

PART 1 PROJECT DESIGN CRITERIA

All applicable Federal, State and industry standards, including those not referenced, constitute design criteria for this project. This scope of work presents requirements for various renovations in five facilities located at Ebbing Air National Guard Base (ANGB) in Fort Smith, Arkansas. The five facilities are B201, B202, B214, B216, and B218.

1.1 Design Requirements

Comply with the requirements stated in this Scope of Work document and all applicable codes and regulations. Reference to Attachment A for a list of Industry and Military Criteria and Governing Codes. Comply with versions that are the most current at the time of the solicitation of this design-build contract. In the event of a conflict between requirements, the most stringent applies. The complete library of Unified Facilities Criteria (UFC) and Unified Facilities Guide Specifications (UFGS) is located at: <http://www.wbdg.org>. Also reference the United States Army Corps of Engineers (USACE) Engineering Construction Bulletins (ECBs) at <http://www.wbdg.org/ffc/dod/engineering-and-construction-bulletins-ecb> for recent updates.

1.1.1 Design Criteria

Facility design, materials, equipment, and installation must be in accordance with the requirements of listed codes, design manuals and military criteria (see Attachment A), and in conjunction with industry standard criteria, material and efficient practices. The latest version of building codes may be used as design guides as long as there are no conflicts between standards. In the event of conflicts, the Military and Industry standards take precedence. The building design and the materials selected must meet the specifications set forth in this Request for Proposal (RFP). Contractor is responsible for the code compliance, technical accuracy and coordination of all designs, drawings, specifications, and other documents or publications upon which the design and construction are based.

1.2 Design Submittal

Provide electronic design files for the project as part of design and construction responsibilities. Follow all guidelines, references, and indications in this report when preparing a bid proposal and when designing the five facilities at Ebbing ANGB. Deliver drawings, specifications, calculations, and details as required for a complete construction document package.

PART 2 GENERAL

2.1 General Conditions

Provide all supervision, labor, materials, equipment, supplies, and transportation necessary to perform the work specified within this Design Build Request for Proposal (DB RFP). The Contractor must be the architect/engineer and constructor of record on this project. For design and construction, utilize an integrated approach that meets the requirements of this RFP while, at the same time is cost effective and establishes synergy among the systems and spaces applicable to the structures as a whole. The design of all architectural and engineering features must be accomplished, reviewed, and approved by professionals licensed to practice in their respective professional field in the United States. Deliver a complete design and do not assume that the provided design criteria and drawings in this solicitation alleviate responsibility of performing any additional design as required to produce a complete set of construction documents.

Employ all design and construction criteria, including but not limited to industry and military criteria and governing codes, from the most current version of the reference that aligns with the date of issue of the solicitation for the design-build contract. The exception to this is if a Unified Facilities Criteria (UFC) document references a specific date of issue of a code or guide referenced therein.

The magnitude of construction for this project is \$25M - \$100M.

2.2 General Facility Descriptions

Construct the five facilities at Ebbing ANGB in accordance with all current and applicable codes. This includes, but is not limited to, accessibility complying with the Architectural Barriers Act (ABA), life safety, fire separations, energy, OSHA, Unified Facilities Code (UFC), and building codes, etc. A brief description of each building is listed below. A detailed description of the scope of work follows this section and is organized by technical discipline. Reference Attachment C for additional requirements.

Building 201 is an existing fire station being repurposed as a storage warehouse facility in support of the F-16 mission. The existing facility is 9,563 gross square feet. The exterior façade requires minor repairs and modification. The interior requires extensive demolition of non-load bearing walls and finishes. Remove and replace all interior finishes.

Building 202 is an existing three-bay hangar with administrative and support spaces. The hangar was originally designed in 2008 to support the A-10 mission and has since been decommissioned. The goal of this project is to renovate the 30,098 gross square foot facility to support the F-16 mission and to restore the three hangar bays to their original functions (Bay 1: Fuel Cell, Bay 2: General Purpose Maintenance, and Bay 3: Wash Bay). As part of this project, renovate existing support functions for current mission needs. The exterior façade requires minor repair. The existing interior configuration is to remain; however, minor modifications are required to meet current code requirements and specific mission needs. Remove and replace the majority of the interior finishes.

Building 214 will be repurposed to an engine repair shop and requires overall repair and renovations of the entire 12,962 SF facility. On the exterior, replace translucent panels and exterior doors. Replace roof. Repair and repaint the existing canopies located to the west and provide a new metal roof. The interior requires minor reconfiguration and the inclusion of a new conditioned parachute room.

Building 216 was originally designed as shop facility with the interior configured with large shop spaces, classroom, office, and support spaces. Renovate and restore to its original function the 17,500 gross square foot facility in support of the F-16 and F-35 missions. The exterior requires minor repair and modification. Provide an approximately 1,400 gross square foot addition to accommodate a distinguished visitor's (DV) meeting area. Add a screen wall on the south side of the sidewalk from the parking lot to the building to screen the view of the service vehicle parking area. This facility will have two secure areas; the first a United States Secret Clearance Access Area in accordance with DoDM 5200.01 V3, and the other to provide Special Access Program Facility (SAPF) space for F-35 secure operations in accordance with the Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities – IC Tech Spec for ICD/ICS 705 (ICD705) and the F-35 Lightning II Functional Requirements Document (FRD). Refer to Room Data Sheets and Conceptual Drawings. Selective demolition of interior partitions and modification of structural walls are required to create the spatial relationships of the new mission's program.

