracking, along with roles and responsibilities on the project.
- b. Actions that will be taken to reduce solid waste generation, including coordination with subcontractors to ensure awareness and participation.
- c. Description of the regular meetings to be held to address waste

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

management.

- d. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas on site and equipment to be used for processing, sorting, and temporary storage of materials.
- e. Name of landfill and incinerator to be used.
- f. Identification of local and regional re-use programs, including non-profit organizations such as schools, local housing agencies, and organization that accept used materials such as material exchange networks and resale stores. Include the name, location, phone number for each re-use facility identified, and provide a copy of the permit or license for each facility.
- g. List of specific materials, by type and quantity, that will be salvaged for resale, salvaged and reused on the current project, salvaged and stored for reuse on a future project, or recycled. Identify the recycling facilities by name, address, and phone number.
- h. Identification of materials that cannot be recycled or reused with an explanation or justification, to be approved by the Contracting Officer.
- i. Description of the means by which materials identified in item (g) above will be protected from contamination.
- j. Description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site).
- k. Copy of training plan for subcontractors and other services to prevent contamination by co-mingling materials identified for diversion and waste materials.
- l. Identification of at least 5 construction or demolition material streams for diversion.
- m. Facilities or subcontractors offering construction waste transport on-site or off-site must ensure that proper shipping orders, bill of lading, manifests, or other shipping documents containing waste diversion information meet requirements of 40 CFR 273 Universal Waste Management, 49 CFR 173 Shippers - General Requirements for Shipments and Packagings, and 49 CFR 178 Specifications for Packaging. Individuals signing manifests or other shipping documents should meet the minimum training requirements.
- n. List each supplier who deliver construction materials, in bulk, or package products in returnable containers or returnable packaging, or have take-back programs. List each program and the applicable material to actively monitor and track to assist in meeting waste diversion requirements on the project.
- o. Identify local jurisdiction requirements for waste management. Include local requirements and points of contact.

Distribute copies of the waste management plan to each subcontractor, Quality Control Manager Environmental Manager, and the Contracting Officer.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## 1.8 RECORDS (DOCUMENTATION)

### 1.8.1 General

Maintain records to document the types and quantities of waste generated and diverted through re-use, recycling and sale to third parties; through disposal to a landfill or incinerator facility. Provide explanations for materials not recycled, reused or sold. Collect and retain manifests, weight tickets, sales receipts, and invoices specifically identifying diverted project waste materials or disposed materials.

### 1.8.2 Accumulated

Maintain a running record of materials generated and diverted from landfill disposal, including accumulated diversion rates for the project. Make records available to the Contracting Officer during construction or incidental demolition activities. Provide a copy of the diversion records to the Contracting Officer upon completion of the construction, incidental demolitions or minor deconstruction activities.

## 1.9 REPORTS

### 1.9.1 General

Maintain current construction waste diversion information on site for periodic inspection by the Contracting Officer. Include in the quarterly reports, annual reports and final reports: the project name, contract information, information for waste generated, diverted and disposed of for the current reporting period and show cumulative totals for the project. Reports must identify quantities of waste by type and disposal method. Also include in each report, supporting documentation to include manifests, weigh tickets, receipts, and invoices specifically identifying the project and waste material type and weighted sum.

### 1.9.2 Quarterly Reporting

Provide cumulative reports at the end of each quarter (December, March, June, and September, corresponding with the federal fiscal year for reporting purposes). Submit [quarterly reports](#) not later than 15 calendar days after the preceding quarter has ended.

## 1.10 FINAL CONSTRUCTION WASTE DIVERSION REPORT

A Final Construction Waste Diversion Report is required at the end of the project. Provide [Final Construction Waste Diversion Report](#) 60 days prior to the [Contract Completion Date](#). The final Construction Waste Diversion Report must be included in the Sustainability eNotebook.

