

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
---------	-------------------	----------	------	------------	--------

0001

1

Lot

WELL PUMP INSTALL VFDs

FFP

THIS IS A CONSTRUCTION CONTRACT TO INSTALL A TOTAL QUANTITY OF FOUR VARIABLE FREQUENCY DRIVES (VFD'S) AT TOBYHANNA ARMY DEPOT'S WELL HOUSES (#'S 7, 8, 9 AND 10). THE NEED FOR THE VFD'S IS TO MEET STATE REQUIREMENTS FOR THE ALLOCATION PERMIT. PRESENTLY THE EXISTING PUMPS WOULD EXCEED THE GALLONS PER MINUTE (GPM) IF THEY WERE NOT BEING THROTTLED BACK. HOWEVER, THROTTLING THEM BACK CREATES A LARGER ISSUE BY SHORTENING THE LIFE SPAN OF THE PUMPS.

TOBYHANNA ARMY DEPOT POC: DAVE HUDAK 570-615-9954

SEE ATTACHED STATEMENT OF WORK AND SPECIAL INSTRUCTIONS

FOB: Destination

NSN: AASSVC23340170

MILSTRIP: W25G1V23340170

PURCHASE REQUEST NUMBER: W25G1V23340170

PSC CD: Z2NZ

NET AMT

STATEMENT OF WORK

**Well House Variable Frequency Drive (VFD)
Installs**

SCOPE OF WORK
TOBYHANNA ARMY
DEPOT

Table of Contents:

- 1.0 General Overview**
 - 1.1 Summary**
 - 1.2 Site Visit**
 - 1.3 Existing Conditions & Demolition**
 - 1.4 Construction**
 - 1.5 Specifications and Requirements**
- 2.0 Products, Materials, and Execution**
- 3.0 Submittals**
- 4.0 -16.0 TYAD Program Requirements**
- 17.0 Additional Attachments**

1.0 GENERAL OVERVIEW

1.1. SUMMARY:

- 1.1.1. This task order will consist of the services associated with the installation of four (4) variable frequency drives (VFD's) located at Tobyhanna Army Depot. The VFD's are to be installed at Well Houses 7, 8, 9 & 10. Upon completion of the equipment installations, the Contractor shall also be responsible for the provisioning of the programmable logic controller (PLC) and supervisory control and data acquisition (SCADA) to achieve the desired gallons per minute (g/pm). The construction services necessary to complete this project include providing all licenses, permits, labor, materials, equipment, supervision and management to complete the project.
- 1.1.2. The contractor shall complete this project in total calendar days. The Government may extend this contract time when reasonable and necessary without penalty or claim.

1.2. SITE VISIT

- 1.2.1. In order to gain an understanding of the project, it is suggested that potential

bidders attend the scheduled site visit on 30 January 2023 at 10:00 am. In order to obtain any desired measurements and other possible related issues.

1.3. EXISTING CONDITIONS:

- 1.3.1. It is the responsibility of the Contractor to confirm existing conditions at the four well locations prior to the commencement of work.

1.4. CONSTRUCTION:

- 1.4.1. Well #7 (Bldg. 257): Install one, 46 Amp - 230VAC, variable frequency drive (VFD) next to the existing control panel using the existing disconnecting means and modify the programmable logic controller (PLC) and supervisory control and data acquisition (SCADA) to achieve the desired 75 gallons per minute (g/pm).
- 1.4.2. Well #8 (Bldg. 258): Install one, 46 Amp - 230VAC, variable frequency drive (VFD) next to the existing control panel using the existing disconnecting means and modify the programmable logic controller (PLC) and supervisory control and data acquisition (SCADA) to achieve the desired 75 gallons per minute (g/pm).
- 1.4.3. Well #9 (Bldg. 259): Install one, 59 Amp - 230VAC, variable frequency drive (VFD) next to the existing control panel using the existing disconnecting means and modify the programmable logic controller (PLC) and supervisory control and data acquisition (SCADA) to achieve the desired 150 gallons per minute (g/pm).
- 1.4.4. Well #10 (Bldg. 260): Install one, 59 Amp - 230VAC, variable frequency drive (VFD) next to the existing control panel using the existing disconnecting means and modify the programmable logic controller (PLC) and supervisory control and data acquisition (SCADA) to achieve the desired 150 gallons per minute (g/pm).