Building 218 was originally a 3,359 gross square foot low-slope pre-engineered metal building (PEMB). A 4,420 gross square foot addition was constructed circa the early 2000's. The facility will be extensively repaired and renovated. The original facility with a low slope roof is susceptible to water infiltration. Field observations show no air/vapor barrier has been installed in the original facility wall system and the roof system requires replacement. Remove and replace the exterior envelope (roof panels, metal wall panels, doors, and windows) to meet current codes and prevent further water infiltration. Reconfigure partition walls for the new layout. Design a hardened pyro room to meet material explosive classification as defined within Section 3.7.13 of this RFP. The existing addition requires minor repair work and replacement of damaged glazing

PART 3 TECHNICAL REQUIREMENTS

3.1 General

See below for the building locations and Attachment C for the project location. Coordinate construction limits with Base Civil Engineer Squadron to minimize impact on Base operations. Provide fencing and/or barriers to secure the work area from the airfield, apron, and sunshades.

3.1.1 Existing Conditions

3.1.1.1 Site

This project consists of the renovation of five (5) buildings (B201, B202, B214, B216, and B218) at Ebbing ANGB, Fort Smith, Arkansas.

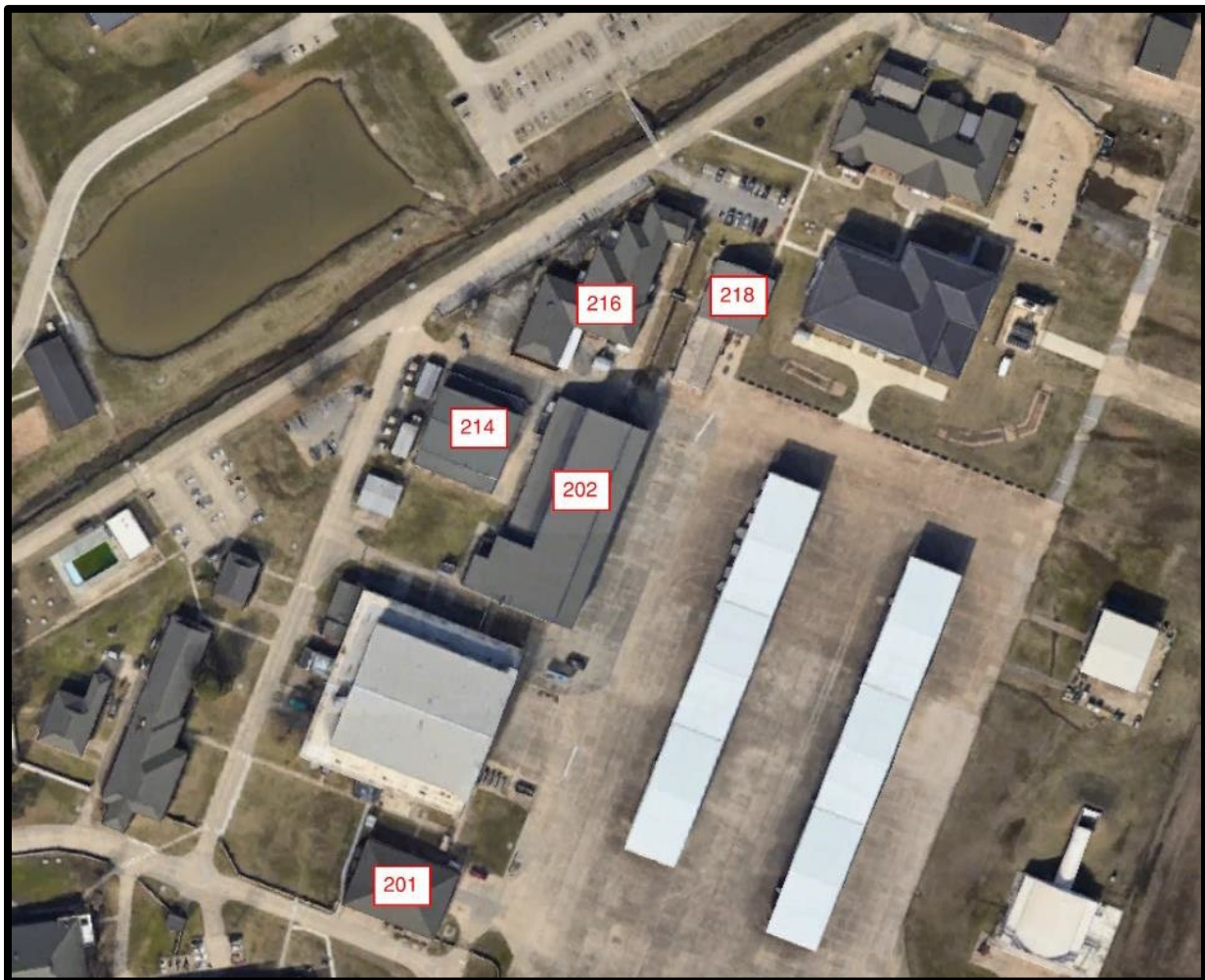


Figure 3.1.1.1-1 - Building Locations

3.1.1.2 Surface Conditions

- 3.1.1.2.1 Building 201 is an existing fire station. It is currently bordered by aircraft or vehicular concrete pavement on the south and east sides. The north and west sides are primarily concrete sidewalks, bordered by areas of lawn.
- 3.1.1.2.2 Building 202 is bordered on the north, east, and south sides by aircraft or vehicular concrete pavement, and on the west by concrete sidewalks and vehicular pavement. There is an area of lawn on the west side of Building 202.
- 3.1.1.2.3 Building 214 is bordered on the north, east, and west sides by concrete vehicular pavement. The area to the south is lawn.
- 3.1.1.2.4 Building 216 is bordered on its north side by a rectangular concrete flume that separates it from a parking lot and an area of lawn. The east side is bordered by concrete sidewalk that separates it from the lawn area. The concrete flume continues down the east side of the building, separating it from Building 218. The south side of the building is bordered by concrete pavement, with a section having a landscaped strip adjacent to the building. The southern portion of the west side is adjacent to the service yard parking area. The northern portion of the west side is a landscaped area. The landscaped area is separated from an elevated parking area by a V-shaped concrete channel that connects to the rectangular concrete flume. The primary access to Building 216 is from steps from the elevated parking lot.
- 3.1.1.2.5 Building 218 is bordered on the north side by a landscaped area and parking lot. The northern portion of the east side is landscaped, changing to concrete pavement for the south east area. The south side is concrete pavement and the west side is the landscaped area and drainage flume separating Building 218 from Building 216.

3.1.1.3 Utility Services

All of the buildings currently have utility services. Existing utility service information was provided by Ebbing ANGB GIS data. Only Buildings 202 and 216 have fire water service. There are no known deficiencies in utility services.

3.1.1.4 Drainage

The site currently drains by surface and storm drain. Add splash blocks to all downspouts that discharge to grade. Replace the V-shaped channel at Building 216 with a rectangular flume in the area of the addition to improve drainage. Reroute existing downspouts in the area of the Building 216 addition to the flume.