## 1.11 COLLECTION

Collect, store, protect, and handle reusable and recyclable materials at the site in a manner which prevents contamination, and provides protection from the elements to preserve their usefulness and monetary value. Provide receptacles and storage areas designated specifically for recyclable and reusable materials and label them clearly and appropriately to prevent contamination from other waste materials. Keep receptacles or storage areas neat and clean.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

Train subcontractors and other service providers to either separate waste streams or use the co-mingling method as described in the Construction Waste Management Plan. Handle hazardous waste and hazardous materials in accordance with applicable regulations and coordinate with Section 01 57 19.00 06 TEMPORARY ENVIRONMENTAL CONTROLS AND PERMITS. Separate materials by one of the following methods described herein:

#### 1.11.1 Source Separation Method

Separate waste products and materials that are recyclable from trash and sort as described below into appropriately marked separate containers and then transport to the respective recycling facility for further processing. Deliver materials in accordance with recycling or reuse facility requirements (e.g., free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process). Separate materials into the category types as defined in the Construction Waste Management Plan.

#### 1.11.2 Other Methods

Other methods proposed by the Contractor may be used when approved by the Contracting Officer.

#### 1.12 DISPOSAL

Control accumulation of waste materials and trash. Recycle or dispose of collected materials off-site at intervals approved by the Contracting Officer and in compliance with waste management procedures as described in the waste management plan. Except as otherwise specified in other sections of the specifications, dispose of in accordance with the following:

##### 1.12.1 Reuse

Give first consideration to reusing construction and demolition materials as a disposition strategy. Recover for reuse materials, products, and components as described in the approved Construction Waste Management Plan. Coordinate with the Contracting Officer to identify onsite reuse opportunities or material sales or donation available through Government resale or donation programs. Sale of recovered materials is not allowed on the Installation. Consider the use of surplus industrial supply broker services, who match entities with reusable or repurpose industrial materials with entities with need of such materials.

##### 1.12.2 Recycle

Recycle non-hazardous construction and demolition/debris materials that are not suitable for reuse. Track rejection of contaminated recyclable materials by the recycling facility. Rejected recyclables materials will not be counted as a percentage of diversion calculation. Recycle all fluorescent lamps, HID lamps, mercury (Hg) -containing thermostats and ampoules, and PCBs-containing ballasts and electrical components as directed by the Contracting Officer. Do not crush lamps on site as this creates a hazardous waste stream with additional handling requirements.

##### 1.12.3 Waste

Dispose by landfill or incineration only those waste materials with no practical use, economic benefit, or recycling opportunity.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

## SECTION 01 78 23

### OPERATION AND MAINTENANCE DATA

08/15, CHG 2: 08/21

#### PART 1 GENERAL

##### 1.1 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-10 Operation and Maintenance Data

O&M Database; G

Training Plan; G

Training Outline; G

Training Content; G

##### SD-11 Closeout Submittals

Training Video Recording; G

Validation of Training Completion; G

##### 1.2 OPERATION AND MAINTENANCE DATA

Submit Operation and Maintenance (O&M) Data for the provided equipment, product, or system, defining the importance of system interactions, troubleshooting, and long-term preventive operation and maintenance. Compile, prepare, and aggregate O&M data to include clarifying and updating the original sequences of operation to as-built conditions. Organize and present information in sufficient detail to clearly explain O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with this section and Section 01 33 00 SUBMITTAL PROCEDURES.

###### 1.2.1 Package Quality

Documents must be fully legible. Operation and Maintenance data must be consistent with the manufacturer's standard brochures, schematics, printed instructions, general operating procedures, and safety precautions.

###### 1.2.2 Package Content

Provide data package content in accordance with paragraph SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES. Comply with the data package requirements specified in the individual technical sections, including the content of the packages and addressing each product, component, and system designated for data package submission, except as follows. Use Data Package 3 for commissioned items without a specified data package requirement in the individual technical sections. Provide a Data Package 3 instead of Data Package 1 or 2, as specified in the individual technical

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

section, for items that are commissioned.

#### 1.2.3 Changes to Submittals

Provide manufacturer-originated changes or revisions to submitted data if a component of an item is so affected subsequent to acceptance of the O&M Data. Submit changes, additions, or revisions required by the Contracting Officer for final acceptance of submitted data within 30 calendar days of the notification of this change requirement.

