

REQUEST FOR PROPOSAL

For

Construct Car Wash



TYNDALL AFB, FLORIDA

Project Number: XLWU 22-4006

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1.0 SCOPE OF WORK

- A. This is a Design-Build project to provide a new car wash facility for Tyndall Air Force Base, Florida. The project is comprised of the design and construction work required to result in a complete and useable Car Wash facility on Tyndall AFB.
- a. BUILDING SCOPE – GENERAL DESCRIPTION
- i. The new facility shall include the following spaces and features:
 - ii. 1 Automated Wash Bay,
 - iii. 2 Self-service Wash Bays.
 - iv. Car wash Equipment Room.
 - v. Dedicated Comm. Room,
 - vi. Dedicated Electrical Room,
 - vii. 4 Vacuum Stations,
 - viii. Curved standing seam metal roofs
 - ix. Tyndall AFB IFS compliant finishes and color scheme.
- B. The Design-Build Team will consist of a Construction and design team Designer of Record (DOR) that shall perform the services herein and as described in this Statement of Work (SOW). The Contractor shall be responsible for all professional services, A/E design, permits, equipment, labor, tools, materials, and ancillary items necessary to complete the tasks defined by the SOW, including the disposal of all resulting waste materials and project clean up. The performed tasks shall be based on the project description, other data furnished in this SOW, and information covered during kick-off meeting.
- C. Ancillary items: Providing necessary support to the primary activities or operation of an organization, institution, industry, or system. An example of ancillary item: Lighting controls, but is not limited to the following: switches, motions sensors, and dimmers, ballasts, emergency backup controls, etc. An incompatible dimmer or electronic equipment replacement to support a conversion from fluorescent to LEDS lights would fit the ancillary item description. Another example is Pump controls but is not limited to the following: Starters, on and off switches, logic controllers. This is all support equipment to ensure the task is completed. Roofs: All required items required by regulations code to complete the installation of a roof system such as detection, fire protections, etc. All of these items must result in a complete and usable product at completion of the project to ensure all the previous functionality was provided in the new design.
- D. This SOW sets forth the requirements for Design/Build (DB) contract site-specific design and construction effort to remove, repair and restore interior and exterior elements and related infrastructure within a building on Tyndall AFB, Florida.

1.1 GENERAL REQUIREMENTS

- A. Applicable provisions of the Contract Clauses in the contract will govern work under each section of the UFGS specifications.
- B. This project has an estimated period of performance from Notification to Proceed (NTP) through completion and turnover of the facility back to the Government for mission operations of 365 calendar days.
- C. Proposal Documents: The contractor shall complete the proposal schedule included in the solicitation and include the completed schedule with the submitted proposal documents.
- D. Measurements: The GC is required to validate dimensions and quantities. The quantities are listed as approximations and GC field measurements and quantity verification should be used for bidding package.
- E. Field Changes:
 - a. Field Changes: The Contractor and the Government may agree to perform a no cost field change. Field changes are made when the change appears to be mutually beneficial to all parties and would not require changing the negotiated items. All field changes must be approved by the CO prior to execution. Only the CO may authorize field changes or deviations from the SOW.
 - b. No order, statement or direction of the Contracting Officer, an authorized representative of the Contracting Officer whether or not acting within the limits of his authority, or any other representatives of the Government, shall constitute a change order under the "Changes" clause of this contract or entitle the contractor(s) to an equitable adjustment of the price or delivery schedule, unless such a change is issued in writing and signed by the Contracting Officer.
- F. Job Start Meeting: A job start meeting shall be accomplished with the Contractor, Contracting Officer, CE, and user upon acceptance of the 35%, 65%, or 95% design submission. The meeting objective is to review project details, determine design delivery dates and anticipated construction start date, security procedures for site, dumpster locations, and any applicable requirements during construction. The Contractor shall visit the job site to verify location, conditions, and dimensions prior to starting work.
- G. Pre-Construction Meeting: A preconstruction meeting shall be held when all the design has reached the Issued For Construction (IFC) stage and all preconstruction submittals have been approved. The contractor Quality Control Manager, Site Safety Officer, and Superintendent shall be required to attend. This meeting will address all items specific to the project to include access, safety, and environmental needs.

- H. Facility Occupancy: There is no existing facility at location of project. During performance of this contract, non-work areas will remain functional to normal base activities. The Contractor is responsible for diverting and restricting pedestrian and vehicle traffic if required for any reason for the duration of the performance period.
- I. Bulletin Board: Immediately upon mobilization, the Contractor shall provide a bulletin board not less than 36 by 48 inches (915 by 1220 mm) in size for displaying various documents required within the contract. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees. All documents posted shall be legible and replaced as needed when unreadable. The board shall be displayed until the work is completed whereby the Contractor shall remove the board and remain the property of the Contractor. The contents of the board shall include, but not limited to, the following:
- a. Contractor's company name
 - b. Project name
 - c. MPLS number
 - d. Superintendent's name and a 24 hour available response phone number
 - e. Equal Employment Opportunity poster
 - f. Wage determination
 - g. Wage Rate Information poster.
 - h. Other documents as needed or required.
- J. Employee Parking: Contractor employees shall park privately owned vehicles in an area designated by CES and approved by the CO.
- K. Job Site Tools and Equipment: All hand tools and equipment shall be maintained in good working conditions and properly stored when not in use. Construction attire shall be in accordance with applicable OSHA regulations.
- L. Field Measurements: The Contractor shall be required to make his/her own field investigations to verify existing conditions, dimensions and other information shown on Government available non-verified furnished reference drawings, solicitation documents and construction documents. Deviations, errors, or omissions in the government supplied reference materials or the design team's construction documents shall be identified and addressed by the contractor during the design phase of the contract. They shall be annotated on the respective contract documents as well as on a consolidated register that will be made available to the government for simplified identification and review.
- M. Notification Requirements: The Contractor shall notify the Government a minimum of ten (10) days in advance of each mobilization. The Contractor is required to notify the CO and Government Project Manager of critical issues that may affect the contract performance and/or human health and the environment. For critical issues pertaining to human health and the environment, the Contractor shall immediately notify the CO and

stop work. Work shall only resume at the direction of the CO following resolution of the issue.

N. On-Site Field Oversight: The Contractor shall provide the manpower, equipment, material, services, and transportation necessary to ensure oversight services throughout accomplishment of the construction period for the contract. It is the responsibility of the Contractor to establish and maintain open communications between salient authorities associated with accomplishment of this contract.

O. Federal Holidays:

a. The standard Federal legal holidays are observed:

1. New Year's Day	January 1
2. Birthday of Martin Luther King, Jr.	Third Monday in January
3. Washington's Birthday/President's Day	Third Monday in February
4. Memorial Day	Last Monday in May
5. Juneteenth	June 19
6. Independence Day	July 4
7. Labor Day	First Monday in September
8. Columbus Day	Second Monday in October
9. Veterans Day	Second Monday in November
10. Thanksgiving Day	Fourth Thursday in November
11. Christmas Day	December 25

b. Any of the holidays falling on Saturday will be observed on preceding Friday; holidays falling on Sunday will be observed on the following Monday. In addition, the Government may dictate the work day before or the work day after an observed holiday as a "Family Day."

c. The Contractor should not perform work on observed holidays, Wing Down Days, Wing Safety Days or Family Days unless authorized by the Contracting Officer for the TO. In the event work is authorized on observed holidays, the Contractor shall pay all applicable overtime and/or holiday pay rates required by law.

P. Working Hours: The normal duty hours of the facility are from 7:00 AM to 5:00 PM, Monday thru Friday excluding Federal Holidays. All work shall be performed during normal duty hours. All other hours to include weekend and holidays shall be requested through the CO for approval. This request shall be submitted no less than three (3) workdays prior to the time requested.

Q. Availability and Use of Utility Services:

1. The contractor should plan on having an offsite office location. The government does not guarantee office space will be provided. The Government does not guarantee

- utilities will be provided for office space. The use of a generator and porta toilets may be required if office space is provided. To install and office space and laydown yard will require an 813 permit determination and could take up to 60 days to obtain the permit.
2. The Contractor shall coordinate with Contracting Officer's Representative (COR) for laydown area, offices, and parking and storage facilities. Any damage to existing improvements adjacent to or on the project site due to construction activity under this contract shall be replaced/repaired at the Contractor's expense. All Contractor POV parking areas shall be coordinated and approved in advance by the Contracting Officer's Representative.
 3. Construction sites shall be kept neat and free of trash. Site construction areas shall be surrounded with orange, plastic safety barrier fence when required to separate construction activities from daily personnel traffic.
- R. Sanitation: The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the CO. Government toilet facilities will not be available to Contractor's personnel.
- S. Clean Up: At the end of each working day the Contractor shall clean up the work site by the removal of all construction debris, waste materials, packaging material and the like. If the before mentioned items could become airborne they shall be placed in refuse containers immediately. Clean up of the work site shall include the construction area(s), construction office area(s), material storage area (s), parking and eating area(s), and any other area(s) effected by the construction process. Any dirt or mud which is tracked on to any Base street, parking area, sidewalk, patio, or driveway shall be cleaned away daily. Materials resulting from demolition activities which are salvageable shall be stored within the work area or at a supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored in an approved location.
- T. Contractor's Management and Use of Electromagnetic Emission Devices on Base: (Electromagnetic emission devices include: Radio/Radar Transmitters; Navigational Aids/Instrumentations; Signaling, Intrusion Detecting, and Identification Devices; Mobile and Fixed Business Radio Communications Equipment; and MARS, CBs, and Amateur Radio Stations.) The Contractor shall comply with the Air Force Military Training Center (AFMTC) Regulation 700-14, Jul 89.
- U. Preparation of Progress Schedules and Reports: The reports contemplated by FAR Clause, 52.236-15, Schedules for Construction Contracts, shall be accomplished on and in accordance with instructions pertaining to AF Form 3064, Contract Progress Schedule, and AF Form 3065, Contract Progress Report. Contract Schedules and Reports shall run from Monday through Sunday and be submitted to the CO per table of deliverables located in 4.0A Table 1 - Table of Deliverables.

V. Deteriorated Construction And Finish

- a. Authority: The QA Inspector will be the governing authority in determining if existing construction and finishes are deteriorated and require repair and/or replacement.

W. Contractor Storage/Staging Area

- a. Operations and Storage Approval: Notwithstanding Contract FAR Clause, FAR 52.236-10, Operations and Storage Areas, subject to approval by the CO and in turn, availability and need, a storage/staging area may be provided at the subject project site. If project site space is not available, then offsite storage may be required.
- b. Utility 'tie-ins', where available, are the Contractor's responsibility. See 1.1 General Requirements, Q. Availability and Use of Utility Services for additional information.
- c. Storage Area Clean Up: Weekly discard trash and debris in the Contractor's containers (dumpsters). Do not allow debris to accumulate. At work completion, clean the storage area. This area must be free of any materials, trash or debris before receipt of final payment.
- d. In areas of high visibility, the job site construction fence shall have a screen fabric material applied to the fence fabric in order to block the view during the construction phase. The CO will make the determination at the pre-construction meeting if the subject project will require a screened fence or not. Remove fence upon completion. Rehabilitate disturbed turfs and grass and if reseeding is required use Bermuda grass.

X. Hazardous component abatement for materials such as asbestos, lead-based paint, PCBs, and other hazardous materials shall be the responsibility of the Contractor. Abatement of mold resulting from water damaged materials shall be the responsibility of the Contractor.

Y. The duration of days is considered calendar days unless otherwise noted.

Z. COVID-19 Requirements - During the COVID-19 pandemic it is vital to Tyndall AFB's Mission that the Contractor adhere to all Tyndall AFB Covid-19 directives to mitigate virus transmission. The contractor shall be responsible for the following: follow CDC guide lines, setting up teleconference meetings, wearing mask and social distancing when entering a government facility, the screening of their employees, and reporting COVID-19 cases to the 325th CONS and 325th CES project manager (PM). As Covid-19 directives are living documents, it is the Contractor's responsibility to be informed and follow the most recent published directive.

AA. Project Signage: As required per the FAR.

- a. As required, a job sign shall be required at the project site. The CO or the Government Inspector will make a determination based on cost and visibility. The sign shall indicate the Contractor's company name, project name and MPLS number, superintendent's name and a 24 hour available response phone number. The size of the sign shall be 4' x 8' x 3/4" thick plywood board mounted to a 2x4 wood frame and diagonal braces. The wood frame shall be supported on 4x4 wood supports and be mounted to the ground in concrete footings. Background color shall be in accordance with Federal Standard White (Gloss). The color of the lettering shall be Black (gloss) with Helvetica font.

1.2 APPLICABLE DOCUMENTS

- A. The Contractor shall identify and comply with all applicable federal, state, and local laws; statutes; Executive Orders; Department of Defense/Air Force manuals, handbooks, regulations, guidance, and policies. The contractor shall comply with the National Institute of Building Sciences' Whole Building Design Guide Construction Criteria Base (CCB) Unified Facility Criteria (UFC) 3-600-01 and all of the related libraries. The primary criteria are the Air Force Criteria from the Documents Library, but other agency criteria may be directed for use, depending on the customer agency for a particular TO. The Unified Facilities Guide Specifications (UFGS) is the mandatory starting point for all specifications, and shall not be deleted, materially modified, or made less stringent without Government approval. It is the contractor's responsibility to identify and comply with all applicable requirements. It shall be the contractor's responsibility as the Designer of Record (DOR) to identify any design/construction criteria waivers that are warranted for the Project and to accomplish all necessary coordination activities necessary to obtain approval of these proposed waivers through the Contracting Officer (CO), and/or Project Manager (PM).
- B. In addition, the contractor shall refer to and comply with the current versions of the Department of Defense Policy and Guidelines for Acquisitions Involving Environmental Sampling or Testing and The United States Air Force Construction Management Implementation Guide as well as the latest version of The USAF Project Manager's Guide to Design and Construction. Base-specific documents are identified in the attached appendices.
- C. The Contractor and Design Team shall adhere to the following guidance during design and construction phase(s) of this project: Those sections of the Southern Standard Building Codes not incorporated in the UBC/International Building Code (IBC) for our respective area, International Concrete Repair Institute (ICRI) Guidelines, Air Force Standards, Department of Defense (DOD) Directives, Florida State Statutes, and the Tyndall AFB Facility Excellence Plan (Base Regulations), Occupational Safety and Health Administration (OSHA) Requirements, Department of Environmental Protection (DEP) Regulations, Environmental Protection Agency (EPA) Regulations, and ABA Accessibility Compliance Requirements.

D. In addition to adhering to the previous guidance, the Contractor shall review and adhere to the most recent version of the following code criteria as applicable at start of the design phase:

- a. Tyndall AFB IFS Tyndall Air Force Base Installation Facility Standard
www.tyndallifs.com
- b. UFC 1-200-01 [The DoD Building Code](#)
- c. UFC 1-200-02 [High Performance and Sustainable Building Requirements](#)
- d. UFC 1-300-02 [Unified Facilities Guide Specifications \(UFGS\) Standard](#)
- e. UFC 1-300-07A Design Build Technical Requirements
- f. UFC 1-300-08 [Criteria for Transfer and Acceptance of DoD Real Property](#)
- g. UFC 3-101-01 [Architecture](#)
- h. UFC 3-110-03 [Roofing](#)
- i. UFC 3-110-04 [Roofing Maintenance and Repair](#)
- j. UFC 3-120-01 Design: Sign Standards
- k. UFC 3-120-10 Interior Design
- l. UFC 3-190-06 [Protective Coatings and Paints](#)
- m. UFC 3-201-01 [Civil Engineering](#)
- n. UFC 3-201-02 Landscape Architecture
- o. UFC 3-210-10 Low Impact Development
- p. UFC 3-220-01 Geotechnical Engineering
- q. UFC 3-220-05 Dewatering and Groundwater Control
- r. UFC 3-230-01 Water Storage and Distribution
- s. UFC 3-230-10A Water Supply, Water Distribution
- t. UFC 3-240-01 Wastewater Collection and Treatment
- u. UFC 3-250-01 Pavement Design for Roads and Parking Areas
- v. UFC 3-250-03 Standard Practice Manual for Flexible Pavements
- w. UFC 3-250-04 Standard Practice for Concrete Pavements
- x. UFC 3-250-08FA [Sealing Joints and Cracks](#)
- y. UFC 3-250-11 Soil Stabilization for Pavements
- z. UFC 3-260-02 Pavement Design for Roads, Streets, Walks, and Open
Storage Areas
- aa. UFC 3-300-07A Design Build Technical Requirements
- bb. UFC 3-301-01 [Structural Engineering](#)
- cc. UFC 3-310-04 [Seismic Design for Buildings](#)
- dd. UFC 3-400-02 [Design: Engineering Weather Data](#)
- ee. UFC 3-401-01 [Mechanical Engineering](#)
- ff. UFC 3-410-01 [Heating, Ventilating, and Air Conditioning](#)
- gg. UFC 3-410-02 [Direct Digital Control for HVAC](#)
- hh. UFC 3-410-04 [Industrial Ventilation](#)
- ii. UFC 3-420-01 [Plumbing Systems](#)
- jj. UFC 3-420-02FA Compressed Air
- kk. UFC 3-430-09 [Exterior Mechanical Utility Distribution](#)