3.1.1.5 Fire Hydrants

Adequate fire hydrants are available to serve the facilities. All buildings are served by at least two fire hydrants.

3.2 Civil Design

3.2.1 Demolition

Demolition activities are needed as a part of the addition to Building 216. In addition to removing two trees and the horseshoe pits, remove and replace approximately 165 linear feet of the existing V-shaped channel.

The proposed addition to Building 218 is in an area of existing concrete aircraft pavement which must be sawcut and removed. Only sawcut at existing joints. Perform concrete pavement demolition in a manner that prevents damage to the existing pavement to remain. Repair any damage to existing pavement at no cost to the Government. Extend the limits of concrete pavement and subgrade removal beyond the addition footprint to an existing pavement joint.

3.2.2 Site Design

Building 201's site work is limited to trenching and restoration for the fire water service connection. There is no site work proposed for Building 202. Building 214's site work is limited to trenching and trench restoration for the fire water service connection. Site design for Building 216 includes adding approximately 165 linear feet of rectangular concrete flume along the west side of the addition, and a brick screen wall separating the building access sidewalk from the service vehicle parking area. Site design for Building 218 is limited to grading and replacement of aircraft paving removed for the new addition.

3.2.2.1 Design Responsibility

Design and construct the site and facilities within the specific site responsibility areas defined.

3.2.2.2 Existing Conditions

Accept the site as-is and be solely responsible for any field survey work required for verification, design, and construction. Do not waste excess soil from within the work area without written approval of the Contracting Officer Representative (COR).

3.2.2.3 Field Office and Laydown Area

Provide a field office and lay down area in accordance with UFGS specification requirements. Use of B201 and B202 for field office and laydown areas is allowed. Stage/phase construction such that new finishes are not damaged.

3.2.2.4 Permanent Utility Connections

Connect all utilities from the buildings to the service lines. All buildings are sub-metered for electricity and natural gas. The Base does not sub-meter for water or sewer.

3.2.2.5 Post-Construction Site Restoration

Upon completion of the project, remove all trailers, materials and equipment. Restore to original or better condition areas used for the storage of equipment or material, or construction use. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil, sodding, and seeding as necessary.

3.2.2.6 Temporary Utilities

All temporary utilities are the responsibility of the Contractor. Provide temporary utility services in accordance with UFGS Specification 01 50 00.

3.2.3 Base Utility Information and Design Requirements

On-site utilities are the responsibility of the Base Civil Engineer Squadron. Water and sanitary sewer services to the Base are provided by Fort Smith Utilities Department (FSUD). FSUD provides water service to the water tower; Ebbing ANGB is the water service provider after the water tower. Ebbing ANGB provides sanitary sewer collection on the Base and connects to a FSUD main. Coordinate and plan utility information with the Installation's Civil Engineer Squadron. Obtain a dig permit prior to construction. Verify utility locations and sizes prior to digging. Bring any discrepancies between the drawings and actual conditions to the COR's attention. Determine if the existing services serving the buildings are adequate for the new distribution within the building. Reference Section 3.8 of this RFP for information on electrical utility scope of work.