#### 1.2.4 Commissioning Authority Review and Approval

Submit the commissioned systems and equipment submittals to the Commissioning Authority (CxA) to review for completeness and applicability. Obtain validation from the CxA that the systems and equipment provided meet the requirements of the Contract documents and design intent, particularly as they relate to functionality, energy performance, water performance, maintainability, sustainability, system cost, indoor environmental quality, and local environmental impacts. The CxA communicates deficiencies to the Contracting Officer. Submit the O&M manuals to the Contracting Officer upon a successful review of the corrections, and with the CxA recommendation for approval and acceptance of these O&M manuals. This work is in addition to the normal review procedures for O&M data.

#### 1.3 O&M DATABASE

Develop an editable, electronic spreadsheet based on the equipment in the Operation and Maintenance Manuals that contains the information required to start a preventive maintenance program. As a minimum, provide list of system equipment, location installed, warranty expiration date, manufacturer, model, and serial number.

#### 1.4 OPERATION AND MAINTENANCE MANUAL FILE FORMAT

Assemble data packages into electronic Operation and Maintenance Manuals. Assemble each manual into a composite electronically indexed file using the most current version of Adobe Acrobat or similar software capable of producing PDF file format. Provide compact disks (CD) or data digital versatile disk (DVD) as appropriate, so that each one contains operation, maintenance and record files, project record documents, and training videos. Include a complete electronically linked operation and maintenance directory.

##### 1.4.1 Organization

Bookmark Product and Drawing Information documents using the current version of CSI MasterFormat numbering system, and arrange submittals using the specification sections as a structure. Use CSI MasterFormat and UFGS numbers along with descriptive bookmarked titles that explain the content of the information that is being bookmarked.

##### 1.4.2 CD or DVD Label and Disk Holder or Case

Provide the following information on the disk label and disk holder or case:

- a. Building Number
- b. Project Title

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- c. Activity and Location
- d. Construction Contract Number
- e. Prepared For: (Contracting Agency)
- f. Prepared By: (Name, title, phone number and email address)
- g. Include the disk content on the disk label
- h. Date
- i. Virus scanning program used

#### 1.5 TYPES OF INFORMATION REQUIRED IN O&M DATA PACKAGES

The following are a detailed description of the data package items listed in paragraph SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES.

##### 1.5.1 Operating Instructions

Provide specific instructions, procedures, and illustrations for the following phases of operation for the installed model and features of each system:

###### 1.5.1.1 Safety Precautions and Hazards

List personnel hazards and equipment or product safety precautions for operating conditions. List all residual hazards identified in the Activity Hazard Analysis provided under Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS. Provide recommended safeguards for each identified hazard.

###### 1.5.1.2 Operator Prestart

Provide procedures required to install, set up, and prepare each system for use.

###### 1.5.1.3 Startup, Shutdown, and Post-Shutdown Procedures

Provide narrative description for Startup, Shutdown and Post-shutdown operating procedures including the control sequence for each procedure.

###### 1.5.1.4 Normal Operations

Provide Control Diagrams with data to explain operation and control of systems and specific equipment. Provide narrative description of Normal Operating Procedures.

###### 1.5.1.5 Emergency Operations

Provide Emergency Procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Provide Emergency Shutdown Instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance and procedures for emergency operation of utility systems including required valve positions, valve locations and zones or portions of systems controlled.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

#### 1.5.1.6 Operator Service Requirements

Provide instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and recording gauge readings.

#### 1.5.1.7 Environmental Conditions

Provide a list of Environmental Conditions (temperature, humidity, and other relevant data) that are best suited for the operation of each product, component or system. Describe conditions under which the item equipment should not be allowed to run.

#### 1.5.1.8 Operating Log

Provide forms, sample logs, and instructions for maintaining necessary operating records.

#### 1.5.1.9 Additional Requirements for HVAC Control Systems

Provide Data Package 5 and the following for control systems:

- a. Narrative description on how to perform and apply functions, features, modes, and other operations, including unoccupied operation, seasonal changeover, manual operation, and alarms. Include detailed technical manual for programming and customizing control loops and algorithms.
- b. Full as-built sequence of operations.
- c. Copies of checkout tests and calibrations performed by the Contractor (not Cx tests).
- d. Full points list. Provide a listing of rooms with the following information for each room:
  - (1) Floor
  - (2) Room number
  - (3) Room name
  - (4) Air handler unit ID
  - (5) Reference drawing number
  - (6) Air terminal unit tag ID
  - (7) Heating or cooling valve tag ID
  - (8) Minimum cfm
  - (9) Maximum cfm
- e. Full print out of all schedules and set points after testing and acceptance of the system.
- f. Full as-built print out of software program.
- g. Marking of system sensors and thermostats on the as-built floor plan and mechanical drawings with their control system designations.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 1.5.2 Preventive Maintenance

Provide the following information for preventive and scheduled maintenance to minimize repairs for the installed model and features of each system. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials.