ll.	UFC 3-450-01	Noise and Vibration Control
mm.	UFC 3-501-01	Electrical Engineering
nn.	UFC 3-520-01	Interior Electrical Systems
oo.	UFC 3-530-01	Interior and Exterior Lighting and Controls
pp.	UFC 3-540-01	Engine-Driven Generator Systems for Prime and Standby Power Applications, with Change 2
qq.	UFC 3-550-01	Exterior Electrical Power Distribution
rr.	UFC 3-560-01	Electrical Safety O&M
ss.	UFC 3-570-01	Cathodic Protection
tt.	UFC 3-570-06	Operation and Maintenance: Cathodic Protection Systems
uu.	UFC 3-575-01	Lightning and Static Electricity Protection
vv.	UFC 3-580-01	Telecommunications Interior Infrastructure
ww.	UFC 3-600-01	Fire Protection Engineering for Facilities
xx.	UFC 3-701-01	DoD Facilities Pricing Guide, with Change 2; 2019
yy.	UFC 3-730-01	Programming Cost Estimates for Military Construction
zz.	UFC 3-740-05	Handbook: Construction Cost Estimating
aaa.	UFC 4-010-01	DOD Minimum Antiterrorism Standards for Buildings
bbb.	UFC 4-010-05	Sensitive Compartmented Information Facilities
ccc.	UFC 4-010-06	Cybersecurity of Facility-Related Control Systems
ddd.	UFC 4-020-01	DoD Security Engineering Facilities Planning Manual
eee.	UFC 4-021-01	Mass Notification Systems
fff.	UFC 4-021-02	Electronic Security Systems
ggg.	UFC 4-211-01	Aircraft Maintenance Hangars
hhh.	UFC 4-214-03	Central Vehicle Wash Facilities
iii.	USAF BIM	Minimum Requirements Version 2.1
jjj.	AASHTO	A Policy on Geometric Design of Highways and Streets
kkk.	ABAS	Architectural Barriers Act Standards; The ABA may be found at https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/aba-standards
lll.	AFDS	Air Force Design Guide
mmm.	AFGM 2018-32-01	Civil Engineer Control Systems Cybersecurity
nnn.	AFI 32-1020	Planning And Programming Built Infrastructure Projects
ooo.	AFI 32-1024	Standard Facility Requirements
ppp.	AFI 32-1063	Electrical Power Systems
qqq.	AFI 32-1064	Electrical Safe Practices
rrr.	AFI 32-1065	Grounding System www.wbdg.org > FFC > AFI > afi_32_1065_2017
sss.	AFI 32-1067	Water Systems
ttt.	AFI 32-1068	Heating Systems and Unfired Pressure Vessels
uuu.	AFI 32-1069	Gas Supply and Distribution
vvv.	AFMAN 91-203	Air Force Occupational Safety, Fire and Health Standards
www.	AFMAN 32-1084	Facility Requirements Standards
xxx.	AFMAN 32-1061	PROVIDING UTILITIES TO U.S. AIR FORCE INSTALLATIONS

yyy.	ANSI C2	National Electric Safety Code
zzz.	ASCE 7-10	Wind Loads
aaaa.	ASHRAE 55	Thermal Environmental Conditions for Human Occupancy
bbbb.	ASHRAE 62.1	Ventilation for Acceptable Indoor Air Quality
cccc.	ASHRAE 90.1	Energy Standard for Bldgs. Except Low-Rise Residential
dddd.	ASHRAE 100	Energy Conservation in Existing Buildings
eeee.	ASHRAE 111	Testing, Adjusting, and Balancing of Building HVAC Systems
ffff.	ASHRAE 180	Inspection & Maintenance Commercial Bldg. HVAC Systems
gggg.	ASHRAE 189.1	Standard for the Design of High-Performance Green Buildings
hhhh.	ASHRAE 202	Commissioning Process for Buildings and Systems
iiii.	ASHRAE Guide 4	Prep of Operating and Maintenance Documentation
jjjj.	ECB 2018-11	Control System Cybersecurity Coordination Requirement
kkkk.	EISA	Energy Independence and Security Act of 2007
llll.	EM 385-1-1	USACE Safety and Health Requirements Manual
mmmm.	EPA 2005	Energy Policy Act of 2005
nnnn.	FC 4-218-03F	Air Force Criteria for Precision Measurement Equipment Laboratory Design and Construction
oooo.	FAR	Federal Acquisition Regulations
pppp.	FS 553	Florida Building Code
qqqq.	IBC	International Building Code
rrrr.	IES	Illuminating Engineering Society Lighting Handbook
ssss.	IFGS	International Fuel Gas Code
tttt.	IMC	International Mechanical Code
uuuu.	IPC	International Plumbing Code
vvvv.	MIL-HDBK-1190	MILITARY HANDBOOK: FACILITY PLANNING AND DESIGN GUIDE
www.	NACE SP-0169	
xxxx.	NACE SP-0185	
yyyy.	NACE SP-0286	
zzzz.	NBIMS US V3	National BIM Standard US Version 3
aaaaa.	NEBB	Standards for Whole Building Systems Commissioning
bbbbb.	NEC	National Electrical Code, current edition
cccc.	NEMA	National Electrical Manufacturer's Association
dddd.	NESC	National Electrical Safety Code current edition
eeee.	NFPA 13	Standard for the Installation of Sprinkler Systems
ffff.	NFPA 24	Installation of Private Fire Service Mains and Their Appurtenances
ggggg.	NFPA 70	National Electric Code
hhhhh.	NFPA 72	National Fire Alarm Code
iiiii.	NFPA 90A	Standard for the Installation of Heating and Air Conditioning Systems
jjjjj.	NFPA 101	Life Safety Code

kkkkk.	NFPA 1141	Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas
lllll.	NPDES	National Pollutant Discharge Elimination System http://www.dep.state.fl.us/water/stormwater/npdes/construction3.htm
mmmmm.	SMACNA Guides	Sheet Metal & Air Conditioning Contractors' National Assoc.
nnnnn.	TAFB FEP	TAFB Facility Excellence Plan
ooooo.	TAFB IFS	TAFB Installation Facility Standard https://www.tyndallifs.com/
ppppp.	TM 5-683	Facilities Engineering Electrical Interior Facilities
qqqqq.	TM 5-684	Facilities Engineering - Electrical Exterior
rrrrr.	USAF BIM	Minimum Requirements Version 2.1
sssss.	UFAS	Uniform Federal Accessibility Standards
ttttt.	UFGS 23 09 00	Instrumentation and Control for HVAC
uuuuu.	UFGS 23 09 13	Instrumentation and Control Devices for HVAC
vvvvv.	UFGS 23 09 23.02	BACnet Direct Digital Control for HVAC and Other Building Control Systems
wwwww.	UFGS 23 09 93	Sequences of Operations for HVAC Controls
xxxxx.	UFGS 25 05 11	Cybersecurity for Facility-Related Control Systems
yyyyy.	UFGS 23 08 10	Utility Monitoring and Control System Testing
zzzzz.	UFGS 25 10 10	Utility Monitoring and Control System (UMCS) Front End and Integration

E. Miscellaneous

- a. AFCEC AGRAM 17-01 Change to AF New Construction and Major Renovation Certification Requirements
- b. Air Force Pamphlet 91-210 (Contract Safety)
- c. Air Force Systems Security Instruction 7700 - Communications and Information - Emission Security
- d. Air Force Systems Security Instruction 7702 - Communications and Information - Emission Security
- e. Air Force Sustainable Design and Development (SDD) Implementation Guidance
- f. Tyndall Mass Notification System Messages
- g. Tyndall Rebuild Facility Related Control Systems (FRCS) Technology Summary –Appendix L –22 Sept 2021
- h. Draft Rule Amendments of the Environmental Resource Permitting (ERP) Program in the Northwest District, Applicant's Handbook Volume I & II, http://www.dep.state.fl.us/water/wetlands/erp/rules/draft_nw.htm.
- i. Recommended Standards for Wastewater Facilities (Ten States Standards)
- j. Chapter 62-555 FAC General Permit of Construction of Water Main Extension for Public Water System
- k. Chapter 62-600 of the Florida Administrative Code, Public Drinking Water Distribution System and Domestic Wastewater Facilities

- l. Chapter 62-604 FAC Collection Systems and Transmission Facilities of the Florida Administrative Code, Domestic Wastewater Facilities and the Wastewater Permit checklist.
 - m. Manual of Practice No. FD-4 Design of Wastewater and Stormwater Pumping Stations.
 - n. Manual of Practice No. FD-5 Gravity Sanitary Sewer Design and Construction.
 - o. USACE ETL 1110-3-466 Selection and Design of Oil/Water Separators at Army Facilities, August 1994
 - p. USACE Designing Coalescing Oil/Water Separators for Use at Army Washracks, December 2000
 - q. GCEC MANUAL OF STANDARDS AND SPECIFICATIONS FOR WATER MAIN CONSTRUCTION FOR TYNDALL AFB SYSTEM
 - r. Guiding Principles for Sustainable Federal Buildings and Associated Installations
 - s. Illuminating Engineering Society of North America (Handbook)
 - t. Florida Fish and Wildlife Commission;
 - u. E.O. 13834 Efficient Federal Operations
- F. Lightning Protection Requirement: Lightning Protection System (LPS) shall be designed and installed IAW the following references:
- a. AFI 32-1065 Grounding System
 www.wbdg.org > FFC > AFI > [afi_32_1065_2017](http://www.wbdg.org/FFC/AFI/afi_32_1065_2017)
 - b. NFPA 70 National Electric Code
 - c. NFPA 780 Standard for the installation of Lightning Protection System
 - d. UFC 3-575-01 Lightning and Static Electricity Protection System
 - e. UL 96 Lightning Protection Components
 - f. UL 96A Installation Requirements for Lightning Protection System
 - g. UL 467 Grounding and Bonding Equipment
- F. Security Requirements:
- a. MIL-HDBK-1013: DOD Military Handbook Design Guidelines for Physical Security of Facilities
 - b. AFI 31-101: Air Force Instruction 31-101: The Air Force Installation Security Program
 - c. DOD 5200.1.R Department of Defense 5200.1.R: Information Security Program Construction Standards.
 - d. ICD-ICS-705 Tech Spec
 - e. UFC 4-010-01 Unified Facilities Criteria Antiterrorism Standards for New and Existing Facilities
 - f. UFC 4-010-06 Cybersecurity of Facility-Related Control Systems
- G. FAR Case No. 92-54 requires the Solicitation Package for all construction projects to reflect the government's preference for "acquisition of environmentally sound and energy

efficient products and services, and an affirmative procurement program favoring items containing the maximum practicable content of recovered materials".

H. DOD Information

- a. Department of Defense Manual 5200.01, Volume 1; DoD Information Security Program: Overview, Classification, and Declassification; 2012
- b. Department of Defense Manual 5200.01, Volume 2; DoD Information Security Program: Marking of Classified Information; 2013
- c. Department of Defense Manual 5200.01, Volume 3; DoD Information Security Program: Protection of Classified Information; 2013
- d. Department of Defense Manual 5200.01, Volume 4; DoD Information Security Program: Controlled Unclassified Information (CUI); with Change 1 2018

I. Federal Green Construction Guide for specifiers. This guide can be found at:

<http://www.wbdg.org/design/greenspec.php>

J. The Contractor shall perform all work IAW with AFI, ETL, UFC and industry standards. Compliance with AF UFCs is mandatory unless the Tyndall AFB IFS has more stringent requirements. If the Contractor determines that the work cannot be performed and/or included in the SOW IAW with ETL's/UFCs or industry standards, the Contractor shall notify the Tyndall AFB POC listed in this document in writing immediately before award of the contract. Otherwise, the Contractor shall be responsible for the required work.

K. All work shall be in compliance with all Public Laws (P.L.), Executive Orders (E.O.), Code of Federal Regulations (CFR), Department of Defense Instructions (DODI), Department of Defense Directives (DODD), or other higher authority documents as applicable. Many applicable compliance documents are authorized by [DoD MIL-STD-3007F](#), and are available through the Government-sponsored Whole Building Design Guide located at <https://www.wbdg.org>.

L. If there is a conflict between these codes, regulations specifications, and/or guidance documents, the most stringent requirements shall apply, as determined by the CO through the Request for Information (RFI) process. These listed documents do not relieve the Contractor from complying with other required regulatory documents not listed.

M. The government may take up to 30 days to review design documents. The contractor schedule activity for less days will be overridden by this time frame and will not be considered a delay by the government. The contractor schedule shall reflect the 30 day review time.

2.0 GOVERNMENT PROPERTY INCLUDING GOVERNMENT FURNISHED INFORMATION, EQUIPMENT, AND PROPERTY (GFI, GFE, GFP)

- A. Historical architectural and structural construction documents may be available for review, however field verification and documentation of existing conditions and configurations prior to construction is essential. The government takes no responsibility for errors and omissions contained in the reference material and field verification shall be performed by the contractor.

3.0 MANAGEMENT, PLANNING, AND REPORTING REQUIREMENTS

- A. Design submittals, 35%, 65%, and/or 95%, and 100%, will be routed with an AF Form 3000 and will be reviewed and approved/disapproved within 30 calendar days.
- B. No delay damages or time extensions will be allowed for time lost in late or lost submittals. Government review times may take up to 30 days and is not considered a delay for design reviews. The contractor's schedule shall include time for these 30 day reviews. The official review time starts when the CO acknowledges the receipt of the submittal.
- C. Submittals pertaining to environmental issues may take up to 30-45 days for review and approval. Wetland permits may take greater than 60 days to process. Environmental 813 submittals shall include drawings, locates for utilities with depth, size of lines, length of runs, underground or above ground routing, spatial coordinates, duration of the laydown yard or temporary trailer, number of personnel, location of temporary porta toilets, etc. Delays greater than the anticipated days listed herein do not constitute a governmental delay. Contractor will be allotted a no-cost PoP extension for days over and above those listed herein.
- D. All other submittals should be reviewed and approved/disapproved within 10 work days. Submittals will be reviewed for accuracy and relevance to the project and specifications. Material Submittal documents shall be submitted with AF Form 3000, Material Approval Submittal.
- E. Submittal shall follow the UFGS Specification Section 013300 SUBMITTAL PROCEDURES as well as the respective submittal section requiring forms, reports, drawings, samples, pictures, media recordings, manufacturer data, certifications, test reports, equipment warranty information, and the like. Submittal documents shall be submitted by the Contractor to the by CO for approval. All submitted documentation shall become the complete property of the Government. The Contractor shall not purchase, install, or construct any equipment or facility component, for which a submittal is required, without first obtaining an approved signed submittal from the CO. Required submittals shall be listed on AF Form 66, Schedule of Material Submittals, and/or a Submittal Register approved by the CO.
- F. Table of Deliverables: Project deliverables shall be as shown in the following 4.0A Table 1 - Table of Deliverables. The dates in the table are hard dates not to be exceeded

without CO approval. The deliverables and scheduled activities may be provided or completed early.

- G. 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.
- H. 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 have been omitted from the register or marked "N/A."
- I. 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.
- J. Contracting Officer Review will be completed within 30 calendar working days after the date of submission for submittals requiring Government approval.

4.0 SUBMITTAL FORMAT AND TIMING

- A. Submittals will have the full contract number, Type of submittal (RFI, RFP, Specification Section Number, etc.) , a unique sequential number (-001, -001A, -002, etc.) Description and a Date. Example FA4820FAC0029_RFI-001_Toilet accessories_14Jun2021.
Revisions will have an alphabetic letter after the original number. Example FA4820FAC0029 RFI-001A Toilet accessories 14Jun2021

4.0A Table 1 - Table of Deliverables

Interim = 35% and 65% submittals, Final = 95% Submittals, IFC Issue for Construction = 100%

Document	Copies				Max Delivery Timeframe
	325 CES		325 CONS		
	Electronic	Hard Copy	Electronic	Hard Copy	
Standard Meetings and Reports					
Meeting Minutes	1	0	1	0	3 calendar days after each meeting
Progress Schedule(AF 3064 or approved equivalent)	1	0	1	0	5 calendar days after NTP or modification to extend PoP
Progress Report (AF 3065 or approved equivalent)	1	0	1	0	Weekly
3-week Look Ahead report	1	0	1	0	Weekly
Daily Logs - Form 1477 or equiv.	1	0	1	0	NLT 0900 the day following - Daily
HAZMAT Forms 81 and 82	1	1	1	1	10 Days prior to preconstruction meeting
Work Clearance Request (AF Form 103A)	1	1	1	1	10 Days prior to preconstruction meeting
Material Approval (AF Form 3000)	1	0	1	0	At the 100% Final Design
Construction Material Testing Reports	1	0	1	0	As required
Welding/Burn Permit	1	0	1	0	Prior to commencing work
Production or Delivery Problem Report	1	1	1	1	At time of identification
Draft DD1354	1	0	1	0	When request for final inspection is submitted
Work Activities					
IMS, WBS and AF 3064/3065	1	0	1	0	15 Days Prior to NTP
Kickoff meeting with all stakeholders	1	0	1	0	5 Days Prior to NTP
Health and Safety Plan (HSP) or (APP)	1	0	1	0	Prior to site visits
NTP	1	0	1	0	NA
Contractor Site Investigation	1	0	1	0	5 Days from NTP
Design Quality Plan (DQCP) or (DQSP)	1	0	1	0	Prior to Design Starting
Quality Control Pan (QCP) or (QSP)	1	0	1	0	Prior to construction activities
Construction Work Plan (CWP)	1	0	1	0	Prior to construction activities
Site Investigation Memorandum	1	0	1	0	10 Days from NTP
Charrette Meeting					40 Days from NTP

Document	Copies				Max Delivery Timeframe
	325 CES		325 CONS		
	Electronic	Hard Copy	Electronic	Hard Copy	
Charrette Meeting Minutes Acceptance and Approval	1	0	1	0	20 Days from 1 st Design Submittal
The 35% and 65% design may be waived for small projects					NA
35% Design w/ AF Form 3000	1*	0	1*	0	40 Days from NTP
35% Design Review and Meeting	1	0	1	0	30 Days from 35% Design Submittal
35% Design Resubmittal if submittal was disapproved	1	0	1	0	10 Days from 35% Design Disapproval
35% Design Final Submittal and Approval	1	0	1	0	10 Days from 35% Design Re-Submittal
65% Design w/ AF Form 3000	1*	0	1*	0	40 Days from NTP or 20 Days 35% Design Approval
65% Design Review and Meeting	1	0	1	0	30 Days from 65% Design Submittal
65% Design Resubmittal if submittal was disapproved	1	0	1	0	10 Days from 65% Design Disapproval
65% Design Final Submittal and Approval	1	0	1	0	10 Days from 65% Design Re-Submittal
95% Design w/ AF Form 3000	0	0	0	0	40 Days from NTP or 20 Days 65% Design Approval
95% Design Review and Meeting	1	0	1	0	30 Days from 95% Design Submittal
95% Design Resubmittal if submittal was disapproved	1	0	1	0	10 Days from 95% Design Disapproval
95% Design Final Submittal and Approval	1	0	1	0	10 Days from 95% Design Re-Submittal
100% Design w/ AF Form 3000	1*	0	1*	0	20 Days from 95% Final Design
100% Design Review and Meeting	1	0	1	0	30 Days from 100% Design Submittal
100% Design Resubmittal if submittal was disapproved	1	0	1	0	10 Days from 100% Design Disapproval
100% Design Final Submittal and Approval	1	0	1	0	10 Days from 100% Design Re-Submittal
All Material Submittals	1	0	1	0	At 100% Design Approval or 30 Days from design Approval with CO approval.
Demolition Plan when demolition activities	1	0	1	0	Prior to 100% Design Approval
Environmental Plan (EPP)	1	0	1	0	Prior to 100% Design Approval
Storm Water Pollution Protection Plan (SWPPP)	1	0	1	0	Provided as part of the EPP
Red Line drawings Submitted	1	0	1	0	15 Days prior to Start Work
Draft Phasing Plan	1	0	1	0	10 Days prior to Start Work