3.2.3.1 Specification and Regulation Compliance

Comply with Unified Facilities Criteria and Arkansas Department of Environmental Quality specifications and regulations for utility design and construction. Where utilities are not owned by the Installation, comply with the specifications and regulations of the individual utility owner. Comply with Arkansas Department of Environmental Quality regulations regarding the minimum separation distance between water and sanitary sewer facilities.

3.2.3.2 Water

Water distribution and service is owned and operated by the Base. All of the buildings have water meters. Design and install all water systems in accordance with appropriate Unified Facilities Criteria and state of Arkansas regulations. Water distribution systems must conform to all Federal and State Requirements. Where there is a conflict between specifications, the most stringent applies.

3.2.3.2.1 Water Service: Verify current service and the projected redesign loading of the buildings. If required, provide a new water service connection between the buildings and the water main on the buildings. Domestic service and the fire service must be separate taps from the main. Provide shutoff valves on all new domestic water service lines.

3.2.3.2.2 Fire Service Line: Provide a new fire service line connection between B201, B214 and B218 and the existing water mains. Place a Post Indicator Valve (PIV) on the fire line. Wall-mount the PIV on the building. Install new Fire Department Connections (FDCs) for B201 and B214. Meet the requirements of UFC-3-600-01 for location of the FDC relative to a fire hydrant. Locate all FDCs within 150 feet of a fire hydrant.

3.2.3.2.3 Fire Hydrants: No new fire hydrants are required.

3.2.3.3 Sanitary Sewer:

No issues have been reported with the existing laterals. No site sanitary sewer work is required.

3.2.3.4 Natural Gas

Based on current service and the projected redesign of the buildings, it is anticipated that the existing natural gas service is adequate.

3.2.4 Siting

Comply with UFC 3-201-01 Civil Engineering and UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings for site design. Verify that the exterior of the building complies with UFC 3-600-01 Paragraph 2-10, Fire Department (Emergency) Vehicle Access. Meet the requirements of ASHRAE 189.1 Section 5.3.2.1 for site hardscaping (sidewalks, courtyards, parking areas, and accesses.)

3.2.5 Site Grading

Verify exterior elevations versus the addition finished floor elevation of Buildings 216 and 218 to provide positive drainage away from the structures. Finish the grade adjacent to the building in accordance with UFCs and geotechnical engineering recommendations and requirements. Slope site grading to drain away from the building and door openings. Convey runoff to existing ditches or piped drainage systems. Slope non-paved drainage away from the building and structures with a minimum of 5 percent slope and a maximum of 10 percent slope at a horizontal distance of 10 feet. Where applicable, provide a drop of 6 to 8 inches at personnel doors without structural stoops. Do not use single riser steps. When steps are required, provide at least three risers and handrails. Meet the requirements of Table 3.1 in UFC 3-201-01, Civil Engineering for all grading. Resolve existing drainage issues at the north end of B218 where the landscape bed adjacent to the building is lower than the sidewalk, trapping water against the building.

3.2.6 Geotechnical

Include on the team a licensed geotechnical engineer to develop earthwork and foundation requirements and design parameters on which to base the proposal. Present foundation type, pavement and earthwork requirements on which the bid is based in the proposal along with the resume of the geotechnical engineer. Subsequent to award, perform and provide a complete geotechnical exploration of the proposed site to develop the final design. Perform the geotechnical exploration under the direction of a licensed professional engineer with at least 10 years of experience specializing in geotechnical engineering. This exploration is the full responsibility of the Contractor and detailed requirements are outlined below.

3.2.6.1 Final Geotechnical Evaluation after Award

Submit a final geotechnical evaluation report prepared by a licensed geotechnical engineer with the first foundation design submittal. This report must summarize the subsurface conditions; provide recommendations for the design of appropriate foundations, floor slabs, retaining walls, embankments, and pavements. In the report, recommend the type of foundation system to be used, lateral load resistance capacities for foundation systems, allowable bearing elevations for footings, grade beams, and slabs. Provide an assessment of post-construction settlement potential including total and differential settlement. Provide recommendations regarding lateral earth pressures (active, at-rest, passive) to be used in the design of retaining walls. Include the Site Class for seismic design along with an evaluation of any seismic hazards and recommendations for mitigation, if required. Include calculations to support the recommendations for bearing capacity, settlement, and pavement sections. Include supporting documentation for all recommended design parameters such as Site Class, shear strength, earth pressure coefficients, friction factors, sub-grade modulus, and California Bearing Ratio (CBR). In addition, provide earthwork recommendations, expected frost penetration, expected groundwater levels, recommendations for dewatering and groundwater control, possible presence of any surface or

subsurface features that may affect the construction of the project such as karst geohazards, sinkholes, boulders, mustow rock, old fill, old structures, soft areas, or unusual soil conditions. The geotechnical recommendation report must be sealed by the engineer of record, who must be licensed as a civil engineer and must have at least 10 years continuous experience in the region. Experience must include evaluation for potential shrink-swell movements of the subsurface materials.

3.2.6.2 Dewatering

In the report, determine project dewatering requirements. If temporary construction dewatering is required due to a high water table, the prepare and present a dewatering plan. Secure all the required information necessary for the design of the system.

3.2.6.3 Additional Borings

Sample any borings with a split spoon sampler in accordance with ASTM D-1586, with samples visually classified at 1.5-foot intervals in accordance with the Unified Soil Classification System (ASTM D 2487). Record the depth to water and Standard Penetration Blow counts. Provide a dated drilling log for each boring drilled. On the contract drawings, present soils information obtained from field logs, laboratory test and geologist's logs in the form of boring plan, final boring logs and explanatory notes.