1.5. SPECIFICATIONS AND REQUIREMENTS:

- 1.5.1. The drawings provided are for informational/guide purposes only. It is the contractor's responsibility to follow all applicable codes and requirements to complete this project.
- 1.5.2. All work shall follow the UFC (Unified Facilities Criteria), UFGS (Unified Facilities Guide Specifications) requirements. See section 26 29 23, ADJUSTABLE SPEED DRIVE (ASD) SYSTEMS UNDER 600 VOLTS provided.
- 1.5.3. The contractor shall protect all Government property and clean all associated debris on and near the jobsite. Cleanup shall be to the satisfaction of COR.
- 1.5.4. The contractor shall send all debris to a certified state landfill. Manifests of

weights shall be supplied to COR if requested.

- 1.5.5. The contractor shall be available to respond to all emergency calls and be on site within 24 hours from time of call for any and all leaks arising during warranty.
- 1.5.6. All work areas or sites shall be clean and in equal or better condition once construction is completed.
- 1.5.7. The contractor shall be fully knowledgeable of all requirements of the contract documents and shall make themselves aware of all job site conditions that will affect their work.
- 1.5.8. The contractor shall confirm all given information and notify TYAD, prior to bid, of any conflicts that will affect their cost proposal.

2.0 PRODUCTS, MATERIALS, AND EXECUTION

- 2.1. All designs and installations shall comply The International Building Codes (IBC) and Unified Facilities Criteria Specification (UFCS). Codes And Standards Include, but not limited to, the latest: National Electric Code (NEC), National Fire Protection Association (NFPA), Underwriter's Laboratory (UL), American Society Of Mechanical Engineers (ASME), American National Standards Institute (ANSI), Occupational Safety And Health Administration (OSHA), American Society For Testing And Materials (ASTM), American Society Of Heating, Refrigerating, And Air Conditioning Engineers (ASHRAE), International Mechanical Code (IMC), And International Plumbing Code(IPC).

2.2. Appendix Checklist

- 2.2.1. The following is a list of TYAD design/ installation guidelines and safety / fire / and environmental requirements and regulations which apply when working on the depot. These appendixes will be made available during the bidding process and it is solely the contractor's responsibility to obtain copies of those listed as required for the project prior to submitting a bid. Failure to obtain copies of appendixes by the contractor does not relieve the contractor of the requirements contained within. TYAD Garrison Engineering office is the "authority having jurisdiction" (AHJ) and is responsible for approving equipment, materials and installation.

U.S. Army- Engineering Branch-TYAD CONTRACT PACKAGE REQUIREMENTS CHECKLIST

Well House Variable Frequency Drive (VFD) Installs POC: Dave Hudak

	REQUIRED	
	YES	NO
APPENDIX A - TOBYHANNA EXECUTIVE SUMMARY FINAL	<input type="checkbox"/>	NO
APPENDIX B - ROOM NUMBERING METHODOLOGY DEC 2014	<input type="checkbox"/>	NO
APPENDIX C - DESIGN SUBMISSION REQUIREMENTS MANUAL	<input type="checkbox"/>	NO
APPENDIX D - TYAD CADD STANDARDS MANUAL	<input type="checkbox"/>	NO
APPENDIX E - STANDARD NEPA SPECIFICATIONS FOR PROJECTS MAY 2020	YES	<input type="checkbox"/>
APPENDIX G- ELECTRICAL DESIGN and CONSTRUCTION STANDARDS- OCT 2019	YES	<input type="checkbox"/>
APPENDIX H - MECHANICAL DESIGN JULY 2015	<input type="checkbox"/>	NO
APPENDIX I- REQUIREMENTS FOR CONTROLS AND INSTRUMENTS JUL 2015	<input type="checkbox"/>	NO
APPENDIX J- FIRE DETECTION & SUPPRESSION 02-14-18	<input type="checkbox"/>	NO
APPENDIX K - SAFETY STANDARDS FOR TYAD FEB 2021	YES	<input type="checkbox"/>
APPENDIX L - SOP FOR EXCAVATION & GROUND PENETRATIONS 07-21-15	<input type="checkbox"/>	NO
	<input type="checkbox"/>	NO