Document	Copies				Max Delivery Timeframe
	325 CES		325 CONS		
	Electronic	Hard Copy	Electronic	Hard Copy	
Final Phasing Plan	1	0	1	0	5 Days prior to Start Work
Mobilization of Contractor	0	0	0	0	After 100% Design Approval or before with CO approval
Job Start Meeting	1	0	1	0	After 100% Design Approval or before with CO approval
Implementation of the Design					100 to 200 Days
Red Zone Meeting	1	0	1	0	60 Days Prior to Beneficial Occupancy Date (BOD)
Pre-Final Inspection	1	0	1	0	At end of Implementation
Pre-Final Inspection Report	1	0	1	0	5 Days prior to Final Inspection
Operations & Maintenance Manuals	1	1	1	1	5 Days prior to Final Inspection
HAZMAT Form 83	1	0	1	0	Prior to Final Inspection
Final Inspection	1	0	1	0	10 Days after Pre-Inspection
Final Inspection Report	1	0	1	0	5 Days After Final Inspection
O&M’s Review	1*	1	1*	0	5 Days After Final Inspection
As-Built Design Documents	1	0	1	0	5 Days After Final Inspection
As-Built Design Drawings	1*	0	1*	0	5 Days After Final Inspection
As Built Review Meeting	1	1	1	1	10 Days After Final Inspection
As Built Review Comments	1	0	1	0	15 Days After Final Inspection
O&M’s Acceptance	1*	1	1*	0	15 Days After Final Inspection
As Built Comments Acceptance	1	0	1	0	20 Days After Final Inspection
As Built Approval	1	0	1	0	20 Days After Final Inspection
Transfer & Acceptance of Military Real Property (DD 1354)	1	1	1	0	5 Days after Final Design Approval
O&M’s to user	1	0	1	0	10 Days after Final Design Approval
User training	1*	1	1*	0	15 Days after Final Design Approval
Items in red may be tailored to fast track requirement					
*Both Autodesk AutoCAD and Adobe Acrobat versions of drawings are required					

- K. Electronic copies of all design deliverable documents shall be provided on CD or DVD discs, formatted for use by the latest software version, and compatible with the Government's version of Microsoft Word, Excel, PowerPoint, Access, Outlook, the Adobe family of products, the Autodesk family of applications, the ANSYS family of

applications, or other software platform as appropriate and as determined and directed by the CO. Whenever possible, the electronic files given to the Government should be compatible with at least one software program application listed on the Air Force Evaluated Products List (EPL) or the Defense Information Systems Agency (DISA) Approved Products List (APL). For any submitted documents converted to one of the above formats from another software program, the Contractor shall also submit the electronic document file from the software program originally creating it, along with a statement describing what creating software program and version was used, as well as any programs used to convert files from one format to another. Submitted electronic files shall be unlocked and fully editable.

L. Builder Template

- a. A builder template will be provided to the contractor to complete for real property items that were installed per the scope of work.

4.1 WORK BREAKDOWN STRUCTURE (WBS)

- A. A 3064 or equivalent spreadsheet is used for the WBS. The task number, start and stop dates, Value for the task will be provided.

4.2 SCHEDULE AND PLANNING REQUIREMENTS

- A. See Section General Requirements

4.3 PROJECT PLANNING CHART (PPC) and/or CONSTRUCTION PLANNING CHART (CPC)

- A. Provide as needed.

4.4 INTEGRATED MASTER SCHEDULE (IMS)

4.5 CONTRACT PROGRESS SCHEDULE (AF 3064)

- A. The Contractor shall submit a signed AF 3064, Contract Progress Schedule, depicting an overall contract progress schedule for the main elements of work for the period of performance as described in the 4.0A Table 1 - Table of Deliverables. The line items, associated project percentages, and dates shall accurately depict the planned work to be performed.
- B. A template spreadsheet may be provided by the government to use for progress reporting.
- C. The progress schedule shall be signed by CE recommending approval and approved by the CO.

4.6 CONTRACT PROGRESS REPORT (AF 3065)

- A. The Contractor shall submit AF 3065 as described in 4.0A Table 1 - Table of Deliverables. This report shall be signed by the Contractor's on-site representative in the Remarks section of the AF 3065. The work elements and percentages of the total job identified on the AF 3065 shall be identical to the work elements and percentages on the AF 3064. The Contractor shall obtain either the QA Inspector or the Government contract inspector's acceptance by signature of the actual reported progress prior to submission to the CO. Additionally, the Contractor shall submit the updated AF 3064 as an attachment to the AF 3065.

4.7 SUBMITTING SCHEDULES AND REPORTS

- A. Contract Progress Report. Contract Schedules and Reports shall run from Monday through Sunday and be submitted to the CO by Tuesday of the following week. Contractor will prepare reports covering activities for days work and give one to the Government Inspector for each week of work even if there was no work accomplished that week. The weekly report may be turned in for each week at the end of the week when construction begins.
- B. A 3064/3064/schedule spreadsheet may be used to coordinate progress reporting. An example spreadsheet can be provided.

4.8 STATUS REPORTING

4.9 REPORTING REQUIREMENTS FOR FIRM FIXED PRICE (FFP)

4.10 CONTRACTOR'S PROGRESS, STATUS, AND MANAGEMENT REPORT (CPSMR)

- A. A 3064 is used for this project.

4.11 HEALTH AND SAFETY PLAN (HSP) OR (APP)

- A. See General Safety Requirements.
- B. The Superintendent cannot be dual hatted with the Safety Officer. The SSHO shall be employed by the Prime Contractor. The contractor shall provide a Health and Safety Plan prior to beginning any work on the job site.

4.12 QUALITY SYSTEM PLAN (QSP)

- A. The Superintendent cannot be dual hatted with the Safety Officer. The Safety office can be dual hatted with the Quality Manager. The Site Safety and Health Officer (SSHO) may have other duties such as Contractor Quality Control (CQC) System Manager

provided that experience requirements for those positions are met. However, the CQC System Manager and Superintendent shall not be the same person. CQC System Manager, Construction Superintendent and SSHO must be employed by the Prime Contractor.

- B. The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with FAR Clause, 52.246-12, Inspection of Construction. The quality control system shall consist of plans, procedures, and organization necessary to manage all delivery orders to produce end products which comply with the contract requirements. The system shall cover all construction operations, both on site and off site, and shall be keyed to the proposed construction sequence. The Government will hold the project manager responsible for the quality of work on the job and is subject to removal by the CO for non-compliance with quality requirements specified in the contract.

5.0 MEETING, CONFERENCE/TELECONFERENCE REQUIREMENTS

- A. Upon award the Contractor shall attend the following meetings at a minimum: Project Start and Pre-Construction Job Start, 35%, 65%, and/or 95% Design Review, 100% Design Review, Corrected Design Review, Incremental Site Inspection, Test and Balance, Commissioning, Pre-Final Inspection, Final Inspection, and other meetings. The Contractor shall participate in other meetings as needed to facilitate the project's work, and as required by the CO.
- B. Job Start Meeting
 - a. The Contractor shall attend a Project Job Start at TAFB. The Contractor shall review the most updated versions of codes, standards, and policies applicable to this project prior to the meeting. These documents should include TAFB design standards, DoD Unified Facility Criteria, and the Florida Building Code, among others including those referenced in this document. The Contractor shall, at the Project Kickoff and Pre-Construction Meeting, submit a memorandum stating that applicable codes, standards, and policies were reviewed; stating which documents (title, revision number, date, source, etc.) were reviewed, and listing any RFI's that resulted from the review.
 - b. The purpose of these meetings is to introduce project stakeholders, clarify the scope of work, review TAFB policies, and communicate information pertinent to the project. Within the time listed in 4.0A Table 1 - Table of Deliverables of the meeting, the Contractor shall submit minutes for approval.
- C. Contractor will be responsible to take and distribute meeting minutes to all those in attendance.

- D. Minutes shall be distributed to attendees for review, comment, and correction the time listed in 4.0A Table 1 - Table of Deliverables of meeting events.
- E. Unedited digital copies of all Contractor recordings shall be provided to the Government within 3 days of the recording date.

5.1 RED ZONE MEETING

- A. Construction Red Zone Activities: Once construction is 80% complete for each facility or 60 days prior to beneficial Occupancy Date (BOD), the Contractor shall conduct weekly Red Zone Meetings instead of the regular weekly Project Update meetings. Red Zone Meetings shall cover not only the construction progress, but also project close out activities, including commissioning activities, training activities, and the preparation of project close out documents. Meeting requirements and Attendees for the QA Inspector scheduled and conducted meeting can be found at P:\Projects\Templates\Red Zone Briefing.
- B. Provide documentation of Total Building Commissioning in accordance with Specification Section 01 91 00.15 TOTAL BUILDING COMMISSIONING. Include, at a minimum, design phase documentation, commissioning team qualifications, commissioning submittals, commissioning plan and anticipated commissioning schedule.
- C. Builder Template: A builder template will be provided to the contractor to complete for real property items that were installed per the scope of work. The template can be found at P:\Projects\Templates\Red Zone Briefing.

6.0 CONTRACTOR DOCUMENTATION

- A. The Contractor shall also create and submit for approval a 4.0A Table 1 - Table of Deliverables, which includes the documents required by the approved Submittal Register. The Table of Deliverables shall indicate when documents shall be submitted for review and approval. The Contractor shall use AF Form 66, Schedule of Material Submittals. The modified submittal register shall include design phase submittals, construction phase submittals, and project close out submittals. It shall also include copies of any submittal forms likely needed by the construction Contractor. The submittal register shall include the documents listed below, in addition to other documents, as applicable.
- B. Design Package
 - a. The Contractor shall prepare and submit for review and approval a design package. The package shall be submitted at the 35%, 65%, and/or 95% and the 100% design level. (4.0A Table 1 - Table of Deliverables for deliverable dates.) The various required elements of the design package are discussed and detailed in other sections of this document.

- b. The design of the building and the materials selected shall be high quality, durable and easily maintained. All parts of the project site and building design shall be in compliance with the current version of the Tyndall AFB Installation Facility Standards (IFS).
- c. The building exterior design and finishes shall comply with the current Tyndall Air Force Base (AFB) Installation Facilities Standards (IFS). All Exterior Paint and Coatings, Storefront and Entry Doors, Door Glazing, Window Frames and Glazing, Louvers, Hardware, Lighting, Roof Systems and Roofing, Wall Panels, Gutters, Downspouts, Scuppers, Railings and other design related features are to comply with the Architectural characteristic of the Current Tyndall AFB IFS. The 325th CES at Tyndall AFB will make final selections related to all colors and textures for interior and exterior of building from manufacturer's standard color range provided during submittal phase from the contractor. In general, no bronze or brown exterior finishes will be included on the project.
- d. Government Review: The Contracting Officer or the authorized representative may furnish the contractor review comments on the data submitted at the 35%, 65%, and/or 95% and 100% design phase submittals. The Government's review is intended to be limited to functional aspects, with limited technical review of a general cursory nature only. Any review by the Government of technical items shall not be construed to relieve the contractor of responsibility for technically correct and complete documents in compliance with applicable codes, industry standards, and the intent of this SOW. Review comments for compliance with Federal Acquisition Regulations (FAR) will also be provided by the Contracting Officer. Government design review comments will be issued to the contractor within 30 days of design submittal receipt. If any review comment requires clarification and/or amplification to assure compliance, the contractor shall notify the Contracting Officer or the authorized representative in writing. After each review, the contractor will be furnished the comments to be annotated and returned to the Government. The contractor shall furnish these annotated comments to the Government no later than 5 calendar days after receiving the comments. The contractor shall comply with the review comments in the development of data for the next submittal.
- e. The Contractor shall provide 100% Final Design package for approval. All previous Government comments shall be addressed in this design package. No review conference is required for this design submittal. The submittal will be formally approved upon verification that the package is complete, and all previously provided review comments have been addressed.

C. Submittal Register

- a. The Contractor shall use AF Form 66, Schedule of Material Submittals. The modified submittal register shall include design phase submittals, construction phase submittals, and project close out submittals. It shall also include copies of any

submittal forms likely needed by the construction Contractor. The submittal register shall include the documents listed below, in addition to other documents, as applicable. Follow UFGS Specification Section 013300 SUBMITTAL PROCEDURES and respective specification section submittal requirements.

- b. The Contractor shall provide 35%, 65%, and/or 95% and 100% design for review and comment (see 4.0A Table 1 - Table of Deliverables). This package shall be in a substantially complete design state. The Government will perform a design submittal review and provide the Contractor with review comments as defined in Section 4.5 B.2. Contractor shall schedule and attend a final review conference meeting at Tyndall AFB, FL. Formal acceptance of the submittal will be issued when the government comments have been addressed in the construction documents. Refer to the Table 1 for submittal details.
- c. Partial Design Submittal List of Requirements
 - 1. AF Form 3000 documenting the submittal Contents.
 - 2. Table of Contents.
 - 3. Construction documents.
 - 4. Fully populated AF Form 66; Schedule of Material Submittals.

6.1 NOTIFICATION REQUIREMENTS

- A. The Contractor shall also create and submit for approval a 4.0A Table 1 - Table of Deliverables, which includes the documents required by the approved Submittal Register. Table 1 shall indicate when documents shall be submitted for review and approval. The Government shall have up to the time listed in Table 1 to review submittal documents.

6.2 PERMITS

- A. The Contractor shall develop, coordinate, and be responsible for labor, professional services and other costs associated with acquiring any and all required state, local, and other applicable permits; base access (including off-base easements and leases), agreements, licenses, and certificates required to perform and complete the project. Before the start of work, the Contractor shall process an Air Force Form 103, Work Clearance Request, through the local Base Civil Engineer (BCE) office. The Contractor shall comply with applicable permit conditions, environmental protection policies and appended guidelines.
- B. The contractor shall comply with all applicable permit conditions and shall keep all permits “current” until construction is 100% complete. The contractor may be required to provide the permits to the Government as required.

- C. If any compliance/enforcement organization notifies the contractor that a certain permit is not required, the government requests a copy of the official notification, from that organization, that the permit is not required. Documentation must be received by the government prior to work commencing.
- D. The Contractor shall thoroughly investigate the requirements for permitting of air quality, potable water, wastewater, stormwater discharge, NPDES, dredge and fill, local construction for disruptions of vehicular traffic and base utility systems, and other permits during design. The Contractor shall determine permit requirements as part of the Design Phase.
 - a. Some potential permits for the project:
 - a. FDEP/NFWMD Environmental Resource Permitting in accordance with FAC 62-330
 - b. FDEP/NPDES stormwater construction permit in accordance with FAC 62-621
 - c. Environmental Protection Plan (EPP)
- E. The contractor may be required to file their equipment with the FAA, such as cranes. This is a separate requirement from the military construction waivers. If the contractor plans to use a crane over 150ft then there will need to be a military construction waiver as well. The FAA has a tool, link provided below, in which you can input data on the building and it will tell you if you need to file with the FAA or not:
 - a. **To see if your structure is required to file with FAA, please go to:** <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>
 - b. If the tool shows the building needs to be filed go to **OEAAA.faa.gov Filing Instructions:** <https://oeaaa.faa.gov/oeaaa/external/content/instructions.jsp> and follow the instructions for filling with the FAA.

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	<input type="text"/> Deg <input type="text"/> M <input type="text"/> S <input type="button" value="N"/>
Longitude:	<input type="text"/> Deg <input type="text"/> M <input type="text"/> S <input type="button" value="W"/>
Horizontal Datum:	<input type="button" value="NAD83"/>
Site Elevation (SE):	<input type="text"/> (nearest foot)
Structure Height :	<input type="text"/> (nearest foot)
Traverseway:	<input type="button" value="No Traverseway"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes
<input type="button" value="Submit"/>	

6.3 PHOTO DOCUMENTATION

- Photos on the Air Field must be coordinated with the government. Photos on the airfield is controlled by the user and Air Force Policy
- To independently take photos on the Airfield, the Contractor is required to obtain a Photography Pass.
- Photography of any kind must be coordinated through the installation, customer, or facility POC. Photo documentation shall be loaded to the Data Collaboration Site as specified at the project level, as requested by the base POC or directed by the QA Inspector and/or PM.
- If photos are taken, the Contractor shall use a consistent file naming convention for photographs throughout the project. All photographs submitted shall have unique

filenames. Photography of any kind must be coordinated through the QA Inspector. Photography of spaces beyond the SOW is prohibited.

6.4 PROJECT DATA/PROJECT DELIVERABLES

- A. Data may be in the form of spreadsheets, and pdfs.

6.5 PROTECTING UNCLASSIFIED DoD DATA

- A. A DOD safe site may be used for large files transfers.

6.6 SECURITY BREACH NOTIFICATION

- A. A contractor shall notify the government when their files have been infected with a virus that may have been transmitted to the government.

6.7 DATA COLLABORATION SITE

- A. A contractor site may be used as long as the files are scanned prior to upload.

6.8 CONSTRUCTION WORK PLAN

- A. The Contractor shall prepare a Construction Work Plan.

6.9 TECHNICAL REPORTS

- A. Inspection reports and other reports may be required for this project.

6.10 TECHNICAL PLANS AND REPORTS

- A. The contractor shall provide technical plans, specifications, and reports as defined below and implemented at the Project level.

7.0 SITE ACCESS BADGES

- A. Registration Process:

- a. DBIDS Pre-Enrollment: Individual credential recipients will be required to complete the virtual pre-enrollment process and provide the alpha/numeric number and a legible front/back copy of a valid proofing document with photo (DL, Passport, etc..) to their company.
 - 1. Companies will provide required information to their Authorizing Officials (AO).
 - 2. AO's will forward information to the VCC via SAFE files for processing.