3.2.6.4 Certification of Compliance with Final Geotechnical Evaluations

Certify in writing that the design of the project has been developed consistent with the geotechnical engineer's final geotechnical report. The certification must be stamped by the consulting professional geotechnical engineer and submitted with the first design submission. If revisions are made to the initial design submission, provide a new certification with the final design submission.

3.2.6.5 Pavements and Parking

Provide in the geotechnical report rigid pavement design(s) including design CBR and modulus of sub-grade reaction and the required compaction effort for sub-grades. Offer information on the types of base course materials available in the area and their design strengths. Include pavement designs in the report. Comply with appropriate Unified Facilities Criteria for the pavement design, including UFC 3-201-01 Civil Engineering and UFC 3-250-01 Pavement Design for Roads and Parking Areas, UFC 3-260-02 Pavement Design for Airfields, and UFGS 32 13 14.14 Concrete Paving For Small Airfield Projects. Conform to one of the following for pavement design: 1) the USACE Pavement Transportation Computer Assisted Structural Engineering (PCASE) program or 2) American Association of State Highway and Transportation Officials (AASHTO) standard pavement design procedures. Base the design thickness on the soils boring data taken for this project. Do not include increased stiffness from subgrade modification in the pavement thickness design. Use a minimum flexural strength of 650psi for concrete pavement design. Submit a complete and detailed pavement analysis for each design pavement section. The link to Corps Guidance Documents is <http://www.usace.army.mil/publications/>. Specific aggregates for aircraft paving may not be available from local sources.

3.2.6.5.1 Section Thicknesses: Conform to the specified requirements for the pavement design section thickness.

3.2.6.5.2 Portland Cement Concrete (PCC): Regardless of the geotechnical report pavement design, a minimum rigid concrete pavement section for areas required to support fire trucks and organizational vehicles and equipment traffic must consist of at least 8 inches of rigid concrete pavement, on 4 inches of aggregate base course, on 4 inches of aggregate subbase. The minimum rigid concrete pavement design for areas required to support passenger automobile traffic must consist of at least 6 inches of rigid concrete pavement, on 4 inches of aggregate base course, on 4 inches of aggregate subbase.

3.2.7 Landscaping Design

Project landscaping is to be limited to soil stabilization with seeding or sod and tree replacement. Replace trees as required in Specification Section 01 35 10.00. Match existing grass species.

3.2.8 Civil Design Antiterrorism (AT) Measures

Comply with the minimum standards in the AT UFC for the building construction. Eliminate locations of concealment. Design any recessed areas, concealed spaces, and landscape features on the exterior of the buildings with security in mind. Include well-lit alcoves and avoidance of large objects in the landscaped areas. Provide interesting visual features while still providing a safe, accessible and secure environment.

3.2.8.1 Landscape

Do not install landscaping items that could conceal packages within the unobstructed space of the building, per UFC requirements. Provide lockable or screw-type systems for structures, like manholes, located within the unobstructed space of the building to deter opening by unauthorized personnel. Locate trash receptacles and dumpsters outside of the building's unobstructed space per UFC requirements.

3.2.8.2 Flightline Access

Provide Access Control (ACS) and Intrusion Detection (IDS) systems infrastructure in the facilities to control access to the flightline. B201 and B218 require emergency exits that discharge to the flightline. Alarm these doors to deter unauthorized access. The hangar bays of B202 are considered part of the controlled area and do not require additional security measures for egress doors accessing the flightline.

3.2.8.3 Utility Enclosures

Secure electrical transformers and mechanical equipment placed within the building's unobstructed space per UFC 4-010-01 requirements. Although B201 is exempt from the minimum antiterrorism standards, replace the existing utility enclosures with six sided enclosures.

3.3 Architectural Design

3.3.1 General Description

The proposed design for the five facilities at Ebbing ANGB, and their associated site development is indicated in Attachment B. The drawings included in this RFP are conceptual in nature but have been developed with input from the facility users and the Installation to reflect their preferences and requirements. Consider the functional relationships between all buildings to ensure items such as sidewalks, entryways, and building facades enable and enhance interactions of the facilities supporting the F-16 mission.