3.0 SUBMITTALS

- 3.1. Submit to the TYAD POC two copies (electronically if able) of all submittals, except as noted below. Allow two weeks for Government review. The Contractor shall certify on all submittals that the material being proposed conforms to contract requirements. In the event of any variance, the Contractor shall state specifically which portions vary, and request approval of a substitute. The Contractor shall also certify that all Contractor-furnished equipment can be installed in the allocated spaces. Incomplete submittals and submittals with inadequate data will be rejected.

When required, catalog data shall be printed pages or permanent copies of manufacturer's catalogs. The below shall be submitted prior to construction commencing:

- 3.1.1. Job Specific Safety Plan
- 3.1.2. Project Schedule/Timeframe
- 3.1.3. 46A VFD
- 3.1.4. 59A VFD

4.0 SECURITY REQUIREMENTS

- 4.1. DEPOT ACCESS: See attachment 2: AT-OPSEC
- 4.2. Contractor personnel working on the Tobyhanna Army Depot must be fully identified. Contractors register with the TYAD Security in Building 606. All employees, staff, and subcontractor personnel, etc., which will require access must present the following to access TYAD:
 - 4.2.1. Full name
 - 4.2.2. Driver's License
 - 4.2.3. Nationality (if non-U.S. Citizen, alien registration number)
 - 4.2.4. Completed Form ELTY 648C (Contractor Request for Access to TYAD)
 - 4.2.5. Completed Form ELTY 648C must be submitted to TYAD prior to date of arrival as required by contract solicitation documentation.
- 4.3. If Contractor vehicles are required for use on TYAD, the following ID is required:
 - 4.3.1. Make
 - 4.3.2. Model
 - 4.3.3. State Registration
 - 4.3.4. Insurance
 - 4.3.5. License Plate#
- 4.4. Contract personnel are expected to perform work during normal TYAD duty hours (0600-1700). If work must be performed otherwise, permission must be obtained

three working days prior from the Security Office through the ISD Engineering POC. ISD Engineering POC will also coordinate with changes in work schedules with Mission Modernization Branch and Mission Operations as needed to determine impact on production.

- 4.5. Contractor personnel must confine themselves to the work sites specified in their contract. Visiting other areas is prohibited.
- 4.6. Alcoholic beverages, weapons, cameras, sound recorders, proscribed drugs and explosives are prohibited on Government property.
- 4.7. Use of Government property without prior written approval of the COR is prohibited.
- 4.8. TYAD will arrange for special Contractor parking if required. Contractor personnel must not park in numbered spaces, areas reserved for car pools, grassy areas or other prohibited areas. Posted speed limits and traffic restrictions must be observed at all times.
- 4.9. Accidents must be reported to the COR according to contractors approved APP and/or in accordance with OSHA and EM 385-1-1 requirements. Dial 911 for emergency and/or medical immediate attentions.
- 4.10. Security concerns should be immediately reported to the COR for action. Immediate emergency security needs or concerns can be directly relayed to TYADs security office thru calling (570.615.7550) immediately.
- 4.11. Contractor personnel working on station for less than 30 days may be required to log in and out at the Visitor Control Center (Bldg. 606) each day and will not be issued an Extended Entry Contractor's Badge. The ISD Engineering POC will provide information on how to obtain an Extended Entry Contractor's Badge if one is required.
- 4.12. Pursuant to federal regulations, all personnel and vehicles on Government property are subject to search by authorized personnel at any time.
- 4.13. All Contractors personnel are required to display the TYAD issued identification badge on their person at all times while present at the work site. Access to Government property will not be allowed without this identification badge. The badge is to be displayed on the person outer clothing, above the waist and in full view. Identification badges and vehicle passes issued to Contractor personnel remain the property of the U.S. Government and must be surrendered upon completion of the Contractor at the termination of individual employment, and when requested by the Government. Badges will not be displayed when not on Tobyhanna property.
- 4.14. A list of all personnel working under this contract should be turned in immediately after award in order to allow sufficient time to process security information.