- B. The pre-enrollment process can be located at <https://dbids-global-enroll.dmdc.mil/> or by scanning the QR code below.
 - a. This website allows an individual to pre-enroll themselves prior to credential issuance.
 - b. It is mobile/computer friendly.
- C. A member from the VCC will contact the AO to retrieve credentials for qualified personnel. Disqualifying personnel will be denied access.
- D. AO's will disperse credentials to the appropriate contractor representatives.
- E. The average waiting period to receive base access credentials is 7-10 business days.
- F. This pre-enrollment DOES NOT submit information for background checks.
- G. For individuals who have not been processed to receive a DBIDS card for unescorted access.
- H. An escort (DBIDS card holder WITH escort privileges/CAC holder) must arrive with the visitor at the VCC to receive a visitor pass.
- I. Retirees/Dependent ID cards are not authorized to escort contractors. These ID's are only used for benefit purposes. Retiree/Dependent card holders who will be working as a contractor must apply for a DBIDS credential as well.
- J. Initial visitor pass can be issued up to 7 days.
- K. Additional visitor passes after 7 days will require an on the spot background check and they may receive an escorted pass up to 30 days.
- L. An individual may not receive more than two 30 day passes.
- M. What are YOUR responsibilities as a SA/COR?
 - a. Ensure you are on a DBIDS authorization to submit letter w/in our office (updated annually).
 - b. Ensure the contractors complete the DBIDS pre-registration for ALL members needing access.
 - 1. Web link: <https://dbids-global-enroll.dmdc.mil/>
 - c. Ensure the contractor submits a scanned copy of all personnel Driver's License.
 - d. Ensure Sheet 1 of the excel spreadsheet is accurately filled out (to include all 6-digit A/N codes).

- e. Accurately fill out Sheet 2 of the excel spreadsheet (ensure escort privileges are indicated)
 - f. Submit completed spreadsheet and DLs to 325 SFS/VCC
 - 1. Org Box: 325sfs2586@us.af.mil
 - g. Allow 7-10 business days
 - h. Pick up DBIDs cards when complete and distribute to contractors
- N. Individuals requiring access for more than 60 days need to apply for a long term DBIDS credential through the on base unit they're contracted through. The Contractor shall be responsible for obtaining security clearances and badges for each employee, and for requiring each employee engaged on the work to display identification as approved and directed by the CO and Security Forces. Prescribed identification shall immediately be delivered to the CO for cancellation upon release of any employee. All Contractor and sub-contractor personnel shall wear identifying markings clearly defining the company for whom the employee works.
- O. Contractor must submit at least 14 days in advance to 325th CES Project Manager and/or Construction Manager the paper work (base pass ID) required for their personal access.

8.0 WORKSITE ACTIVITIES AND COORDINATION

8.1 REMOTE and/or AUSTERE SITES

- A. All work is performed at Tyndall Air Force Base. There are remote areas of the base.

8.2 COORDINATION OF ACTIVITIES

- A. Pre-proposal Site Visit
- a. Prior to submitting a proposal for this project, prospective Contractors are highly encouraged to attend a site visit, which may provide an opportunity to gain a greater appreciation of both the existing conditions and of the operational environment impacting the project.
- B. Site Design Data: The contractor is responsible for field reconnaissance, surveys, site investigations and testing required to obtain engineering information and design data for the accomplishment of the contract documents for the project in accordance with requirements of this Statement of Work (SOW).

- C. All site visit schedules shall be in coordination with the 325 CES/CENMP Project Engineer and 325 CONS. Any additional site visits required to complete the required designs shall be at the Contractor's expense.
- D. The Contractor must coordinate with the Contracting Officer (CO), 325 CES Engineer, and system stake holders before any initial and/or pre-design is submitted.

8.3 RADIOLOGICAL WASTE, HAZARDOUS MATERIAL AND HAZARDOUS WASTE PERMITTING AND REPORTING

- A. The Contractor shall notify the CO and obtain approval prior to transporting, receiving, and/or disposing of any radiological or hazardous materials or wastes. All such materials or waste shall be handled in accordance with applicable federal, state, and local requirements. The Contractor shall provide all radiological waste, hazardous materials use and hazardous waste disposal documentation to the CO to ensure appropriate and efficient tracking of the Contractor's hazardous material purchases, inventories, use, and releases such as required by the Emergency Planning and Community Right-to-Know Act (EPCRA), Executive Orders, or any installation reporting requirements.

8.4 HAZARDOUS MATERIAL AND HAZARDOUS WASTE

- A. The Contractor will submit TAFB IMT Form 81 (Contractor Questionnaire) and TAFB IMT Form 82 (Chemical Inventory) 7 to 10 days upon issuance of the notice to proceed and prior commencement of work on site. The Contractor should note that Tyndall AFB is required to report chemicals such as (but not limited to) compressed gases, adhesives, aerosol cans, sealants, paints, lubricants, solvents, oils, cleaners, degreasers and pesticides. Copies of manufacturer-specific Material Safety Data Sheets must be attached to TAFB IMT Form 82. After submission, CEIEC will notify the Project Manager and/or CONS of the reportable chemicals and of any special instructions. The Contractor is required to submit TAFB IMT Form 83 (Reporting Entry Form) monthly. CEIEC must be notified if anything changes from the original submittal (i.e. new chemical is added, size of container or unit of issue changes or if the manufacturer changes).

8.5 ENVIRONMENTAL PROTECTION

- A. The All projects shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those effected outside the limits of permanent work must be protected during the entire duration of a project. Contractor shall comply, and assure that all sub-contractors comply, with all applicable federal, state, and local laws and regulations, Air Force Instructions, Engineering Technical Letters, regulations, ordinances, policies and standards related to environmental matters. Copies of local policies and procedures will be provided to the contractor upon request.

- B. The use of materials which have been identified by Governmental agencies as being hazardous or creating potentially hazardous conditions will not be allowed on any project. Specifically, products containing lead, asbestos, polychlorinated biphenyl (PCB), and Ozone depleting chemicals are prohibited. The contractor shall assume a strict and cautious position in responding to reports of other materials, which may be identified as hazardous during construction period.
- C. If any material originally specified or approved for use in the work should become listed as suspected or verified as being hazardous, the contractor shall immediately notify the Contracting Officer and initiate efforts to postpone the installation or use of the material until the matter can be investigated.
- D. All contractors must comply with requirements for the protection of natural resources (e.g. wetlands) and cultural resources (archeological sites and historic buildings).
- E. The contractor shall reimburse the Government for any remediation undertaken to clean up releases by the contractor and for any civil or criminal fines or penalties for any environmental infraction caused by the contractor.

8.6 ENVIRONMENTAL PERMITS

- A. Tyndall Air Force base will be considered a Community Development Center in regards to the requirements for providing a SWPPP with the EPP. The project size will not be used to deviate from this requirement. An exemption form 10-2 is not to be processed at Tyndall Air Force Base.
- B. Obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations is the Contractor's responsibility.
- C. All permits applications will be staffed through 325 CES/CEIE for signature and forward to Florida Department of Environmental Protection or US Army Corps of Engineers as necessary
- D. Typical environmental permitting process for execution methods:
 - a. Design-Build: The prime contractor's A/E shall provide the necessary design work, payment, and application forms to obtain any permits for potable water, sanitary sewer, storm water treatment facility, and 62-621 construction activity as part of the overall contract. The prime contractor is responsible for completion of the necessary as-built permit certifications once the items are complete.
 - b. As-built certifications shall be staffed by the contractor through 325 CES/CEIE for signature and forward to FDEP.

- E. Sanitary sewer and drinking water permits: The A-E shall bear full responsibility to accurately conceive, and design the proposed utility system and/or modifications to the existing system(s) based on acceptable practices for design as required by state and federal regulations.

8.7 NATIONAL ENVIRONMENTAL PROTECTION ACT (NEPA)

- A. In the event that the government has prepared any NEPA Documentation, i.e. Environmental Impacts Statement (EIS), Environmental Assessments (EA), or a Finding of No Significant Impact (FONSI), the designer shall prepare the design so that it is entirely compatible with any and all requirements of the NEPA documents.

8.8 ENVIRONMENTAL PROTECTION PLAN (EPP)

- A. The Contractor shall prepare an Environmental Protection Plan when dealing with Chemical use, hazardous materials, spill prevention, or any other process requiring the EPP. See Appendix E - Environmental Protection Plan Guidance for requirement that should be included in the EPP. File Location: P:\Projects\Templates\Environmental Guidance.
- B. The base Environmental group is requiring a SWPP for all work that disturbs the soil. Provide the plan as part of the EPP.

8.9 FUEL TANKS

- A. For any new fuel tanks, the Storage Tank Manager (325 CES/CEIE) must approve prior to install to ensure that proper registration and coordination with State agencies is performed as needed.

8.10 AIR QUALITY

- A. Contractor working on projects that involve the creation or changing, in any way, of an air pollution source located at Tyndall AFB shall coordinate with 325 CES/CEIE to modify the existing air operating permit or, for a new air source, apply for a construction permit. The cost of any fees involved shall be included in the design proposal.
- B. Air pollution sources include, but are not limited to, external combustion sources (boilers), internal combustion sources (gas, diesel, propane, natural gas – fired generators and other internal combustion driven types of equipment), woodworking shops, paint spray booths, fuel storage and dispensing operations, welding operations, abrasive cleaning, degreasers and emitters of ozone depleting substances and/or hazardous air pollutants (HAPS).

8.11 HAZARDOUS WASTE

- A. The Contractor shall identify, characterize, store and dispose of any hazardous waste generated during work in strict accordance with Federal, State and Air Force guidelines found in the Code of Federal Regulations and Florida's Administrative Code.
- B. The contractor shall comply with all provisions of 40 CFR 260 through 281 regarding the determination, generation, storage, and disposal of hazardous waste including conducting a hazardous waste determination on all wastes generated. The contractor shall stop all work in the event 325 CES/CEIE identifies noncompliance with federal and state regulations and shall correct any discrepancies immediately within 2 hours of notification. All hazardous waste shall be labeled and an inventory management system will be initiated to insure timely removal and proper disposal. Hazardous wastes will not be accumulated in excess of 55 gallons "at or near" the point in which the waste is generated. No on-base disposal will be allowed. If the contractor accumulates more than 55 gallons of hazardous waste, the drums shall be marked with the date they were filled and move to BLDG #6011 (Telephone # 850.283.4780) within three days of the fill date.
- C. All drums will be labeled with a hazardous waste label. The label shall include the proper DOT shipping name, UN or NA, EPA waste number, generator information, and accumulation start date. The label shall be placed on the side of the drum. All drums used to store hazardous waste shall be non-leaking and safe to handle. Contractor shall be responsible for over packing drums that are rusted, dented, or leaking. Drums and/or over-packs shall be provided by the contractor. All drums shall be "new" DOT approved containers.
- D. Hazardous waste transportation and disposal shall be coordinated through 325 CES/CEIE. The contractor shall be responsible for transportation and disposal of all hazardous waste at an EPA approved treatment, storage, disposal facility (TSDF). The transportation and disposal facilities shall be approved by 325 CES/CEIE prior to their use. Manifests shall be signed only by 325 CES/CEIE. Drums shall be disposed of within 90 days of placing the first drop in the container.
- E. Solid, Liquid, and Gaseous Contaminants: The Contractor shall be responsible for the proper disposal of all solid, liquid, and gaseous contaminants in accordance with all applicable Federal, State, and Local codes and regulations, as described elsewhere herein.
- F. Covered Chutes: All chutes for refuse, and the like, shall be covered or of such a design to fully confine the material to prevent dust dissemination.
- G. Management of Liquid Wastes: The contractor shall not dispose of any waste or residual material on the ground or in any storm sewer or drainage system. This includes but is not limited to paints, coatings, solvents, petroleum products, etc. Discharge of any material or diluted material into sanitary or industrial sewer systems shall be coordinated with the Base Environmental Element through the Contracting Officer, and shall be approved by the Base Environmental Element. Waste material for disposal shall be disposed of in accordance

with Federal and State waste regulations and with local base policies. If in doubt, consult with the Base Environmental Element, Tyndall AFB, through the Contracting Officer.

- H. Hazardous Chemical and Liquid Petroleum Products Spill Prevention: All hazardous materials and wastes shall be stored and handled in a manner to minimize the potential for spills. Liquid containers of 55 gallons or greater will be stored on or in a secondary containment compatible with the material being stored, and capable of containing the entire contents of the largest single container. (e.g. A secondary containment pallet capable of holding 60 gallons may have more than a single 55 gallon drum stored upon it.). Spill response materials and tools will be available in the immediate area to contain and control a spill. In the event of a spill every effort will be made to prevent the material from entering a storm water or sanitary sewer inlet. If the spill is a result of negligence or failure to adhere to these requirements the contractor will be solely responsible for the cost of cleanup and restoration of the area. Copies of the Spill Prevention, Containment and Countermeasures Plan (SPCCP) and the Hazardous Material Management Plan (HazMat) will be provided to the Contractor by the Contracting Officer upon request.

8.12 HAZARDOUS MATERIAL INVENTORY AND TRACKING

- A. A letter of review from 325 CES/CEIEC Must be accomplished prior to commencement of work.
- B. The contractor shall submit TAFB Form 81 (Contractor Questionnaire) and TAFB Form 82 (Chemical Inventory) if applicable (within 10 duty days after the Notice to Proceed is issued), for review. The forms should be submitted to the 325 CES Hazardous Materials Office organization mailbox (325CES.hazmat@us.af.mil) and courtesy copy the 325 CONS organizational mailbox (325CONS.construction@us.af.mil).
- C. The Contractor should note that Tyndall AFB is required to report chemicals used such as (but not limited to) compressed gases, adhesives, aerosol cans, sealants, paints, lubricants, oils, cleaners, degreasers, pesticides, Fuels. Copies of manufacturer-specific Safety Data Sheets (SDS) must be attached to TAFB Form 82. These SDSs shall also be readily accessible at the location of each hazardous material.
- D. After submission, 325 CES/CEIE will notify the Project Manager and/or CONS of the reportable chemicals and of any special instructions. As directed by the CO, the Contractor is required to submit TAFB Form 83 (Reporting Entry Form) showing material usage monthly until completion of the contract. A letter from CEIEC will be accomplished with each submittal monthly and/or completion. The CO must be notified of any changes from the original submittal (i.e. new chemical is added, size of container or unit of issue changes or if the manufacturer changes), changes must be submitted using TAFB form 82. An up-dated letter of review indicating changes will be sent from CEIEC to the Contracting Office before the material can be brought onto the installation. Prime contractors shall be responsible to ensure all sub-contractors comply with this section.

- E. The contractor shall identify a single Point of Contact (POC) in writing to the HMMP. Submit changes in writing to the HMMP as they occur.
- F. All containers will be labeled and the Contractor will provide the Environmental Element, the Fire Department, and Readiness Flight with a listing of all Extremely Hazardous Substances (as defined in 40 CFR Part 355, Appendix A), approximate volumes of petroleum based substances (i.e., lubricants, fuels, etc.) and hazardous materials as defined in 40 CFR Part 302.4. This information will be updated any time different materials are brought on base.
- G. Hazardous material encountered by the contractor during work: The contractor shall notify the Contracting Officer upon encountering any material thought to be hazardous that was not generated by the contractor during the work. The Government shall be responsible for characterization, transportation, storage and disposal of the material if it is determine to be hazardous.
- H. Forms - AF 81, 82, and 83 will be submitted for Government review. The AF 83 will be maintained and sent in monthly for Government review.
- I. Fluorescent Light fixtures – Certain Light fixtures may contain PCB ballasts. The light bulbs shall be processed with the recycle center. The base does not allow good light bulbs to be crushed and must be recycled.
- J. Burning: Burning of any type of materials will not be permitted to accomplish the work.
- K. Disposal of waste water will be as specified below:
 - a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. will not be allowed 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 all Federal, State, Regional and Local laws and regulations.
 - b. For discharge of ground water, the Contractor will obtain a State or Federal permit specific for pumping and discharging ground water prior to surface discharging. A permit is required to be obtained if the discharge of surface water flows to Statutory Surface Water. Many drainage ditches meet this requirement unless it already is exempt from the state.

8.13 PETROLEUM, OILS AND LUBRICANTS (POL)/TANKS

- A. Contractors with POL tanks must maintain a maintenance log, reconciliation records and also ensure secondary containment valves are closed. Employees must have proper training for spill cleanup and response. Contractor shall ensure all areas are free of spill

residues. Tyndall AFB's Environmental Compliance POL/Tank Program Manager can be reached at 283-4486.

8.14 RECYCLING

- A. Executive Order 13834 directs all Federal agencies to recycle. All recyclables metal, wire, paper products, cardboard, aluminum, should be turned in to the Tyndall AFB Recycling Center, 283-2267. The recycling center can provide collection receptacles if project generates a large amount of scrap metal.

8.15 STORAGE

- A. Storage areas for material designated for reuse or recycling should be coordinated with the CES Program Manager and the 325 CES/CEIEC Solid Waste Manager. The contractor is responsible for the disposal of solid waste generated for this project and must be managed in accordance with AFMAN 32-7002 and the Tyndall AFB Installation Solid Waste Management Plan.

8.16 DIGGING/EXCAVATION

- A. Prior to any digging an excavation permit is required. An Air Force Form 103, BCE Work Order Request, will be required to ensure that there are no cultural/natural resources or contaminant sites impeding the work. If during excavation any petroleum odors are detected, please contact CEIE immediately so that proper screening can be coordinated.

8.17 LEAD AND ASBESTOS

- A. Any project that requires abatement of asbestos containing material or lead base paint must be performed by a State of Florida Certified Contractor. A 10-day notification must be submitted to Florida Department of Environmental Protection for demolition of any structure and/or abatement of a regulated amount of asbestos containing material. Copies of the submittal must be provided to the Asbestos Program Manager.