3.3.1.1 Building 201 Modifications are as follows:

- a. Convert B201 from a fire station to a storage facility in support of the F-16 mission.
- b. Perform minor repairs and selective demolition.
- c. Remove and replace all exterior control and expansion joint sealants.
- d. Completely replace the SSMR system down to structural decking. The original roof is a low-slope roof with parapet. Structure was previously added to support the current standing seam metal roof (SSMR). Refer to the SSMR requirements provided in the roofing section below.
- e. Remove all windows and infill with CMU block with brick veneer to match adjacent construction. Give special attention to waterproofing and flashing at all infilled sections.
- f. Replace six overhead doors; three located on the east elevation and three on the south elevation. The replacement doors are to be solid insulated sectional panels. Sections with vision panels or glazing will not be accepted. The existing rails and motors are in good working order. Contractor may reuse the existing motors provided that a warranty for the replacement doors is provided.
- g. Remove the existing glazed paired entry doors on the south façade. Infill opening with CMU block and brick veneer to match adjacent construction.
- h. Remove the north existing apparatus bay personnel door. Infill opening with CMU and brick veneer to match adjacent construction.
- i. Remove existing west glazed entrance door system and replace with flush insulated metal doors. Paint new doors and new insulated metal frame.
- j. Remove all wood fencing at the existing utility enclosures. Provide metal wall panels and doors that match the utility enclosures near B202. The brick pilasters are to remain. All utility enclosures are within the 33-foot unobstructed space and require a new chain link top in accordance with the construction requirements in UFC 4-010-01.
- k. Provide an ABA compliant single occupant restroom with an ABA compliant water closet, grab bars, lavatory, mirror, service sink, and plumbing accessories. Renovate the existing sleeping room restroom to provide the minimum plumbing fixtures in accordance with UFC 3-420-01.
- l. Demolish interior partitions as indicated in the attachments. Provide double door widths to accommodate a pallet jack at openings in the existing structural walls that are to remain.
- m. Provide a dedicated telecommunications room (TR). The existing facility does not currently have a dedicated TR. There is a comm rack in the existing conference room. Refer to the Telecommunications section of this RFP for additional information.

- n. The existing electrical room is centrally located. The electrical room is to remain. Refer to the Electrical section of this RFP for additional requirements.
- o. Provide all new finishes inside the facility.

3.3.1.2 Building 202 Modifications are as follows:

- a. Repair and renovate facility to restore the original function as an aircraft fuel cell, general purpose maintenance, and wash bay hangar facility in support of the F-16 mission.
- b. Minor repairs, modifications, and selective demolition are required.
- c. Add new egress doors in the hangar bays to meet current life safety and UFC requirements.
- d. Add new emergency shower/eyewash stations in the hangar bays, paint booth, and tank bay.
- e. The SSMR system is existing to remain. A roof replacement is not in scope for B202. Repair existing gutter and downspout at the covered personnel entry. Repair water damage seen at brick veneer in this location.
- f. Provide new fall protection system for the F-16 parked in the tail-in configuration for three bays.
- g. Infill existing door connecting the Men's Restroom to Bay 1.
- h. Reconfigure administrative section north of Hangar Bay 1 to provide a support tool crib and supervisors office.
- i. Provide three overhead doors at the support counter.
- j. Repurpose space within the existing fire pump room created by demolishing foam suppression equipment as a new, enclosed storage room. Provide access via the main corridor. Provide fire rated assemblies as required by NFPA.
- k. Convert two existing CMU block storage rooms in Bay 1 to Secret Collateral Vaults (US Vault and RSAF Vault). The perimeter construction of the rooms will serve as the vault enclosure. The existing CMU block walls will remain. Replace the existing metal deck ceiling and associated structure with a cast-in-place concrete ceiling. Infill overhead door openings with CMU block and provide a new GSA vault door for each vault. No caged day gate is required. Refer to the Concept Design Drawings for additional information.
- l. Convert the existing janitor room and laundry room to a single storage/janitor room. The existing service sink is to remain to satisfy minimum plumbing fixture requirements.
- m. Provide two 5-ton bridge cranes with a 22'-0" minimum hook height. Provide one bridge crane in Bay 2 and a second bridge crane in Bay 3. Provide independent structural columns, new footings, and rails for the bridge crane. Coordinate overhead clearances of the bridge crane model selected with other systems, such as fall protection. The bridge crane coverage area is limited by the existing storage rooms and ramps. Provide a coverage area to the maximum extent possible. The user will primarily use the bridge crane over the nose end of the aircraft in the parked position.
- n. Repair and recertify the existing hoist in the tank bay.
- o. Disassemble and remove all existing equipment and materials in the paint booth room. Provide new finishes – refer to the Room Data Sheets for additional information. Replace the existing paint exhaust/ventilation fans in kind. Existing ductwork associated with the paint room exhaust system are to remain. Repair to ductwork that is associated with the replacement of the fans and connection to the new paint booth. Disconnect all infrastructure from the existing paint booth, capping and protecting during construction, and prepare all existing building/infrastructure

systems for connection by Government. New paint booth equipment will be Government provided and Government installed (GFGI). Coordinate infrastructure connection and scheduling requirements with the Contracting Officer Representative (COR) for new paint booth equipment.

3.3.1.3 Building 214 modifications are as follows:

- a. Patch and repair areas resulting from demolition work to match adjacent surfaces and finishes.
- b. Code upgrades are required, including stairs, handrails, fire separations, and a new communications room.
- c. Remove the offices on the mezzanine and replace with a new conditioned structure. Upgrade the mezzanine stairs to meet NFPA 101.
- d. Recondition existing spaces along the plan south of the facility to be storage spaces.
- e. Demolish the restrooms and upgrade to ABA compliant facilities. Provide a new janitor closet adjacent to them. Meet International Plumbing Code requirements for all fixtures.
- f. Install new fuel resistance resinous five coat epoxy hangar flooring in accordance with UFC 4-211-01 for ground floor areas identified in the room data sheets.
- g. Install a new conditioned parachute room with table for rigging and access to storage along the north portion of the facility.
- h. Replace the exterior doors of the facility. They have impeded functionality due to excessive corrosion. The two large main service doors in the work bay are in good working order and to remain.
- i. Minor upgrades and repairs to the envelope are required. Remove and replace the insulation along the work bay, roof, and walls. Replace the existing translucent panels with new.
- j. Reference demolition section of this RFP for demolition scope. Reference roof and exterior wall requirements section of this RFP for the percentage of the exterior envelope to be replaced.
- k. Existing cranes are to remain. Inspect, service, test, and certify the existing crane. Load capacity is unknown.
- l. Existing clerestory windows are to remain.
- m. Existing canopies located to the west are to remain and require minor repairs including repainting and replacing the metal roof.
- n. Provide a new hydrostatic low slope standing seam metal roof.
- o. Patch and repair areas resulting from demolition work to match adjacent surfaces and finishes.
- p. Remove all existing exterior doors as noted on the concept drawings.