5.0 SMOKING RESTRICTIONS:

- 5.1. The bearing and use of lighted cigarettes, cigars, pipes, or any tobacco product is prohibited in the following areas:

- 5.1.1. All buildings including private offices, lobbies, and restroom
- 5.1.2. Alleys and passages between buildings
- 5.1.3. Stairways and ramps leading to building entries and exit
- 5.1.4. Within 50 feet of building entries and exits
- 5.1.5. Within 20 feet of heating, ventilation, and air conditioning intake ducts
- 5.1.6. Hazardous areas containing flammable liquids, gases, vapors, and all other locations where there is a collection of readily ignitable combustible material

6.0 STATION PERMITS and WRITTEN APPROVALS:

- 6.1. Permits are required for, excavation, welding and burning. Contractors must utilize the PA 1 Call system and obtain a permit coordinated with the POC for excavations in accordance with Appendix L prior to any groundbreaking including digging, drilling and stake driving. Bum/fire permits must be obtained daily from the Fire Department (Appendix K).
- 6.2. Written approval (Appendix K via e-mail) must be obtained from the Safety Office through the ISD Engineering Branch prior to executing any of the following
 - 6.2.1. Trenching five feet or more in depth (Trench Plan)
 - 6.2.2. Entry to a confined space
 - 6.2.3. Crane Lift (Lift Plan)

7.0 STORM PROTECTION:

- 7.1. If a warning of gale force winds is issued, take precautions to minimize any danger to persons, and protect the work and any nearby Government property. Precautions shall include, but not be limited to, closing openings, removing loose materials, tools, and equipment from exposed locations, and removing or securing scaffolding and other temporary work. Close openings even if expected storms are of a lesser intensity but, may still pose a threat to the work site or any nearby Government property.

8.0 PCB, HAZARDOUS MATERIALS, ASBESTOS AND LEAD MATERIAL:

- 8.1. If material is encountered which may contain PCB's, hazardous materials, asbestos and or lead and must be disturbed, do not touch the material. Should the discovery of such suspected material affect the Contractor's planned work schedule, the Contractor shall redirect the work crew to other portions of the unaffected work and modify the schedule at no additional cost to the Government. The ISD Engineering POC shall be notified immediately, in writing, regarding the discovery of the suspected material and of any adverse impact the Contractor may expect to incur due to this situation.
- 8.2. Within 10 calendar days, the Environmental, Safety and Occupational Health Branch (ESOH Branch) Representative will have laboratory tests performed to determine if the material is a hazard. If there is not a danger, the ESOH Branch Representative will direct the Contractor to proceed in the identified area without change. If the material is identified as hazardous, before proceeding, discussions will be held between the Contracting Officer's Representative, ISD Engineering POC and ESOH Branch to determine the most cost-effective means for removal. The hazardous material will be removed, abated or rendered harmless before work commences.

9.0 SAFETY REQUIREMENTS:

- 9.1. (See Appendix K for TYAD specific Safety details)
- 9.2. Contractor will adhere to and enforce all site safety and health site controls, resources, management and regulations in accordance with OSHA and EM 385-1-1 standards. Wherever any discrepancies exist, the most stringent of regulations shall apply. Wherever any doubts or confusions exist the contractor will notify the COR via proper submittal and/or RFI procedures for clarification.