8.18 RECORDING AND PRESERVING HISTORICAL AND ARCHEAOLOGICAL FINDS

- A. All items having any apparent historical or archeological interest, which are discovered in the course of any construction activities, shall be carefully preserved. The Contractor shall leave the archeological find undisturbed and shall immediately report the find to the Contracting Officer so that the proper authorities may be notified.
- B. Archaeological monitoring is required for all ground-disturbing activities, including, but not limited to, removal of below grade slab/concrete foundation, sidewalks and other associated pavement, and underground utilities. The archaeologist will be a contractor on site from 325 CES; contractor must verify they are there before any digging is completed.

All ground-disturbing work shall cease and 325 CES shall be contacted if human remains, archaeological deposits, or paleontological remains are encountered at any point during the project.

9.0 PROSECUTING THE WORK

A. Roles and Responsibilities

- a. Key personnel for this project include the CO, QA Inspector, Government Project Manager, Government Inspector, and CxA.
- b. Contracting Officer
 1. The CO is the Government's sole contract decision maker, within the limits of his/her warranted authority. No other entity may legally obligate the Government or direct the Contractor to take action, or cease from performing contracted work in non-emergencies. The CO is the Authority Having Jurisdiction for all issues related to the contracted work. The CO receives, processes, and renders judgment on the RFI's that the Contractor may submit. The CO negotiates the terms of the contract, and any modifications to the contract. The CO is the approval authority, who determines whether and when contract requirements have been met prior to authorizing payment to the Contractor. The CO is assisted by a team of individuals who may include a QA Inspector and Contract Administrators. The CO operates in accordance with laws, including the Federal Acquisition Regulation (FAR).
- c. Government Inspector/ QA Inspector
 1. The Government Inspector is primarily involved with the project during its construction and close out phases. He/she normally spends significant amounts of time reviewing, recording, and reporting the details of the project's progress during daily visits to the construction site. He/she either fulfills the duties of the QA Inspector and the PM or works closely with those individuals. While the Government Inspector will frequently perform inspections, only the CO is empowered to actually accept or reject the Contractor's work.
 2. The QA Inspector advises the CO by monitoring and recording the Contractor's contract performance on a day-to-day basis, and by providing information, which the CO uses to make decisions. The QA Inspector is not empowered to obligate the Government or to direct the Contractor for other than emergency situations, such as those that may impact the safety of personnel. Communication between the QA Inspector and the Contractor will be frequent. The QA Inspector will often visit the project site throughout the period of performance. The QA Inspector may or may not also fulfill the roles of the Government Project Manager and/or the Government Inspector.
 3. The Contractor shall advise the Government 48 hours before performing any concrete pouring, backfilling, wall covering or test operation that will encase or cover his work. For soil compaction tests, a minimum of 72 hours notification shall be required.

d. Government Project Manager

1. The Government Project Manager (PM) is a caretaker, problem solver, and recommender for the project, throughout all of its phases from conceptualization to facility occupancy/usage, and often beyond. In representing the interest of the Government, he/she facilitates communication and coordination among all of the project's stakeholders in order to ensure that the project achieves its objectives. He is aware of the project's needs and requirements. The PM possesses relevant technical expertise. The PM is a key reviewer of submittal documents, and serves as a technical advisor to the CO.
2. Any review by the Government of technical items shall not be construed to relieve the Contractor of the responsibility for producing technically correct and complete documents in compliance with applicable codes, regulations, industry standards, and the contract.

e. Commissioning Agent

1. The CxA shall be a certified, experienced, proficient third-party professional.
2. Provides a copy of the 3rd party certification and/or commissioning report

f. Contractor Superintendent

1. The superintendent must be on the job site at all times while work is in progress. The contractor shall provide in writing the name of the superintendent and the scope of their responsibility, experience, qualifications, and authority to act for the contractor. Clearly define these items prior to approval.
2. If the superintendent is changed this shall be designated in writing immediately, notifying the CO. The contractor shall reinstate the experience, qualifications, and authority to act for the contractor. Clearly define these items prior to approval.

10.0 SITE WORK

A. See Appendix A for work scope.

B. The Contractor shall be responsible for all professional services, A/E design, permits, equipment, labor, tools, materials, and ancillary items necessary to complete the tasks defined by the SOW, including the disposal of all resulting waste materials and project clean up. The performed tasks shall be based on the project description, other data furnished in this SOW, and information covered during kick-off meeting.

10.1 SITE CONTROL

- A. Use construction fencing, and barriers to isolate and secure the construction site as needed based on abatement and security requirements. Provide fence screening, durable sand bagging, and conduct ongoing daily site inspections/housekeeping, and other approved measures to prevent the release of foreign object debris (FOD) outside of the construction site. Use appropriate measures to prevent soil erosion, landscaping degradation, or damage to areas adjacent to the construction site. At a minimum, the contractor shall employ best management practices consistent with the Florida Development Manual, Chapter 6, Storm-water and Erosion and Sediment Control Best Management Practices for Developing Areas.
- B. Provide erosion and sediment control measures that meet the requirements of the FDEP ERP. The downstream side of the sites will be protected from sediment escaping the site with the use of silt fence. The silt fence will be maintained per the direction stated in the construction details.
- C. The existing and proposed catch basins and storm water inlets will be protected with either a dandy bag type of protection or be blocked with a filter sock per the construction details. Each site will have a construction entrance to assist in the removal of dirt from construction vehicle tires prior to exiting on to the public roadways. There is a provision in the plans for the contractor to clean any mud and soil off the public roadways as needed. Each culvert outlet/inlet on the car wash site and each curb cut outfall on both sites will have rock channel protection at each end to prevent erosion of the grassed banks.

10.2 UTILITIES (EXISTING)

- A. The Contractor shall contact the base utilities Contractor (TECO Gas and GCEC) for drawings for the base electrical, water, and natural gas systems. The Contractor shall familiarize himself with drawings and coordinate all connections with the base utilities Contractor.
- B. Any utility lines shown on the record drawings (or made known to the Contractor) and damaged during construction work shall be repaired immediately by the Contractor at no cost to the Government.
- C. Contractor is responsible for coordinating and paying connection fees to Gulf Coast Electrical Company and Gulf Power if necessary for electrical and GCEC for water hook-up.
- D. The sanitary sewer system is owned by Tyndall AFB and managed by Alutiiq.

10.3 LOCATES

- A. It shall be the Contractor's responsibility to verify the exact location, character and depth of any existing utilities, communication lines, electrical components, structures, etc. The Contractor is responsible for contacting the appropriate utility POC's for TAFB's privatized utilities and scheduling terminations for this project and all associated costs with those entities. The Contractor shall request referenced locations and permit at least 10 days prior to scheduled work begin. The Contractor shall exercise due care and take reasonable steps to avoid injury or to otherwise interfere with lines where positions have been provided. The Contractor shall hand dig only, within 5 feet in any direction of a located utility. If sufficient information is not available, the Contractor shall explore prudent techniques, such as hand-dug test holes, to ascertain the precise location of such facilities. The Government will hold the Contractor liable for repairing any damages caused by work under this contract at no additional cost to the Government.
- B. Contractor shall obtain a blank AF Form 103a, BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST from 325 CES Customer Service, 283-4949, prior to any construction activities. Contractors shall request a BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST at least 10 working days in advance.

10.4 OUTAGES

- A. Definition: Utility outages shall be defined as a stoppage in electric, gas, potable water, sewer, chilled or hot water, steam, telephone, Energy Monitoring and Control System (EMCS), or any other similar utility whether serving all or a part of a single facility or of several facilities.
- B. In the event utility outages are required, they shall be coordinated with the CO and QA Inspector Notice of the necessity for an outage shall be provided by the Contractor to the CO, in writing, not less than 14 working days prior to the time of the required outage and written approval for the outage will be issued by the Contracting Officer. All work shall be coordinated and arranged to ensure that the outage will be of minimum duration.
- C. Restoration: Once a utility outage is arranged and work begun, work shall continue until all utilities are restored to the effected facility or facilities.
- D. Cancellation: In the event a scheduled utility outage is cancelled by the Government, notification will be given to the Contractor at least 24 hours in advance of the time for the outage to start. Rescheduling of a cancelled outage must be coordinated with written notification as described above

10.5 DEMOLITION

- A. Perform awarded tasks as defined in Appendix A, Scope of Work.

- a. Protect work area with barricades, warning tape, signs and/or other appropriate methods for the work being completed to ensure the safety of pedestrians and personnel;
- b. Remove and dispose of all demolition and general construction debris from the site (off base);
- c. Perform ancillary efforts required to complete the work in order to provide clean, complete and functional facility meeting the standard of quality for each trade utilized;
- d. Limit disturbance to the natural vegetation, wildlife and base activities to the greatest extent practicable.

B. Salvageable materials

- a. Contractor shall turn in salvageable goods to the appropriate base agency. The Contractor shall separate and turn in recyclable materials to the Base Recycle Center, building 6035, in accordance with base policies. Precious scrap and waste metals (e.g. steel, iron, etc.) shall be recycled and/or disposed in accordance with base policies. The Contractor shall reimburse the Government for any remediation undertaken to clean up releases by the Contractor and for any civil or criminal fines or penalties for any environmental infraction caused by the Contractor. The Contractor shall comply with all provisions of 40 CFR 260 through 281 regarding the generation, storage and disposal of hazardous waste. The Contractor shall submit a hazardous waste management plan to Contracting Officer for approval by 325 CES/CEI. The Contractor shall not commence any work until this approval is obtained. The Contractor shall stop all work in the event 325 CES/CEI identifies non-compliances with federal or state regulations and shall correct any discrepancies immediately within 2 hours of notification by 325 CES/CEI.

C. Disposal of materials

- a. All waste materials generated by any work under this contract shall become the property of the Contractor and shall be handled, transported, stored and disposed of off-base by the Contractor. Such material shall be hauled OFF BASE to a Contractor selected disposal area and disposed of in accordance with applicable Florida Administrative Code 62-701, federal, state and local laws, ordinances, regulations, court orders or other type of rules or rulings having the effect of law. The Contractor shall provide CO the waste manifest tickets for all disposal runs associated with the abatement project.

D. Site excavation and restoration

- a. All excavations other than building foundations, must have site restoration (sod, hydro-mulch, pavement or other scheduled restoration), completed within 14 days (excluding approved rain delay days) after excavation has been initiated.

- b. All borrow material must come from off-base.

11.0 CONSTRUCTION OPERATION SERVICES

11.1 CONSTRUCTION

- A. Upon approval by the CO for all preconstruction submittals, applicable permits, and construction documents; the Contractor may commence on-site construction activities. The Contractor shall conform to all specifically referenced and otherwise applicable requirements during performance of the work as described in the SOW:
- B. The Contractor shall perform a full range of activities to meet all engineering and other construction requirements as described. Requirements include construction, completion of conceptual design and construction, demolition, decommissioning, and emergency response for traditional engineering and construction needs. All completed designs shall be signed and sealed.
- C. The Contractor shall execute engineering tasks as required during construction. The Contractor shall plan, develop cost estimates, perform scheduling, install, construct, and test IAW this project's requirements.
- D. The Contractor shall perform incidental support such as designing, planning, programming, scoping, studying, investigating, evaluating, and consulting on traditional engineering and construction efforts.
- E. The Contractor shall also provide training and operational support to Government and other Contractor personnel regarding the operations and maintenance of equipment, systems, and facilities. The Contractor shall provide operation and maintenance of equipment and systems during both construction phases and the commissioning period prior to acceptance by the Government.
- F. Mobilization: Mobilize equipment, labor, tools, materials, and ancillary items necessary to complete the work defined in the SOW.
- G. Government furnished equipment: NONE
- H. Weapons bunkers are excluded from contract. NO unauthorized entry into these spaces is allowed in any circumstances. Request to enter these spaces must be submitted in writing.
- I. It may be necessary to initiate limited construction activities (such as ordering long lead time major components) prior to acceptance of the completed design. Prior to the completion of the 100% it may be acceptable for the contractor to order materials and equipment. But this shall be contingent on the Contractor obtaining CO approval.

- J. Within the time listed in 4.0A Table 1 - Table of Deliverables of approval of the corrected 100% Design, and IAW the approved Construction Schedule, the Contractor shall commence all remaining construction tasks, as denoted by the mobilization of personnel and equipment to the construction site, and daily progress in accordance with the approved Construction Schedule.
- K. The completion of the full design may include but is not limited to the following: drainage, sidewalks and entryway pavements, parking lot pavements, pavement marking, perimeter fencing, facility structural evaluation, support columns, architectural finishes, brick work, administrative area roof replacement, exterior panels, coatings and paints, exterior lighting, door and doorframe replacement, communications devices, facility HVAC, exterior HVAC equipment replacement and mechanical plant installation, cameras, intrusion detection and access control. In all cases, construction shall only proceed upon approval of the CO.
- L. Within the time listed in 4.0A Table 1 - Table of Deliverables of approval of the corrected 100% Design, and IAW the approved construction schedule, the Contractor shall commence all remaining construction tasks, as denoted by the mobilization of personnel and equipment to the construction site, and daily progress in accordance with the approved Construction Schedule.
- M. It may be permissible to initiate limited construction activities (such as ordering long lead time major components) prior to acceptance of the completed design, but this shall be contingent on the Contractor obtaining approval to do so. The Contractor shall schedule, give 5 working days' notice prior to, then physically attend a Pre-Construction Meeting located at TAFB. At least one member of the Contractor's on site team having supervisory responsibilities shall attend the Pre-Construction Meeting. The meeting will facilitate construction phase ongoing coordination and communication between key stake-holders and the Contractor necessary for a successful construction project.
- N. The Contractor shall accomplish construction tasks in accordance with the submitted and approved Construction Schedule.

12.0 INSPECTIONS

A. Inspection Acceptance

- a. Pre-final inspection, and final inspection acceptance shall be completed by the Contractor with the following additional provisions:
 1. The Contractor shall give the Government a minimum of five (5) working days' notice for all requested inspections. Shorter notifications may impact being granted access or completion of the inspections.
 2. The Contractor shall make sure that the work is ready for all inspections. The presence of an unreasonable number of deficiencies, as determined by the Government Inspector, may cause the inspection to be rescheduled and re-accomplished.
 3. The pre-final inspection date shall be determined by joint agreement of the parties. Any discrepancies noted during the pre-final will be corrected within (5) working days. If the Contractor's Quality Control (CQC) manager determines that the discrepancies have been corrected, a final inspection may then be requested.
 4. The Contractor shall notify the QA Inspector in writing five (5) working days in advance for a final inspection, and shall provide a copy of all operation and maintenance manuals and extended manufacturer/material warranties to the Government before the final inspection.
 5. Pre-final and final inspections and any correction of deficiencies shall be accomplished within the period of performance.

12.1 PRE-FINAL INSPECTION

- A. The Contractor shall conduct a pre-final walk through inspection with Base personnel and publish the pre-final inspection findings in a pre-final inspection (punch list) report for each of the project tasks. The Contractor shall include a draft DD Form 1354, Transfer and Acceptance of Real Property to the QA Inspector for review for each project task.
- B. Partial BOD of the facility may be allowed with CO approval.

12.2 FINAL INSPECTION

- A. The Contractor shall conduct a final inspection with base personnel and publish the findings in a final inspection report for each project task. The inspection shall concentrate on the items identified at the pre-final inspection and recorded in the pre-final inspection (punch list) report. A final inspection shall not be performed until the pre-final inspection (punch list) report has been resolved. At the final inspection, the Contractor shall present a

completed DD Form 1354, Transfer and Acceptance of Real Property to the BCE or other appropriate organization for signature and acceptance, if required.

- B. Final BOD can take place at Final Inspection with CO approval

12.3 DELIVERY AND WARRANTY

- A. The Contractor shall complete all inspection and commissioning requirements prior to final inspection. Following final inspection, the Contractor shall deliver to the Government the warrant documentation. The warranty shall be issued in accordance with FAR 52.246-21.
- B. The warranty shall continue for a period of one (1) year from the date of final acceptance of the work, unless otherwise specified in the individual TO. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date of beneficial occupancy. In the event the Contractor's warranty of this clause has expired, the Government may bring suit, at its expense, to enforce a subcontractor's, manufacturers, or supplier's warranty.
- 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:
 - a. The Contractor's failure to conform to contract requirements or
 - b. Any defect of equipment, material, workmanship, or design furnished.
 - c. 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 one year from the date of repair or replacement.
 - d. The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. 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
- D. Facility 3rd Party Certification
 - a. A CxA is **NOT** required for the RFP process.
 - b. 3rd Party certification is required for items such as LPS, Fire Protection, and some HVAC systems
- E. Training

- a. The Contractor shall conduct both Operator Training and Maintainer Training once all installed systems are operational in accordance with an approved Training Plan.
 - b. The Contractor shall formally train both operations and maintenance personnel in the use and care of the facility systems, which they were responsible for constructing or installing. Training shall be conducted on the project site whenever feasible. The Contractor shall provide “Manufacturer Authorized” training sufficient for TAFB users to obtain certification in the operation, care, maintenance, and/or repair of the installed system(s) whenever the manufacturer(s) offers such training and/or certification. If “Manufacturer Authorized” training is not available, the Contractor shall devise and conduct training, ensuring that training sessions include a means to evaluate the effectiveness of the offered training. Written and recorded quizzes, tests, and training evaluation surveys may be acceptable ways of evaluating training effectiveness, in addition to other methodologies.
 - c. The Contractor shall be responsible for all training support materials and for the logistics associated with training sessions. Training documents to include training agendas, training schedules, training outlines, training manuals, training videos, product manuals, and the like shall be submitted to the CO for approval in electronic format within the time listed in 4.0A Table 1 - Table of Deliverables in advance of training events. Hard copies shall be provided for the individuals who will physically attend training sessions. Electronic copies on computer discs of training materials shall be provided for attendees, in addition to hard copies.
 - d. Following training, class rosters of those who attended shall be submitted electronically to the CO. The Contractor shall also submit training effectiveness records for those who attended any training sessions. The Government reserves the right to perform audiovisual recording of training sessions for future use in conducting refresher training of existing personnel and/or for initial training of incoming personnel. All training documents and records are required project close out submittal documents.
- F. The Contractor shall provide both electronic and hard copy versions of O&M manuals at least to the time listed in 4.0A Table 1 - Table of Deliverables prior to conducting training sessions. Hard copy versions of O&M manuals shall be bound in high quality hard cover binders with dividers separating the various sections. Hard copy versions of O&M manuals shall include computer discs containing the electronic versions of those manuals.
- G. O&M manuals shall be configured to provide ready access to information needed to operate and maintain the facility for years, likely decades, to come. As the important continuity documents that they are, they should summarize the project; describe what was constructed and/or installed; provide equipment schedules, schematics, diagrams, and pictures; include catalog cut sheets; include manufacturer’s product manuals; list start up, operations, shut down, user-level disassembly/reassembly, and repair procedures; as well as include all information necessary to obtain warranty service during the 12 month general warranty

period, and any manufacturer warranty periods. O&M manuals shall include clear and readable pictures of equipment data plates for all installed equipment.