3.3.1.4 Building 216 work includes but is not limited to:

- a. Construct a new addition with a low slope roofing system. See civil site design section of this RFP for site work requirements.
- b. Configure restrooms and showers per ABA.

- c. Provide a United States Secret Clearance Access Area – U.S. Secret Clearance Open Storage Area (Secure Room) in the northwest corner of B216 in accordance with Department of Defense Manual (DoDM) 5200.01 Volume 3, DoD Information Security Program: Protection of Classified Information.
- d. Provide a Special Access Program Facility compliant with F-35 Facility Requirements Document / TEMPEST Area in accordance with UFC 4-010-05 SCIF/SAPF Planning, Design, and Construction and UFC 4-026-01 Design to Resist Forced Entry. Coordinate design, construction, and accreditation with Ebbing ANGB AR Site Security Manager (SSM) and Accrediting Official (AO).
- e. Construct a simulator area and F-35 admin offices.
- f. Construct a command suite and large conference room.
- g. Provide new interior finishes and repair existing walls and floors to receive new finishes.
- h. Infill exterior wall at overhead doors and louvers.
- i. Replace existing roof.

3.3.1.5 Building 218 modifications are as follows:

- a. Provide new exterior envelope consisting of walls, roof, doors and glazing to align with existing low-slope PEMB structure to meet current codes.
- b. Construct a new 972 square foot facility expansion with a 240 square foot exterior overhang entry to the flight line to meet new program requirements.
- c. Include a new communication room in the building expansion area.
- d. Minor work to the large assembly room is required. Adjust the space to provide new sinks, refrigerators, and counters for microwaves to store personnel food and heat meals.
- e. Provide new ABA-compliant restroom facilities, showers, and an adjacent janitor closet. Provide all plumbing fixtures in accordance with International Plumbing Code requirements.
- f. Reconfigure partition walls in the existing circa 2000's expansion to meet RSAF program needs.
- g. Provide a hardened pyro room to be designed to meet the material explosive classification.
- h. Provide upgrades to fire separation partitions as required.
- i. Patch and repair areas resulting from demolition work to match adjacent surfaces and finishes. Reference demolition section of this RFP for requirements.

3.3.2 Demolition

The plans in Attachment B show the intended demolition extents. Inventory and coordinate with Contracting Officer Representative (COR) turn-over to the Government of any and all removed equipment. Dispose of any equipment not returned to the Government.

3.3.2.1 Building 201

- a. Demolish all equipment associated with the existing fire station as well as many interior partitions. Refer to attachments for additional information.

- b. Retain mechanical spaces and the single occupant restroom in their current locations.
- c. Remove existing concrete locker pad and repair concrete slab as required to provide a smooth finished surface along the west wall of the existing apparatus bay.
- d. Remove all plumbing fixtures in the facility.
- e. Remove all millwork and finishes in the facility.
- f. Remove existing mezzanine and associated structure/stairs in the existing northeast apparatus bay.
- g. Remove existing curb in the north restroom that currently holds the washer and dryer. Remove and cap all associated utilities.
- h. Remove all existing windows, glazed openings, and frames.
- i. Remove all existing overhead doors. Track and motors are to remain for reuse.
- j. Remove existing south entrance doors and north apparatus bay door and prepare for infill.
- k. Remove and replace existing west entrance door.

3.3.2.2 Building 202

- a. Minor reconfiguration is required. Refer to Attachment B Concept Design Drawings.
- b. Remove all non-loading bearing screen walls that were constructed in the tank bay, bay 1, and bay 2.
- c. Remove and prepare to infill the east personnel door in bay 1.
- d. Remove and prepare to infill the personnel door connecting the men's restroom to bay 1.
- e. Remove all existing utilities, shelving, brackets, etc. in the laundry room. Demolish partitions as shown in Attachment B between the laundry room and the adjoining janitor room.
- f. Remove all existing millwork, fixtures, appliances, and utilities for the kitchenette in the administrative room north of bay 2.
- g. Remove interior overhead doors for the two storage rooms in bay 1 and the overhead door in bay 3. Prepare to infill with CMU block and specified doors.
- h. Remove existing framing and metal decking at the two storage rooms in bay 1 and prepare to replace with concrete vault ceiling.
- i. Remove foam suppression system equipment in fire pump room. Refer to Fire Protection section of this RFP for additional information.
- j. All items in the existing Men's and Women's Restrooms/Locker Rooms are to remain.

3.3.2.3 Building 214

- a. While some selective demolition is required throughout the facility, much of B214 is to remain in its current configuration to operate as an engine shop. Reuse building elements to the maximum extent feasible.
- b. Demolish existing SSMR System.