#### 1.5.2.1 Lubrication Data

Include the following preventive maintenance lubrication data, in addition to instructions for lubrication required under paragraph OPERATOR SERVICE REQUIREMENTS:

- a. A table showing recommended lubricants for specific temperature ranges and applications.
- b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities.
- c. A Lubrication Schedule showing service interval frequency.

#### 1.5.2.2 Preventive Maintenance Plan, Schedule, and Procedures

Provide manufacturer's schedule for routine preventive maintenance, inspections, condition monitoring (predictive tests) and adjustments required to ensure proper and economical operation and to minimize repairs. Provide instructions stating when the systems should be retested. Provide manufacturer's projection of preventive maintenance work-hours on a daily, weekly, monthly, and annual basis including craft requirements by type of craft. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation.

- a. Define the anticipated time required to perform each of each test (work-hours), test apparatus, number of personnel identified by responsibility, and a testing validation procedure permitting the record operation capability requirements within the schedule. Provide a remarks column for the testing validation procedure referencing operating limits of time, pressure, temperature, volume, voltage, current, acceleration, velocity, alignment, calibration, adjustments, cleaning, or special system notes. Delineate procedures for preventive maintenance, inspection, adjustment, lubrication and cleaning necessary to minimize repairs.
- b. Repair requirements must inform operators how to check out, troubleshoot, repair, and replace components of the system. Include electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting of the system after acceptance.

### 1.5.3 Repair

Provide manufacturer's recommended procedures and instructions for correcting problems and making repairs.

#### 1.5.3.1 Troubleshooting Guides and Diagnostic Techniques

Provide step-by-step procedures to promptly isolate the cause of typical

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.

#### 1.5.3.2 Wiring Diagrams and Control Diagrams

Provide point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering.

#### 1.5.3.3 Repair Procedures

Provide instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards.

#### 1.5.3.4 Removal and Replacement Instructions

Provide step-by-step procedures and a list of required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Use a combination of text and illustrations.

#### 1.5.3.5 Spare Parts and Supply Lists

Provide lists of spare parts and supplies required for repair to ensure continued service or operation without unreasonable delays. Special consideration is required for facilities at remote locations. List spare parts and supplies that have a long lead-time to obtain.

#### 1.5.3.6 Repair Work-Hours

Provide manufacturer's projection of repair work-hours including requirements by type of craft. Identify, and tabulate separately, repair that requires the equipment manufacturer to complete or to participate.

### 1.5.4 Appendices

Provide information required below and information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment. Include the following:

#### 1.5.4.1 Product Submittal Data

Provide a copy of SD-03 Product Data submittals documented with the required approval.

#### 1.5.4.2 Certificates

Provide a copy of SD-07 Certificates submittals documented with the required approval.

#### 1.5.4.3 Manufacturer's Instructions

Provide a copy of SD-08 Manufacturer's Instructions submittals documented

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

with the required approval.

#### 1.5.4.4 O&M Submittal Data

Provide a copy of SD-10 Operation and Maintenance Data submittals documented with the required approval.

#### 1.5.4.5 Parts Identification

Provide identification and coverage for the parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing must show the index, reference, or key number that will cross-reference the illustrated part to the listed part. Group the parts shown in the listings by components, assemblies, and subassemblies in accordance with the manufacturer's standard practice. Parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as typically shown in a master parts catalog.

#### 1.5.4.6 Warranty Information

List and explain the various warranties and clearly identify the servicing and technical precautions prescribed by the manufacturers or contract documents in order to keep warranties in force. Include warranty information for primary components of the system. Provide copies of warranties required by Section 01 78 00 CLOSEOUT SUBMITTALS.