H. O&M manuals are required project close out submittal documents.

13.0 DEMOBILIZATION

- A. The contractor shall decontaminate equipment and facilities, decommission facilities as necessary, and restore the site back to its pre-project condition or as directed in the TO. The contractor shall remove any temporary facilities and implement erosion control measures such as seeding, mulch, sodding, and erosion control fabrics; restore roads, structures and utilities; and plant trees, shrubbery, grasses and other vegetation. The contractor shall document and report on activities and train Government personnel to perform required maintenance, as requested in each Project (See Appendix B).
- B. The contractor shall abide by FAR 52.245-1 Government Property and Defense Contract Management Agency (DCMA) instructions pertaining to disposal of Government Property and reporting through the Plant Clearance Automated Reutilization Screening System (PCARSS) in the removal and disposition of any Government Property during the Demobilization from the project site.

13.1 EMERGENCY RESPONSE

- A. See section 5.8, General Safety Requirements.

13.2 MAINTENANCE AND REPAIR

- A. See section 5.2.1 Construction

13.3 ORDNANCE REMOVAL AND SUPPORT

- A. See section 5.8, General Safety Requirements.

13.4 SECURITY REQUIREMENTS

- B. Weapons bunkers are excluded from contract. NO unauthorized entry into these spaces is allowed in any circumstances. Request to enter these spaces must be submitted in writing.

13.5 GENERAL SAFETY REQUIREMENTS

- A. Workplace: Provide a safe and healthful workplace for employees and the general public while performing the contract work.

- B. Personal Protective Equipment: Supply each employee with personal protective equipment. This equipment includes but is not limited to protection for the eyes, face, head, ears and extremities. Use the proper protective equipment for the work performed.
- C. Roads: Obey the posted base speed limits. Wear Seat belts on base in accordance with AFI 91-207.
- D. Accidents: Report Contractor accidents involving injury to Air Force personnel or damage to Government property to the Base Law Enforcement Desk and the CO.
- E. Safety Regulations: Familiarize yourself and comply with the general safety requirements in accordance with DOL regulations, OSHA 29 CFR Part 1926, and AFI 91-202.
- F. Employers should have a written Emergency Action Plan (EAP), as outlined in 29 CFR 1910.38 or 29 CFR 1926.35. The EAP should include a written lightning safety protocol for outdoor workers.
- G. Required:

STANDARD	SECTION	SUBJECT
OSHA 1910	.132	Personal Protective Equipment
OSHA 1910	.215	Explosives
AFM 91-201		Explosives Safety Standard
OSHA 1926	Subpart H	Material Handling
OSHA 1926	Subpart O	Mechanized Equipment
OSHA 1926	Subpart Q	Concrete Forms
OSHA 1926	.850	Demolition
OSHA		Asbestos and PPE
1910	.1001	
1926	.58	
OSHA		Ladders
OSHA		Welding, Cutting, Brazing
OSHA		Confined Spaces

NEC		Electrical Work
1926	Subpart P	Trenching
1926	.202, .203	Barricades
OSHA		Confined Space Entry
1925	.461	Scaffolding

H. OSHA Inspections: The Contractor shall be subject to no-notice inspections under OSHA program by inspectors of the Department of Labor.

I. Severe Weather:

The Contractor should monitor the weather conditions, ex. Winds higher than 35 knots and lightning within 5 miles, and take proper precautions to protect employees, job site, government property, etc. If severe weather is anticipated the Contractor shall take immediate action to tie down, remove, protect, and/or secure construction materials, equipment and refuse to the satisfaction of the Air Force inspector in order to reasonably assure that Government property will not be damaged. If the Contractor fails or refuses to secure materials and equipment to the satisfaction of the Air Force Inspector, the work will be accomplished by Air Force personnel and the cost thereof charged to the Contractor.

J. Lightning: When thunder roars, go indoors! If you hear thunder, even a distant rumble, get to a safe place immediately. Thunderstorms always include lightning. Any thunder you hear is caused by lightning! NOAA advises that nowhere outside is safe when thunderstorms are in your area. National Lightning Safety Institute, lightningsafety.com

1. The national weather service (NWW) provides lightning reports with a phone call when lightning strikes within 8 miles of the airport, when lightning strikes within 5 miles of the airport, and when an auditory warning is signaled. "ACRP Report 8: Lightning-Warning Systems for Use by Airports [2008]"
2. PLAN in advance your evacuation and safety measures. When you first see lightning or hear thunder, activate your emergency plan. Now is the time to go to a building or a vehicle. Lightning often precedes rain, so don't wait for the rain to begin before suspending activities.
3. IF OUTDOORS...Avoid water. Avoid the high ground. Avoid open spaces. Avoid all metal objects including electric wires, fences, machinery, motors, power tools, etc. Unsafe places include underneath canopies, small picnic or rain shelters, or near trees. Where possible, find shelter in a substantial building or in a fully enclosed metal vehicle such as a car, truck or a van with the windows completely shut. If lightning is striking nearby when you are outside, you should:

- a. Crouch down. Put feet together. Place hands over ears to minimize hearing damage from thunder.
 - b. Avoid proximity (minimum of 15 ft.) to other people.
 4. IF INDOORS... Avoid water. Stay away from doors and windows. Do not use the telephone. Take off headsets. Turn off, unplug, and stay away from appliances, computers, power tools, & TV sets. Lightning may strike exterior electric and phone lines, inducing shocks to inside equipment.
 5. SUSPEND ACTIVITIES for 30 minutes after the last observed lightning or thunder. Remain in the shelter for at least 30 minutes after hearing the last sound of thunder
 6. INJURED PERSONS do not carry an electrical charge and can be handled safely. Apply First Aid procedures to a lightning victim if you are qualified to do so. Call 911 or send for help immediately.
 7. KNOW YOUR EMERGENCY TELEPHONE NUMBERS AVOID the following locations: the high elevations; bare ground; metal; water; solitary trees; open fields; electrical equipment and other conductors. When hopelessly isolated, separate people a min. distance of 15 m (50 ft) to reduce multiple injuries.
- K. Fire Regulations and Preventative Practices: The Contractor shall comply with fire prevention practices as set forth by the National Fire Protection Association (NFPA), other recognized fire prevention agencies, and base regulations.
- L. Protection and Maintenance of Traffic: During construction the Contractor shall provide access and temporary relocated paths as necessary to maintain traffic if required. The Contractor shall maintain and protect traffic on all effected roads/pedestrian paths during the construction period except as otherwise specifically directed by the CO. 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 and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.
- M. Barricades: The Contractor shall erect and maintain temporary barricades to prevent public access to hazardous areas as required by OSHA, Florida Department of Transportation, and/or like Agencies. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas, sidewalks or other work areas are prevented by

construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. The minimum required number of barricades shall be securely placed in a neat and orderly fashion, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night. Barricades shall be maintained in an orderly fashion during the duration of their placement.

- N. Explosive Operated Hand Tools: The Contractor shall comply with OSHA Standard 1910.215(c) when utilizing explosive operated hand tools. Storage of explosive cartridges on the installation shall be in metal containers and limited to one days supply. The Contractor shall provide adequate controls to prevent loss/theft of cartridges used and stored on the installation.
- O. Welding: Welding shall not be performed without first obtaining a welding permit issued by the Base Fire Department.

13.6 GENERATED REFUSE

- A. Refuse: The Contractor shall take positive action to prevent work-generated refuse from entering the sewer system and water bodies. All Contractor generated refuse and waste shall be hauled from the construction site to a disposal area located outside the physical boundaries of the installation. This refuse and waste material shall be hauled in with tight-fitting beds and covers to prevent spillage on roadways and waterways. The construction site shall be kept neat, orderly, and safe for workmen at all times.
- B. All waste materials other than uncontaminated recyclable metals generated by any work under this contract shall become the property of the Contractor and shall be handled, transported, stored and disposed of off-base by the Contractor at the end of each day's work. Such material shall be hauled OFF BASE to a Contractor selected disposal area and disposed of in accordance with applicable Florida Administrative Code 62-701, federal, state and local laws, ordinances, regulations, court orders or other type of rules or rulings having the effect of law. The Contractor shall provide the CO with the waste manifest tickets for all disposal runs associated with the project.
- C. Contractor shall turn in salvageable goods to the appropriate base agency. The Contractor shall separate and turn in recyclable materials to the Base Recycle Center, building 6035, in accordance with base policies. Precious scrap and waste metals (e.g. steel, iron, etc.) shall be recycled and/or disposed in accordance with base policies. The Contractor shall reimburse the Government for any remediation undertaken to clean up releases by the Contractor and for any civil or criminal fines or penalties for any environmental infraction caused by the Contractor. The Contractor shall comply with all provisions of 40 CFR 260 through 281 regarding the generation, storage and disposal of hazardous waste. The Contractor shall submit a hazardous waste management plan to Contracting Officer for approval by 325 CES/CEI. The Contractor shall not commence any work until this approval is obtained. The Contractor shall stop all work in the event

325 CES/CEI identifies non-compliances with federal or state regulations and shall correct any discrepancies immediately within 2 hours of notification by 325 CES/CEI.

14.0 FACILITY CONSTRUCTION PROJECT DELIVERY METHODS

- A. The contractor should plan on having an offsite office location. The government does not guarantee office space will be provided.
- B. The Government does not guarantee utilities will be provided for office space. The use of a generator and porta toilets may be required if office space is provided. To install and office space and laydown yard will require an 813 permit determination and could take up to 60 days to obtain the permit.
- C. The Contractor shall provide their own office space. If the government allows the office space to be at the job site, then the job site office trailer must be skirted. Skirt must be painted with an approved color that complies with the TAFB IFS Exterior Materials, Finishes and Color palette.

14.1 DESIGN-BUILD (D-B)

- A. The D-B Contractor shall be staffed sufficiently to perform acceptably as both the DOR and the Constructor for this contract.
- B. Design services shall develop design documents which identify the necessary requirements for the development of the design. Design documents shall include working drawings, specifications and O&M manuals.
- C. The Contractor shall provide the manpower, equipment, material, services, and transportation necessary to ensure oversight services throughout accomplishment of this construction project. It is the responsibility of the Contractor to establish and maintain open communications between salient authorities associated with accomplishment of this project.
- D. The personnel assigned to the building may be occupying a large portion of the building during the design and construction phases. The contractor will be expected to coordinate closely and with ample lead time any requests for the user to relocate or suspend their mission inside the building. As part of the proposed effort for this DB, the Contractor shall implement means and methods that will limit disturbance to the base activities to the greatest extent practicable during the design-build project duration.
- E. The construction documents provided by the design team shall thoroughly define the renovation effort and meet the standard of quality typical of the professional design industry. Construction efforts shall be in strict accordance with the approved “for construction” design documents. The Contractor shall verify quantities and locations for

all materials associated with the effort. The Contractor shall provide all labor, materials, and equipment required to design and construct this project.

14.2 DESIGNER OF RECORD (DOR)/DESIGN PROJECT MANAGER (PM)

- A. The professional registrations of other US States and territories shall be acceptable, in cases where the State of Florida has previously established regulatory reciprocity with those US States and territories for the purpose of officially recognizing those registrations. It shall be the responsibility of the Contractor to provide documentary evidence of professional registration, and State of Florida recognition of such registration, as applicable. The Contractor is advised that firms conducting professional engineering are required by state law to obtain a Florida Engineering Certificate of Authorization. If applicable, this authorization shall be submitted along with the DOR's evidence of professional registration.
- B. The PM who shall be a registered engineer or architect. This individual is responsible for overall integration of the contractor's team DORs' work. If the DOR is employed by the Contractor, that individual may also function as the Contractor's PM.
- C. Final designs and As-built drawings shall be signed and marked with the official seal of the Designer. Along with any submitted final (100%) designs, the Designer shall also submit a signed and sealed letter, which shall serve as an affidavit that confirms that the design complies with all applicable laws and regulatory standards.

14.3 CONTRACTOR DESIGN REQUIREMENTS AFTER AWARD

- A. See Section 1.1 General Requirements.
- B. Please note that the sole responsibility of ensuring that the design submittals comply with contract documents remains with the Contractor, in accordance with all the contract documents and design criteria referenced therein. The Government retains the right to comment on the design at any design stage, and the lack of Government comments at a given review cannot be used as a basis for the Contractor to fail to address the Government's comments on subsequent reviews, regardless of design stage. Furthermore, approval of incomplete designs will not relieve the Contractor of the responsibility for any error that may exist, and which may require rework or other appropriate adjustment to the contract terms, as determined at the sole discretion of the Government.
- C. Government review, clearance for construction, or approval by the Contracting Officer shall not relieve the Design-Build Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract.

- D. Government review, clearance for construction, or approval of post design construction submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.”
- E. As the designer of record (DOR), contractor has the sole responsibility of ensuring that the design complies with the contract documents.

The following relate to designs with Fire Protection:

- F. A-E Qualifications: It is mandatory that the design organizations (whether the design is accomplished by an in-house design agent or an outside A-E firm) use a registered in Florida fire protection engineer (FPE), experienced in the design of the fire protection systems. System designers shall be qualified IAW UFC 3-600-01.
- G. The project FPE must review the one-hundred percent (100%) design submission of plans and specifications and certify in writing that the design is in compliance with UFC 3-600-01 and all applicable criteria. This certification letter must be submitted with the one-hundred percent (100%) submission.
- H. The design-build contractor’s Qualified Fire Protection Engineer (QFPE) shall review all interior finishes (ceiling, wall, and floor finishes) for compliance with the fire performance classifications of NFPA 101.
- I. In addition to the construction indicated in this RFP, additional smoke/fire rated construction may be required depending on the final design approach proposed by the DOR. Material changes to the design require Government approval prior to acceptance and inclusion into the design.
- J. Base Fire Prevention Program: The Contractor design shall comply with the Fire Prevention Program regulations of the military installation to be serviced under this contract, TAFB, FL. The names of the installation fire protection and fire safety personnel, and the TAFB applicable regulations will be provided during the pre-performance conference.
- K. Fire Regulations and Preventions Practices: The Contractor shall design to comply with fire prevention practices as set forth by the National Fire Protection Association, other recognized fire prevention agencies, and base regulations.
- L. The AHJ as defined by UFC 03-600-01 and NFPA 13 for the Fire Protection has final say on whether the contractor meets the applied codes and standards. Prior to implementing testing of Fire Systems the AHJ shall review and approve the test plan to meet coded requirements. The AHJ shall be notified by the contractor and witness testing.
- M. Security forces is the final review and approval of all security related submittals and test plans.

- N. Fire Safety Deficiencies (FSDs). Refer to UFC 3-600-01, Fire Protection Engineering for Facilities, Paragraph 1-3.2.2, and AFI 32-10141, Planning and Programming Fire Safety Deficiency Correction Projects, for policy regarding the programming of fire protection system work when facility repair costs equal or exceed 50% of the estimated facility replacement cost. This threshold applies in the work's pre-award phase, up to and including project award. See Table 6.1.2 below:

Table 6.1.2 UFC 3-600-01, Fire Protection Engineering for Facilities, Compliance Metrics.

UFC Term	UFC Definition	Abridged UFC rule
Repair	Patching, restoring, painting to maintain sound condition	Work area must comply to UFC
Renovation	Replacement, strengthening, or upgrading not resulting in reconfiguration of space	Work area must comply to UFC
Modification	Reconfigurations	Work area must comply; If 50% area, entire facility must comply
Reconstruction	Reconfiguration effecting exit or shared corridor	Entire building must comply
Addition	An increase in area	Addition must comply
Change in Use	None	Area of change must comply
Vacant Building	None	Entire building must comply before occupancy

14.4 USER REQUIREMENT DESIGN MEETING

- A. The DOR is required to hold and document meetings with project stakeholders to discuss design requirements. Any design issues which arise that are outside the scope of the contract shall be identified by the Design PM and submitted to the CO for review. If a change order is required, instructions will be given through the CO.

14.5 GEOTECHNICAL/HAZARDOUS MATERIAL SURVEY REQUIREMENTS AND RESPONSIBILITIES

- A. A geotechnical survey may be required prior to digging in a potentially contaminated area.
- B. Any contaminated soil discovered a geotechnical survey is the contractor's responsibility for removal and dispose the soil.
- C. Any boring sample that cannot be returned to the bore hole is the responsibility of the contractor for disposal and removal.

14.6 SOIL SURVEY REQUIREMENTS AND RESPONSIBILITIES FOR CONTRACTOR

- A. A hazardous waste determination is required for soil removal.
- B. Payment will not be paid for removal of soil that does not require treatment.
- C. Soil sampling is the contractor's responsibility which includes the hazardous waste determination.
- D. Soil sampling and boring may be required to obtain a proper footer for new construction activities.
- E. All soil prior to removal from the base shall be sampled for contaminants. Refer to WBDG section 02 54 20 for additional requirements. See below for required sampling requirements.
- F. Sampling is required every 400 cy of soil removal in a non ERP.
- G. Sampling is required every 50 cy of soil removal in an ERP.
- H. Testing Requirements for required soil testing for a hazardous waste determination is a TCLP with FLOPRO. This is actually 2 separate tests and can be confusing for contractors.
- I. This is a partial required contaminants list required for sampling:

Table 1—Maximum Concentration of Contaminants for the Toxicity Characteristic

EPA HW No. ¹	Contaminant	CAS No. ²	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	⁴ 200.0

EPA HW No.¹	Contaminant	CAS No.²	Regulatory Level (mg/L)
D024	m-Cresol	108-39-4	⁴ 200.0
D025	p-Cresol	106-44-5	⁴ 200.0
D026	Cresol		⁴ 200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	³ 0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	³ 0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	³ 5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0

EPA HW No. ¹	Contaminant	CAS No. ²	Regulatory Level (mg/L)
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

¹Hazardous waste number.