- c. Demolish existing ground floor sealed finish of concrete slab in areas identified in Room Data Sheets. Grind and prep structural slab to receive new finish.
- d. Remove and replace interior insulation at work bay walls and roof insulation.
- e. Remove and replace translucent upper wall panels.
- f. Demolish wall panels enclosing the office space at the mezzanine.
- g. Modify/demolish the mezzanine stair railing in accordance with NFPA requirements.
- h. Remove and replace all exterior swinging doors and panels.
- i. Demolish existing kitchen space, restrooms, and adjacent wall for new space configuration.
- j. Conduct inspection, service maintenance, and load certification of existing cranes.
- k. Patch and repair masonry wall partitions as required for abandoned openings

3.3.2.4 Building 216

- a. Secure Areas within Building 216 require the most extensive alteration in accordance with the requirements of UFC 4-010-05 and F-35 FRD. One area is United States Secret Clearance Access Only and an F-35 SAPF/FRD Special Access Area. Selective demolition of interior partitions and modification of structural walls are required to create the spatial relationships of the new mission program. New exterior windows and doors are required in accordance with DoD Minimum Antiterrorism Standards in UFC 4-010-01. Civilian personnel occupy the facility, so it is to be accessible in accordance with ABA Standards.
- b. Demolish existing SSMR System.
- c. Selectively demolish restroom, lockers, and break areas.
- d. Demolish vault and vault door for command suite.
- e. Demolish interior partitions and interior doors.
- f. Demolish interior finishes. Demolish floor finishes to the slab.
- g. Provide new openings in exterior enclosure for egress. The original facility has endured three additions during its life with multiple exterior walls now serving as interior walls.
- h. Patch and repair masonry wall partitions as required for abandoned openings.

3.3.2.5 Building 218

- a. The new addition to the B218 facility requires selective demolition. Much of the facility east of gridline A (as shown in the concept drawings in Attachment B of this RFP) remains in its current configuration. Perform minor demolition for its new purpose. Reuse building elements to the maximum extent feasible.
- b. Remove the exterior envelope to fix moisture and air infiltration issues at the original low-slope PEMB building. Demolish the existing roof, metal wall panels, brick veneer base, and associated swing doors and windows. Reference Attachment B Concept Drawings.
- c. Demolish existing interior partitions, doors, windows, ceiling assembly, and flooring as required for the new space configuration as identified in Attachment B Concept Drawings.
- d. Remove damaged curtain wall system glazing. Repair to match the existing assembly.

- e. Provide any temporary bracing needed for the structural system.

3.3.3 Functional/Operational Requirements

The plans in Attachment B show the intended functional layouts.

3.3.4 Accessibility Requirements

Design the facilities to comply with DoD standards for accessibility for all spaces open to the public or accessed by civilian personnel.

3.3.5 Exterior Requirements

Complement existing buildings when choosing exterior design elements. Design wall types to meet the requirements for energy efficiency, weather protection, air and water infiltration, thermal movement, low maintenance, high durability, and aesthetic appearance. Provide low-maintenance finish materials to the greatest extent possible. Conform to the minimum requirements and allowable options contained within each of the applicable UFGS specification sections.

Design all work in accordance with UFC 3-101-01, Architecture, and UFC 3-301-01, Structural Engineering. Provide wind load calculations for exterior cladding in accordance with UFC 1-200-01 and UFC 3-301-01 with a comparative analysis of the cladding system. Refer to Concept Design Drawings in Attachment B and Room Data Sheets in Attachment C for more information.

3.3.5.1 Roofing System

- 3.3.5.1.1 Existing Standing Seam Metal Roof (SSMR): The standing seam metal roof system for Buildings 202 shows minimal damage. This system is to remain. Remove existing SSMR systems on B201, B214, B216, and B218.
- 3.3.5.1.2 Replacement: The roofs of all facilities, with the exception of B202, will be replaced in their entirety. No repairs will be undertaken as part of this project.
- 3.3.5.1.3 New SSMR System: For new roof systems, provide hydrostatic (structural) fully seamed standing seam roofing panels conforming to Ebbing ANGB requirements and matching the newest building addition roof system. Provide steel formed at the manufacturing plant and conditioned for flatness. Determine panel thickness by the requirements of UFC 3-110-03 Roofing. The minimum gauge for panels is 20-gauge, (.032-inch) thick or greater. Meet deflection and wind load requirements per ASCE 7-22. Provide continuous roof insulation over the entire roof area. Insulation must meet or exceed the requirements of the International Energy Code, Air Force High Performance Building requirements, and all federal mandates. Provide the following warranties for metal roof system: Manufacturer's 20 year no dollar limit weathertight warranty, manufacturer's 20 year no dollar limit factory applied finish warranty, and 2-year installation warranty
- 3.3.5.1.4 Roof penetrations: Flash all existing and new roof penetrations according to the new roof manufacturer's required details for watertight warranty coverage.
- 3.3.5.1.5 Low-Slope Roof: Provide a single-ply membrane roof assembly in accordance with UFC 3-110-03 for the new addition roof at Building 216. Use 80 mil fully adhered TPO Hydrostatic System. Minimize roof penetrations as much as practicable and must be sealed and