#### 1.5.4.7 Extended Warranty Information

List all warranties for products, equipment, components, and sub-components whose duration exceeds one year. For each warranty listed, indicate the applicable specification section, duration, start date, end date, and the point of contact for warranty fulfillment. Also, list or reference the specific operation and maintenance procedures that must be performed to keep the warranty valid. Provide copies of warranties required by Section 01 78 00 CLOSEOUT SUBMITTALS.

#### 1.5.4.8 Personnel Training Requirements

Provide information available from the manufacturers that is needed for use in training designated personnel to properly operate and maintain the equipment and systems.

#### 1.5.4.9 Testing Equipment and Special Tool Information

Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components. Provide final set points.

#### 1.5.4.10 Testing and Performance Data

Include completed prefunctional checklists, functional performance test forms, and monitoring reports. Include recommended schedule for retesting

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

and blank test forms. Provide final set points.

#### 1.5.4.11 Field Test Reports and Manufacturer's Field Reports

Provide a copy of Field Test Reports (SD-06) and Manufacturer's Field Reports (SD-09) submittals documented with the required approval.

#### 1.5.4.12 Contractor Information

Provide a list that includes the name, address, and telephone number of the General Contractor and each Subcontractor who installed the product or equipment, or system. For each item, also provide the name address and telephone number of the manufacturer's representative and service organization that can provide replacements most convenient to the project site. Provide the name, address, and telephone number of the product, equipment, and system manufacturers.

### 1.6 SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES

Provide the O&M data packages specified in individual technical sections. The information required in each type of data package follows:

#### 1.6.1 Data Package 1

- a. Safety precautions and hazards
- b. Cleaning recommendations
- c. Maintenance and repair procedures
- d. Warranty information
- e. Extended warranty information
- f. Contractor information
- g. Spare parts and supply list

#### 1.6.2 Data Package 2

- a. Safety precautions and hazards
- b. Normal operations
- c. Environmental conditions
- d. Lubrication data
- e. Preventive maintenance plan, schedule, and procedures
- f. Cleaning recommendations
- g. Maintenance and repair procedures
- h. Removal and replacement instructions
- i. Spare parts and supply list
- j. Parts identification



496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- k. Warranty information
- l. Extended warranty information
- m. Contractor information

1.6.3 Data Package 3

- a. Safety precautions and hazards
- b. Operator prestart
- c. Startup, shutdown, and post-shutdown procedures
- d. Normal operations
- e. Emergency operations
- f. Environmental conditions
- g. Operating log
- h. Lubrication data
- i. Preventive maintenance plan, schedule, and procedures
- j. Cleaning recommendations
- k. Troubleshooting guides and diagnostic techniques
- l. Wiring diagrams and control diagrams
- m. Maintenance and repair procedures
- n. Removal and replacement instructions
- o. Spare parts and supply list
- p. Product submittal data
- q. O&M submittal data
- r. Parts identification
- s. Warranty information
- t. Extended warranty information
- u. Testing equipment and special tool information
- v. Testing and performance data
- w. Contractor information
- x. Field test reports

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

1.6.4 Data Package 4

- a. Safety precautions and hazards
- b. Operator prestart
- c. Startup, shutdown, and post-shutdown procedures
- d. Normal operations
- e. Emergency operations
- f. Operator service requirements
- g. Environmental conditions
- h. Operating log
- i. Lubrication data
- j. Preventive maintenance plan, schedule, and procedures
- k. Cleaning recommendations
- l. Troubleshooting guides and diagnostic techniques
- m. Wiring diagrams and control diagrams
- n. Repair procedures
- o. Removal and replacement instructions
- p. Spare parts and supply list
- q. Repair work-hours
- r. Product submittal data
- s. O&M submittal data
- t. Parts identification
- u. Warranty information
- v. Extended warranty information
- w. Personnel training requirements
- x. Testing equipment and special tool information
- y. Testing and performance data
- z. Contractor information
- aa. Field test reports