²Chemical abstracts service number.

³Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

⁴If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.
 [55 FR 11862, Mar. 29, 1990, as amended at 55 FR 22684, June 1, 1990; 55 FR 26987, June 29, 1990; 58 FR 46049, Aug. 31, 1993; 67 FR 11254, Mar. 13, 2002; 71 FR 40259, July 14, 2006]

15.0 GENERAL DESIGN REQUIREMENTS

- A. The Contractor shall submit electronic versions of the following close-out documents for this project: Real Property Accountability Worksheet (DD 1354 Checklist), DD Form 1354 Transfer and Acceptance of DoD Real Property, a comprehensive database of installed system and component information for the BUILDER Air Force condition assessment (Government provided template) and SMS, O&M manuals, warranty documentation, testing reports, commissioning reports including deferred seasonal functional testing/commissioning reports, training documentation, the Project Completion Memorandum, the Warranty Initiation Memorandum, permit applications, permits, chemical usage and tracking documents, hazardous materials documents, geospatial data, As-Built drawings, and other required documents.
- B. Building Commissioning: Provide necessary drawings, specifications, basis of design, and other necessary information at each design submittal and during construction phase for review by the Government's Commissioning Authority (CxA).
- C. Design
 - a. The Contractor shall prepare and submit for approval a draft 35%, 65%, and/or 95%, Final 95% design and a 100% draft design and a Final 100% design. The design shall include a detailed description of the project requirements, a discussion of alternative solutions to technical challenges highlighting advantages and disadvantages, calculations for all structural, electrical, heating, and cooling loads, specifics of selected systems, a detailed Cost Engineering estimate of the Government's cost to operate and maintain the selected systems, and recommended value engineering measures to improve the performance of the facility systems and to reduce the associated costs of those systems to the Government.

- b. The design reveals the designer's rationale and intent. The design shall be configured to allow a reviewer unfamiliar with the project to gain an understanding of the project requirements, the design options that were considered, and the reasons that the selected design options were ultimately chosen. The design may include sketches, photographs, tables, flow charts, or other graphics or media necessary to communicate the intent of the design.
- c. The 35% and 65% design may be waived for small projects
- d. 35% Design

In general, documents which show the essential components of the proposed design and convey that the Contractor fully understands the Task Order Request requirements and that the proposed price includes all required elements of work to complete the project. The documents will include the following minimum information, as applicable to the project; drawings, a list showing sections to be incorporated in the specifications, and any other design components relating to the 35% design as identified in the Task Order (TO). Major mechanical and electrical equipment items shall be shown on the drawings with single line diagrams and appropriate load calculations. All utilities and structures shall be shown with applicable design calculations.

- 1. Draft 35% Design
 - 2. Composed of, at minimum, a Project Specifications, a Design Analysis, Design Drawings, and a Submittal Register.
 - 3. 35% Design Review
 - 4. Meeting agenda.
 - 5. 35% Design Review Meeting Minutes.
 - 6. Government Approval Meeting Minutes.
 - 7. Government 35% Review and Comments
 - 8. Government Approval of Comments
 - 9. 35% Design Document.
- f. 65% Design

Documents building upon the 35% design, including drawings and the complete text of the specifications. The drawings will show an additional 30% progress in all disciplines which may include site plans, floor plans, elevations, wall sections, details, and all other elements as identified in the 35% design. All cut sections and details shall also be shown on the drawings at this time. Any updated or corrected design analyses of architectural, structural, civil, electric, mechanical, and utility systems shall be included. The Contractor shall stop work until the Contracting Officer issues a Notice to Proceed to the next design milestone. For small projects the 35% and 65% design phase may be eliminated and all these attributes will be included in the 95% and 100% design

1. Draft 65% Design
2. Composed of, at minimum, a Project Specifications, a Design Analysis, Design Drawings, and a Submittal Register.
3. 65% Design Review
4. Meeting agenda.
5. 65% Design Review Meeting Minutes.
6. Government Approval Meeting Minutes.
7. Government 65% Review and Comments
8. Government Approval of Comments
9. 65% Design Document.

g. 95% Design

Documents building upon the prior design submittal. This will include, for review, final and complete drawings, specifications, and analysis. All project requirements are identified in the most current TO revision, site visit minutes, modifications, or review comments must be incorporated. The Contractor shall stop work until the Contracting Officer issues a Notice to Proceed to the 100% design.

1. Draft 95% Design
2. Composed of, at minimum, a Project Specifications, a Design Analysis, Design Drawings, and a Submittal Register.
3. 95% Design Review
4. Meeting agenda.
5. 95% Design Review Meeting Minutes.
6. Government Approval Meeting Minutes.
7. Government 95% Review and Comments
8. Government Approval of Comments
9. 95% Design Document.

h. 100% Design

Documents building upon the prior design submittal which include final contractor accomplished corrections based on the Government's review of the prior design documents.

1. Draft 100% Design
2. Composed of, at minimum, a set of Project Specifications, a Design Analysis, the Design Drawings, a Submittal Register, Test and Balance (TAB) Plan, a detailed Construction Schedule, a Construction Health and Safety Plan, and a Training Plan for system operators and maintainers.
3. 100% Design Review Meeting
4. Meeting agenda.
5. 100% Design Review Meeting Minutes.

6. Government Approval Meeting Minutes.
7. Government 100% Review and Comments
8. Government Approval of Comments
9. Material Submittals
10. 100% Design Document.

D. Design Analysis:

- a. The Contractor shall prepare and submit for approval a 35%, 65%, and/or 95% and a 100% Design Analysis (DA). The DA shall include a detailed description of the project requirements, a discussion of alternative solutions to technical challenges highlighting advantages and disadvantages, calculations for all structural, electrical, heating, and cooling loads, specifics of selected systems, a detailed Cost Engineering estimate of the Government's cost to operate and maintain the selected systems, and recommended value engineering measures to improve the performance of the facility systems and to reduce the associated costs of those systems to the Government.
- b. The DA reveals the designer's rationale and intent. The DA shall be configured to allow a reviewer unfamiliar with the project to gain an understanding of the project requirements, the design options that were considered, and the reasons that the selected design options were ultimately chosen. The DA may include sketches, photographs, tables, flow charts, or other graphics or media necessary to communicate the intent of the design.
- c. As specified in the TO SOW, design calculations may be required, to include code references, as applicable for each discipline, to show compliance. The following is a list of calculations (but not limited to) which might typically be required under this contract. A few examples of items required for the design are included below
- d. Civil/Site work:
 1. Sizing and grades for sanitary & storm sewers
 2. Sizing for water mains & services
 3. Sizing for gas mains & services
- e. Structural
 1. Foundation sizes and reinforcing
 2. Superstructure framing
 3. Wind & snow loading analysis
 4. LL (Live Load) & DL (Dead Load)
 5. Wall sizes and reinforcing
 6. Equipment supports
 7. Elevated platforms
 8. Floor member sizing / reinforcing

9. Lintel sizing
 10. Sizing for roof joists & decking
- f. Mechanical:
1. Cooling and heating load analysis
 2. Pump sizing and pump curves
 3. Pipe sizing
 4. Duct size
 5. Static pressure loss
 6. Control valve sizing
 7. Psychometric chart analysis
 8. Fan sizing and fan curves
 9. Heat exchanger selection
- g. Electrical:
1. Load calculations
 2. Short circuit calculations
 3. Lighting level calculations
 4. Branch circuit calculations
 5. Motor feed requirements
 6. Panel sizing
- h. Fire Protection:
1. Sprinkler layout and pipe sizing
 2. Pressure drop calculations
 3. Alarm battery voltage drop calculations
- i. Others as applicable to a specific project and identified in the TO SOW.
- E. Calculations:
- Calculations shall be shown in the 35%, 65%, and/or 95% design submittal and in the 100% design submittal. All calculations used to select equipment such as valves, pumps, motors, fans, transformers, switches, circuit breakers, and/or lighting fixtures shall be shown. Software programs may be used to generate calculations; however, the design shall address the appropriateness of any selected program(s), as well as provide a listing of software program inputs and software program generated outputs.
- F. Specifications
- a. The Contractor shall draft United Facilities Guide Specifications (UFGS) compliant specifications and submit them for approval. The Contractor shall submit

- specifications at the 35%, 65%, and/or 95% design level and the 100% design level. The completed specifications shall be provided to the CO in Portable Document Format (PDF), and in unprotected editable Microsoft Word (RTF, DOC, or DOCX) formats.
- b. Technical specifications have not been provided. The Design Build Contractor's Designer of Record shall develop construction document technical specifications for all areas of work using the UFGS system in conformance with the RFP.
 - c. Unless otherwise noted or required in this Request for Proposal, materials and methods allowed by the unedited UFGS specifications will be allowed to be incorporated into the project when in compliance with other listed criteria. The DBC shall not materially revise the specifications such that the specification does not reflect the intent of the unedited specification without prior approval from the Government. The DBC will edit the specifications for completeness and project applicability. The specification will be edited to remove all materials that will not be used such that the edited specification reflects only those products intended to be used on the project. This editing process must be completed prior to first submission of the specification. Unless a more stringent warranty is identified in the RFP include warranties as described in the UFGS Specification. Do not reduce warranty requirements recommended in the guide specification. If no UFGS Specification exists for a component to be incorporated into the design the Contractor will develop a product specific specification using the UFGS format to describe in detail the item to be incorporated into the design. All custom specifications will be developed in the coded format of the UFGS standard system, including Parts 1, 2 and 3.
 - d. For fire alarm projects, please refer to the base Fire Protection Engineer or the Fire Department for the latest version of the fire alarm and mass notification specification.
 - e. Electronic sets of the specifications index for those sections, as well as other specification sections appropriate to the anticipated work and added by the Contractor, shall be included in the 35% design or the first design phase submitted with the Contractor's offer. The contractor shall electronically edit the specification sections, previously identified, to correspond with the work proposed in the project. Electronic sets of edited specifications (or as otherwise required by the TO SOW) shall be provided with each intermediate and final design submittal.
 - f. The bottom of each page shall have the following relative information indicated in the format noted:
 - 1. Project Number Section Number
 - 2. Page Number of the Section
 - 3. When the last page of a section is encountered, the following shall be noted (centered) after the last paragraph: END OF SECTION

- e. The use or specification of materials not made in the United States is prohibited. Only American made products shall be used in this project, except as identified in clauses FAR 52.225-9; Buy American--Construction Materials, and FAR 52.225-11, Buy American-- Construction Materials under Trade Agreements, as applicable under FAR 25.1102.
- G. Material Submittals shall be approved prior to the 100% design final submittal. 4.0A Table 1 - Table of Deliverables requires the Material Approval (AF Form 3000) to be provided at the 95% Final design. These submittals will clearly show that the design specifications are met.
- H. The Contractor shall coordinate with the Base Civil Engineer (BCE) or his appointed representatives to ensure that any applicable Tyndall AFB specific code and regulatory requirements are captured in the completed specifications set.
DOR
- I. Professional Certification – The process of affixing a seal or statement to a drawing or design document to indicate that the work to which it is affixed has been performed by a person licensed as a professional, in that area of expertise, in the state of Florida.

15.1 GOVERNMENT DESIGN REVIEW

- A. The Government will review all design submittals for conformance with the requirements of the contract. Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.
- B. The Government's review is not to be considered a quality control review; the Contractor shall provide his own internal quality control as required by Contractor Design Quality Controls Plan (DSQP) before the design is submitted to the Government. The Government's review or acceptance does not relieve the Contractor of his responsibility to provide a safe, functional project in accordance with the terms of the contract.
- C. If the Government's review results in comments, the Contractor shall respond to each comment with a response that clearly indicates what action will be taken. Comments that, in the Contractor's opinion, require effort outside the scope of the contract will be clearly indicated as such by the Contractor, and the issue shall be documented in writing then submitted to the CO for consideration and determination. The Contractor shall not proceed with work outside the contract as determined by the CO unless a modification to the contract is executed.
- D. After the first round of design comments and the initial comments have not been resolved the design is to be disapproved with comments. The design cannot move forward until an agreement has been reached with CO approval for disapproved designs. Administrative issues like spelling and formatting can be approved with comments. When portions of the design such as the specifications and design analysis have not been submitted with the

design will be disapproved with comments. Resubmittal of the design stages 35%, 65%, 95%, and 100% will not be considered a delay by the government.

- E. Disapproval of material submittals that do not clearly show the specifications are met or the design does not have a specification requirement that needs to be included in the design is not considered a delay by the government. Submittal comments must be resolved before the material submittals can be accepted.
- F. Materials and equipment shall not be ordered that does not have an approved submittal and a design specification. Failure to provide documentation can result in removal of the material at no cost to the government.
- G. Approval is required for any proposed deviation from the accepted design. Failure to coordinate the approval of variations and deviations may result in the Government rejecting and requiring removal of work at no additional cost to the Government.
- H. Per the Contract the Contractor is the Designer of Record (DOR) per FAR 52.236-23. The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, and drawings, specifications, and other services furnished by the contractor. The government will review and accept the attached documents for technical compliance of the Contractor supplied Design Analysis/Basis-of-Design for conformance with the contract SOW, per FAR 52.236-21 Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of the contract. The contractor warrants to the government that the associated plans and specs are in complete compliance with the Design Analysis; as such the contractor owns all details of the design and is liable for any and all errors or omissions. It is the Contractor's responsibility to insure all aspects of the design are in compliance with the Bases-of-Design and associated documents; continuous construction inspection is the responsibility of the Contractor. The government reserves the right to inspect and test any phase of work without relieving the Contractor of any responsibility for contract compliance.

15.2 AS-BUILT DOCUMENTATION

- A. Drawings shall be prepared on AutoCAD release 2008 or later format. Drawings shall be delivered in hard copy, standard black line quality paper, at review stages. One of the drawings provided to CENM shall be full size. All drawings will utilize the Tri-Service Spatial Data Standards (TSSDS) Version 1.8, for compliance with the installation standards. Digital copies of all drawings for project files and CES review shall be provided to the Contracting Officer for project at the 35%, 65%, and/or 95% and 100% design phases. Approved, For Construction plan set shall be provided digitally and in hard copy with the designer of record's signature and seal. When the 100% design drawings are accepted, the contractor may then begin construction. As-Built drawings shall be submitted to the government upon completion of construction and shall be reviewed for accuracy. Upon approval, the contractor shall provide electronic versions of the As-Built drawings in both

AutoCAD 2008 or later, and as .PDF to the government on CD. The drawings shall be drawn to appropriate scales and dimensioned completely and accurately. Extensive explanatory notes on the drawings should be held to a minimum. Dimensions shall be shown in Standard English units. Standard building material indications and symbols for architectural items and for mechanical and electrical equipment shall be used to the greatest extent possible.

- B. Accurate As-Built drawings denoting the details of what was actually constructed or installed shall be created from day-to-day field notes of deviations or changes from the design drawings. Where the actual construction or installation differs from the design, the As-Built drawing set shall accurately record what was built/installed on all applicable drawings. In the case of any contract modifications associated with the construction effort, the Contractor shall be responsible for adding pages to the As-Built drawing set as needed to fully describe what was physically built or installed.
- C. The Contractor is responsible for maintaining records of such deviations or changes, including those generated by any subcontractors, on the project site. These records may take the form of a master set of manually marked-up red line record drawings. The Contractor shall provide access to these records to the CO or QA Inspector upon request, without prior notice. All field notes on design drawings shall be printed or written legibly in red ink, so that they are clearly readable by others..
- D. Delays in delivering accurate As-Built drawings in accordance with the 4.0A Table 1 - Table of Deliverables and/or the Submittal Register may subject the Contractor to the payment of Liquidated Damages. Inaccuracies of the As-Built drawings, or missing portions of the As-Built drawings, shall be considered to be a defect and shall be corrected by the Contractor at his cost.
- E. The minimum drawing scale on drawings shall be $1/4" = 1'-0"$. Preliminary electronic As-Built Drawings shall be submitted with an AF Form 3000, Material Approval Submittal, for Government Approval. The submission shall precede or be concurrent with the request for a Pre-Final Inspection.
- F. Design Drawings
 - a. As-Built drawings are required project close out submittal documents.
 - b. The Contractor shall prepare and submit for approval a 35%, 65%, and/or 95% set of design drawings and a 100% set of design drawings. Regardless of the software used to prepare the drawings, the submitted unprotected and fully editable drawing files shall be wholly compatible with the most recent version of AutoCAD. The Contractor shall also submit a PDF version of the complete drawing set, in addition to 1 set of bound hard copies. The drawings shall be configured to allow a competent construction Contractor unfamiliar with the project to propose, plan, and fully execute construction without additional design or excessive change orders.

- c. At a minimum, the Contractor shall submit drawing pages covering the following: Title Page, Index of Drawings, Legend of Symbols and Abbreviations, Construction General Notes, Demolition Plan, Site Plan, architectural plans, structural plans, utilities plans, mechanical plans, plumbing plans, fire protection and life safety plans, electrical plans, and lighting plans. The Contractor shall submit other drawing pages as needed to completely convey the design intent to a competent construction Contractor.

G. Project Closeout Documentation

- a. Submissions of project close-out documents are required project tasks. The Contractor shall include these tasks in his Contract Progress Schedules and his Contract Progress Reports. The project will not be considered to be completed until all required project close out documents have been submitted and approved.
- b. The Contractor shall submit electronic versions of the following close-out documents for this project: Real Property Accountability Worksheet (DD 1354 Checklist), DD Form 1354 Transfer and Acceptance of DoD Real Property, a comprehensive database of installed system and component information for the Builder Air Force condition assessment and SMS, O&M manuals, warranty documentation, testing reports, commissioning reports including deferred seasonal functional testing/commissioning reports, training documentation, the Project Completion Memorandum, the Warranty Initiation Memorandum, permit applications, permits, chemical usage and tracking documents, hazardous materials documents, geospatial data, As-Built drawings, and other required documents.
- c. A completed builder spreadsheet shall be provided by the contractor to assist real property
- d. The Contractor shall provide both electronic and hard copy versions of O&M manuals at least to the time listed in 4.0A Table 1 - Table of Deliverables As-Built Design Documents prior to conducting training sessions. Hard copy versions of O&M manuals shall be bound in high quality hard cover binders with dividers separating the various sections. Hard copy versions of O&M manuals shall include computer discs containing the electronic versions of those manuals.
- e. O&M manuals shall be configured to provide ready access to information needed to operate and maintain the facility for years, likely decades, to come. As the important continuity documents that they are, they should summarize the project; describe what was constructed and/or installed; provide equipment schedules, schematics, diagrams, and pictures; include catalog cut sheets; include manufacturer's product manuals; list start up, operations, shut down, user-level disassembly/reassembly, and repair procedures; as well as include all information necessary to obtain warranty service during the 12 month general warranty period, and any manufacturer warranty periods.

O&M manuals shall include clear and readable pictures of equipment data plates for all installed equipment.

- f. For those projects which include mechanical/electrical/specialty systems requiring periodic or routine maintenance, the Contractor shall prepare and submit operation and maintenance manuals in one (1), bound, hard copies as well as one (1) electronic copy (or as otherwise required by the TO SOW). As a minimum, the manuals shall contain technical data, diagrams, parts listings, maintenance instructions, and the name, address, and phone number of the manufacturer and servicing/replacement parts source. These manuals shall be submitted prior to the final inspection.

H. GPS Data

- a. When required: The Contractor shall furnish survey data showing the horizontal location of all site improvements constructed under the TO to include, but not limited to, buildings, pavements, utilities, and all similar construction. Site improvements such as buried utility lines require one survey shot every 50' of straight line, at each turn or bend in the line, hydrants, fittings, valves, valve boxes, curb stops, relocations and crossings of existing utilities, structures, or other appurtenances relocated or effected by the construction. Also provide elevations for the topmost point of visible appurtenances such as fire hydrants and valve boxes. The Contractor shall use conventional surveying methods such as total station, Global Positioning System (GPS) for field data collection at an accuracy of +/-2cm. Data delivered in a format other than ESRI geodatabase must have an external spatial reference (.prj) file attached that specifies the parameters of the coordinate system in standard ERSI format. All electronic data deliverables shall be on a CD-ROM in a format that conforms to the latest version of both the CADD/GIS Technology Center's Spatial Data Standards and A/E/C CAD Standards. These standards can be found at <https://cadbim.usace.army.mil/>

15.3 RESPONSIBILITY FOR ERRORS OR OMISSIONS

- A. It is the sole responsibility of the Contractor to ensure that submittals comply with the contract documents. Government review, clearance for construction, or approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract.
- B. The Government will review all design submittals for conformance with the requirements of the contract. Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.
- C. The Government's review is not to be considered a quality control review; the Contractor shall provide his own internal quality control as required by Contractor Design Quality Controls Plan (DSQP) before the design is submitted to the Government. The

Government's review or acceptance does not relieve the Contractor of his responsibility to provide a safe, functional project in accordance with the terms of the contract.

- D. If the Government's review results in comments, the Contractor shall respond to each comment with a response that clearly indicates what action will be taken. Comments that, in the Contractor's opinion, require effort outside the scope of the contract will be clearly indicated as such by the Contractor, and the issue shall be documented in writing then submitted to the CO for consideration and determination. The Contractor shall not proceed with work outside the contract as determined by the CO unless a modification to the contract is executed.
- E. Per the Contract the Contractor is the Designer of Record (DOR) per FAR 52.236-23. The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, and drawings, specifications, and other services furnished by the contractor. The government will review and accept the attached documents for technical compliance of the Contractor supplied Design Analysis/Bases-of-Design for conformance with the contract SOW, per FAR 52.236-21 Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of the contract. The contractor warrants to the government that the associated plans and specs are in complete compliance with the Design Analysis; as such the contractor owns all details of the design and is liable for any and all errors or omissions. It is the Contractor's responsibility to insure all aspects of the design are in compliance with the Bases-of-Design and associated documents; continuous construction inspection is the responsibility of the Contractor. The government reserves the right to inspect and test any phase of work without relieving the Contractor of any responsibility for contract compliance.

16.0 ARCHITECTURAL AND STRUCTURAL

16.1 BASE WIND SPEED REQUIREMENTS

- A. The scope of work is based on the Tyndall Wind Speed Memorandum dated October 19, 2019. The wind speed memo can be found out www.tyndallifs.com. HVHZ FBC, section 1602.2 criteria for Miami Dade County Risk Category III and IV Buildings and Structures meeting 186 mph. Based upon our AF Structural SME recommendations and in alignment with the SecAF directed Severe Weather Readiness Assessment recommendations, the Tyndall PMO will use the UFC 3-301-01 and the following Tyndall design wind speeds based upon Risk Categories III-V. RC III 165 mph and RC IV 170 mph (Risk categories are defined by UFC 03-301-01, Table 2-2).
- B. All exterior building envelope materials such as, but not limited to windows, glazing, roofing systems, concrete masonry unit or metal panel walls, and doors shall have a current Miami-Dade Notice of Acceptance (NOA) and installed to HVHZ standards that match the specified wind requirement. Our construction industry partners shall continue to have the option of submitting test results or drawings sealed by a Professional Engineer stating

conformance with HVHZ standards in lieu of materials pre-approved by Miami-Dade County.

- C. While we should always use our Unified Facilities Criteria as the basis for all our facilities designs, we will also integrate the best practices from the Florida Building Code (FBC) High-Velocity Hurricane Zone (HVHZ) into this design guidance to further improve facility resiliency at Tyndall. Other details from the memorandum may apply as well.
- D. Risk Category III is applicable to the SOW for the Car Wash and must meet a 165 mph wind speed. Support structures include but are not limited to porches, awnings, canopies, etc. The building envelope is not required to be brought up to those standards at this time. The repairs and new installation work must meet all current codes and standards.
- E. Exterior Windows, Curtain Walls, Storefronts, Doors, and Louvers Architectural Design Criteria:
Approved products with test reports for use in the FBC HVHZ and their respective Florida Product Approval (FPA) that has been tested to the FBC standards of TAS 201, 202, and 203.

16.2 HVHZ WINDOWS AND STOREFRONTS PERFORMANCE REQUIREMENTS

- A. Wind loads: Provide storefront system; include anchorage, capable of withstanding wind load as indicated on the Structural Drawings. The design pressures are based on the FBC for the geographical location of Miami-Dade County.
- B. Air Infiltration: Test the specimen in accordance with ASTM E 283. Air infiltration rate shall not exceed 0.06 cubic foot per minute per square foot (0.3 liter per second per square meter) at a static air pressure differential of 6.24 psf (300 Pa).
- C. Water Resistance: Test the specimen in accordance with ASTM E 331. There shall be no leakage at a minimum static air pressure differential of 12 psf (575 Pa) as defined in AAMA 501.
- D. Uniform Load: Apply a static air design load of 65 psf (3,112 Pa) in the positive and negative direction in accordance with ASTM E 330. There shall be no deflection in excess of L/180 of the span of any framing member. At a structural test load equal to 1.5 times the specified design load, no glass breakage or permanent set in the framing members in excess of 0.4% of their clear spans shall occur.
- E. Windborne-debris-impact-resistance Performance: Test in accordance with ASTM E 1886 and information in ASTM E 1996 and/or AAMA 506.
 - a. Large-missile Impact: For aluminum-framed systems located within 30 feet (9.1 meters [m]) of grade.

- b. Small-missile Impact: For aluminum-framed systems located more than 30 feet (9.1 m) above grade.
- F. Exterior glazing shall be large impact-rated in compliance with FBC Chapter 14; maximum glass sizes as per ASTM E1300; low thermal emissivity-type, insulated and tinted. Dry glazing gaskets are in accordance with ASTM C864 or ASTM C509 per FBC Chapter 14.

16.3 DESIGN FLOOD ELEVATION

The TAFB Memorandum for Design Flood Elevation (DFE) dated June 05, 2019 defines as:

- A. For the Gulf side (generally southwesterly of Highway 98) the DFE is 19' above today's mean sea-level (MSL); and
- B. For the East Bay side, generally northeasterly of Highway 98, the DFE is 14' above MSL

16.4 ROOF ACCESS

- A. When required, roof access will be provided by building-mounted external ladders secured by locked cages or similar mechanisms. Access to keys will be limited to appropriate facility users, maintenance personnel, and emergency responders. Reference request for deviation F325CES-E20-04 10/30/2020.

16.5 EXTERIOR AND INTERIOR DOORS INCLUDING OVERHEAD/SECTIONAL

- A. At exterior locations provide locksets of full stainless steel type 302 or 304 construction including fronts, strike, escutcheons, knobs, bolts and all interior working parts. Marine Grade I, fully non-ferrous. Door lock cores will be best with 7 pin cylinders. The Flight line side uses "K" keyway and Base Support side uses "J" keyway.
- B. Hinges for exterior doors should be stainless steel with BHMA 630 finish. At exterior locations provide locksets of full stainless steel type 302 or 304 construction including fronts, strike, escutcheons, knobs, bolts and all interior working parts. Marine Grade I, fully non-ferrous.
- C. Doors must be made of 14-gauge galvanized steel sheet for exterior locations and 16-gauge for interior locations. Exterior frames must be prefinished and interior frames can be shop-primed and shop-finished. Steel doors and frames must comply with ANSI/SDI 100 and SDI 105.
- D. Steel doors and frames must be fabricated from galvanized steel sheets that comply with ASTM A 653/A 653M, commercial steel, or ASTM A 642/A 642M, drawing quality, with A60 or G60 coating designation, mill phosphatized.
- E. Exterior hollow metal steel doors must be Grade IV, extra heavy-duty, Model 2, and insulated, seamless design.

- F. Interior hollow metal steel doors must be Grade III, extra heavy-duty, Model 2, and insulated, seamless design.
- G. Exterior swing doors must swing out to allow the frame rabbet to act as a stop that will prevent doors from blowing in during high velocity winds. Having door seals compress by the door against the door frame side allows the rabbets to resist water.
- H. Doors must have Americans with Disabilities Act (ADA)-compliant weather-sealed thresholds and automatic door bottoms or door shoe with drip. Door thresholds must have concrete recessed seats and Type 316 stainless-steel door sill pan flashing with end dams, rear leg, and turned-down front leg. The top of door must have Type 316 stainless steel drip with hook at top of exterior door and door frame.
- I. Rollup doors must be a minimum of 20 gauge with 24 gauge trim. Heavy duty framing is required. The doors must meet missile test and ASTM E1886 and ASTM E1996 (HVHZ /FBC). Provide explosion proof motors and controls where hazardous vapors may be encountered

17.0 STRUCTURAL INTERIOR DESIGN (SID) DESIGN SUBMITTALS

- A. The Structural Interior Design (SID) includes selection, specification and installation of the building related finishes, materials and colors. SID materials, finishes, and colors shall be reviewed by the Government for compliance with the awarded RFP. SID submittals will run concurrent with the Architectural submittals and be provided to the base per the UFC for SID binder requirements. The SID binder for submittal to Base CE for review and approval.
- B. As part of the SID package, The Contractor shall provide exterior rendered perspectives (two minimum-(front and back) of the exterior color scheme for the TAFB Architectural Review Board approval.
 - a. Renderings should be done in a render program like V-Ray, etc. Which will show the material selections reaction to the sun.
 - i. Use June 21, Summer Solstice at to render.
 - ii. Height of the camera should be 6'-0" for the front entry view.
 - iii. Provide, unframed 11 x 17 sized rendering printed on matt/semi-gloss paper.
 - iv. Borders on the printed 11 x 17 should be 1/4" maximum.
 - v. Provide digital files in .pdf, .jpeg and .tiff file types.
 - vi. Views should be rendered at minimum 600 dpi and maximum 1200 dpi.
 - vii. Do not "Photoshop in" trees, cars, people, etc.....just the building finishes.

18.0 LIGHTING:

- A. Luminaries/ Interior Lighting - Lighting fixtures must be LED, and have a correlated color temperature of 4,000 degrees Kelvin with a Color Rendering Index (CRI) of 90 CRI. All lighting fixtures must have the same correlated color temperature.
- B. Luminaries/ Exterior Lighting for non-Turtle lit areas of TAFB - Lighting fixtures must be LED, and have a correlated color temperature of 4,000 degrees Kelvin with Color Rendering Index (CRI) of 80 CRI or higher. All lighting fixtures must have the same correlated color temperature.
- C. Turtle Lighting. Wildlife Preservation Lighting for all exterior lighting for Tyndall AFB, “south” of US Highway 98.
 - a. Provide LED light with an “Amber” color. of 560 nanometers (nm) wavelength.
 - b. “Turtle Lighting to be certified by Florida Fish and Wildlife Conservation Commission. <https://myfwc.com/conservation/you- conserve/lighting/criteria/certified/>
- D. Dimmable LED lighting may require the fluorescent light dimmers to be replaced as part of the LED light replacement. This would be considered part of the work scope for the LED light replacement.
- E. Interior LED lighting may require the replacement of battery backup lighting. This would be considered part of the work scope for the LED light replacement.
- F. Light sensors may require replacement to meet the current Siemens Appendix H memorandum. This would be considered part of the work scope for the LED light replacement and/or Siemens upgrades.
- G. Luminaries/ Emergency Lighting - Lighting fixtures must be LED.
- H. Fire Protection Strobes shall be white.

19.0 PLUMBING:

- A. See Appendix A. for specifics to the project.

20.0 MECHANICAL

- A. See Appendix A. for specifics to the project.
- B. A Memorandum AFCEC/CO: The 325th Civil Engineer Squadron requests that Trane be the single manufacturer for Heating, Ventilation, and Air Conditioning (HVAC) chiller

systems at Tyndall AFB. Trane Chillers and HVAC above 10 ton are required to be Trane equipment. If Trane is currently installed for smaller units then they are to be replaced with Trane equipment.

20.1 HVAC CONTROLS

- A. Justification and Approval (J&A) for Other Than Full and Open Competition - Tyndall AFB Reconstruction, Facility Related and Industrial Control Systems. The Appendix provides current guidance for this section. The Sept 2021 version of the document shall be used.
- a. The use of Siemens brand name programmable controllers will be required for all projects that require a connection to the identified (existing or currently under development) installation networked facilities control and monitoring systems commonly referred to as the Energy Management and Control (EMCS) system, fire reporting system, and base defense system. The Siemens controllers will be configured and programmed using government-licensed Siemens software. Programmable controllers are categorized as FRCS/ICS and include building automation sensors, occupancy analysis sensors, energy efficiency monitoring sensors, lighting sensors, back-up power sensors, redundant energy systems monitoring sensors, leak detection sensors, meters, fire/smoke/carbon monoxide sensors, mass notification, gunshot detection sensors, intrusion detection sensors, and industrial controls (i.e. pump controls, roadway intersection signals, etc). See Appendix C for the Tyndall Rebuild - Facility Related Control Systems (FRCS) Technology Summary for reference as applicable.
- b. The control system should be a BAS or equivalent capable of controlling/monitoring the entire heating, ventilation, air conditioning system. The system shall also include the ability to calculate compressor runtime and include the following points:

● VAV Boxes	● AHUs
● Exhaust Fans	● Boilers (Heating/Domestic Water)
● Chillers	● Chilled/Hot Water Pumps
● Ambient Temperature and Humidity	● Domestic Hot Water Recirculation Pumps

- c. The system shall be interfaced with the building fire alarm system and shall be provided with additional devices required by AT/FP standards to permit system

shutdown in an emergency. All air-handling system(s) over 2,000 CFM shall be interfaced with the building fire alarm system and be capable of emergency shutdown. The system shall be capable of temperature control, occupied/unoccupied scheduling, night setback control, and alarms.

- d. The use of unapproved ATO equipment will require the base to update the Authorized equipment list to be used to tie into the EMCS system. Buildings that do not have an ATO will require approval prior to the tie into the EMCS system. 97 percent of the base is currently using Siemens controls.
- e. FRCS Switches may be required for items like the gunshot detection. These switches will be provided by the contractor

20.2 VAVs

- A. VAVs should be utilized for new systems.

20.3 METERING

- A. Approved metering is to be a 9410 or 9810 model numbers.

21.0 POINTS OF CONTACT (POCs)

- A. Contracting Officer Authority: CO, the term used herein, does not include any representative not acting within the scope of his/her authority. Notwithstanding any of the provisions of this contract, the CO shall be the only individual authorized to in any way amend or modify the terms of this contract.
- B. POCs will be coordinated through the CO.
- C. Contracting Officer (CO):
 - a. The CO will be Bernie Husted.
- D. Contracting Officer Authority (COA):
 - a. COA, the term used herein, does not include any representative not acting within the scope of his/her authority. Notwithstanding any of the provisions of this contract, the CO shall be the only individual authorized to in any way amend or modify the terms of this contract.
- E. QA Inspector:
 - a. (TBD)

F. Technical Representative

325 CES/CEPMS is designated as the technical representative to ensure progression, workmanship, and inspection of materials for work being performed under this contract. This clause in no way authorizes anyone other than the CO to commit the Government to changes in the terms and conditions of the contract

APPENDICES

Appendix A	Description of Work
Appendix B	Drawings
Appendix C	Tyndall Rebuild Facility Related Control Systems (FRCS) Technology Summary –Sept 2021.
Appendix D	Renderings per TAFB Architectural Review Board – See Next Page.
Appendix F	Tyndall Plant List: https://www.tyndallifs.com/images/landscape_master_plan/TAFB_MasterPlantPalette_2020-08-12.pdf
Appendix G	Preliminary Fire Hydrant Flow Test Field Observations and Data
Appendix H	J&A TAFB SIEMENS FRCS
Appendix I	Environmental Requirements
Appendix J	813
Appendix K	GCEC Manual Of Standards And Specifications For Utility Construction For Tyndall AFB System
Appendix L	GCEC Connection Charge Agreement
Appendix M	HQ USAF A4C Memorandum for Tyndall AFB Design Wind Speeds And Envelope Protection (https://www.tyndallifs.com/images/Home/Tyndall_Design_Wind_Speed_A4C-2_Memo_08-27-19.pdf) HQ USAF A4C Memorandum For Tyndall AFB Design Flood Elevation (DFE) (https://www.tyndallifs.com/images/Home/Tyndall_DFE_Memo_06-05-19.pdf)
Appendix N	TAFB Exterior Materials, Finishes and Colors Palette
Appendix O	Palette Geotech Report