1.6.5 Data Package 5

- a. Safety precautions and hazards

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- b. Operator prestart
- c. Start-up, shutdown, and post-shutdown procedures
- d. Normal operations
- e. Environmental conditions
- f. Preventive maintenance plan, schedule, and procedures
- g. Troubleshooting guides and diagnostic techniques
- h. Wiring and control diagrams
- i. Maintenance and repair procedures
- j. Removal and replacement instructions
- k. Spare parts and supply list
- l. Product submittal data
- m. Manufacturer's instructions
- n. O&M submittal data
- o. Parts identification
- p. Testing equipment and special tool information
- q. Warranty information
- r. Extended warranty information
- s. Testing and performance data
- t. Contractor information
- u. Field test reports

## PART 2 PRODUCTS

Not Used

## PART 3 EXECUTION

### 3.1 TRAINING

Prior to acceptance of the facility by the Contracting Officer for substantial completion, provide comprehensive training for the systems and equipment specified in the technical specifications. The training must be targeted for the building maintenance personnel, and applicable building occupants. Instructors must be well-versed in the particular systems that they are presenting. Training must include classroom or field lectures based on the system operating requirements. The location of classroom training requires approval by the Contracting Officer.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

### 3.1.1 Training Plan

Submit a written training plan to the Contracting Officer for approval at least 60 calendar days prior to the scheduled training. Training plan must be approved by the Quality Control Manager (QC) prior to forwarding to the Contracting Officer. Also, coordinate the training schedule with the Contracting Officer and QC. Include within the plan the following elements:

- a. Equipment included in training
- b. Intended audience
- c. Location of training
- d. Dates of training
- e. Objectives
- f. Outline of the information to be presented and subjects covered including description
- g. Start and finish times and duration of training on each subject
- h. Methods (e.g. classroom lecture, video, site walk-through, actual operational demonstrations, written handouts)
- i. Instructor names and instructor qualifications for each subject
- j. List of texts and other materials to be furnished by the Contractor that are required to support training
- k. Description of proposed software to be used for video recording of training sessions.

### 3.1.2 Training Content

The core of this training must be based on manufacturer's recommendations and the operation and maintenance information. The QC is responsible for overseeing and approving the content and adequacy of the training. Spend 95 percent of the instruction time during the presentation on the OPERATION AND MAINTENANCE DATA. Include the following for each system training presentation:

- a. Start-up, normal operation, shutdown, unoccupied operation, seasonal changeover, manual operation, controls set-up and programming, troubleshooting, and alarms.
- b. Relevant health and safety issues.
- c. Discussion of how the feature or system is environmentally responsive. Advise adjustments and optimizing methods for energy conservation.
- d. Design intent.
- e. Use of O&M Manual Files.
- f. Review of control drawings and schematics.
- g. Interactions with other systems.

496395 Repair Aircraft Maintenance B1455 for MH-139  
Maxwell AFB, AL

- h. Special maintenance and replacement sources.
- i. Tenant interaction issues.

### 3.1.1.3 Training Outline

Provide a written course outline listing the major and minor topics to be discussed by the instructor on each day of the course to each trainee in the course. Provide the course outline 14 calendar days prior to the training.

### 3.1.1.4 Training Video Recording

Record classroom training session(s) on video. Provide to the Contracting Officer two copies of the training session(s) in DVD video recording format. Capture within the recording, in video and audio, the instructors' training presentations including question and answer periods with the attendees. The recording camera(s) must be attended by a person during the recording sessions to assure proper size of exhibits and projections during the recording are visible and readable when viewed as training.

### 3.1.1.5 Unresolved Questions from Attendees

If, at the end of the training course, there are questions from attendees that remain unresolved, the instructor must send the answers, in writing, to the Contracting Officer for transmittal to the attendees, and the training video must be modified to include the appropriate clarifications.

### 3.1.1.6 Validation of Training Completion

Ensure that each attendee at each training session signs a class roster daily to confirm Government participation in the training. At the completion of training, submit a signed validation letter that includes a sample record of training for reporting what systems were included in the training, who provided the training, when and where the training was performed, and copies of the signed class rosters. Provide two copies of the validation to the Contracting Officer, and one copy to the Operation and Maintenance Manual Preparer for inclusion into the Manual's documentation.

### 3.1.1.7 Quality Control Coordination

Coordinate this training with the QC in accordance with [Section 01 45 04.10 06 CONTRACTOR QUALITY CONTROL](#).

-- End of Section --