10.0 ENVIRONMENTAL PROTECTION REQUIREMENTS:

- 10.1. (See Appendix E for Environmental details)

11.0 STORAGE OF MATERIALS AND EQUIPMENT:

- 11.1. Government furnished storage facilities may not be available to the Contractor in the vicinity of the work site. The Contractor shall provide suitable storage facilities as required, located as approved by the ISD Engineering POC, if he intends to leave materials and equipment in the work area overnight or on weekends. The security of the Contractor's property or his personnel's property shall be the full responsibility of the Contractor. The Government will accept no liability in case of loss due to fire or theft.

12.0 AVAILABILITY OF UTILITY SERVICES:

- 12.1. The Government will furnish water and power in the quantity not to exceed the amount necessary for the normal prosecution of the work, at the nearest available

outlet. The Contractor shall make all piping and wiring connections thereto and shall extend the services to the site of the work. On completion of the work, the Contractor shall remove all such temporary connections and any removed or damaged portions of the Government services at the points of connection shall be repaired or replaced.

12.1.1. Other Utilities: The Contractor shall make arrangements to obtain all utilities not furnished by the Government, at his/her own expense.

12.1.2. The Government will not provide refuse facilities. The Contractor will be required to dispose of all garbage and other waste materials generated by his work at a licensed off-site landfill.

13.0 ORAL MODIFICATION:

13.1. No oral statement of any person other than the Contracting Officer or as delegated by the Contracting Officer as provided in the Basic Contract shall in any manner or degree modify or otherwise affect the terms of this Contract.

14.0 TIME FOR COMPLETION:

14.1. All work and services under the base bid shall be completed within 60 calendar days after award of the task order.

15.0 WORK SCHEDULE:

15.1. All work shall be performed during normal working hours, between 0600 and 1700, Monday through Friday, except (a) federal holidays, or (b) other days so designated by the Contracting Officer's Representative or the POC. Any work other than these hours or weekend work will be permitted only when advance written approval has been issued by the POC three working days in advance. All work associated with the pre-engineered enclosure affecting road closure, or restricted traffic flow shall be performed after normal working hours unless approved in advance as part of the construction schedule. To work on post at any other times will require a request to the POC 14 days in advance.

16.0 DELIVERABLES:

16.1. Upon completion of the construction and prior to final payment, the Contractor will supply the On Site Representative with two (2) copies of the following:

16.1.1. Maintenance manuals. (If applicable) Information shall include: Safety precautions, Normal operations, Preventive maintenance plan and schedule.

16.1.2. Maintenance and repair procedures, (If applicable) Removal and replacement instructions, Spare parts and supply list, Parts identification, Warranty information, Test equipment and special tool information, and Contractor

information.

17.0 ADDITIONAL ATTACHMENTS

***END OF SPECIFICATION*

SECURITY REQUIREMENTS

Contractor personnel working on the Tobyhanna Army Depot must be fully identified. Contractors register with TYAD Security in Building 606. All employees, staff, and subcontractor personnel, etc., which will require access must present the following to access TYAD:

- A. Full name
- B. Drivers License
- C. Nationality (if non-U.S. Citizen, alien registration number)

If Contractor vehicles are required for use on TYAD, the following ID is required:

- A. Make
- B. Model
- C. State Registration
- D. Insurance
- E. License Plate#

Contract personnel are expected to perform work during normal TYAD duty hours (0730-1600). If work must be performed otherwise, permission must be obtained three working days prior from the Security Office through the TYAD Representative.

Contractor personnel must confine themselves to the work sites specified in their contract. Visiting other areas is prohibited.

Alcoholic beverages, weapons, cameras, sound recorders, proscribed drugs and explosives are prohibited on Government property.

Use of Government property without prior written approval of the On Site Representative is prohibited.

TYAD will arrange for special Contractor parking if required. Contractor personnel must not park in numbered spaces, areas reserved for car pools, grassy areas or other prohibited areas. Posted speed limits and traffic restrictions must be observed at all times.

Accidents or problems of a security/safety nature must be reported to the Security (570.615.7550) and TYAD Representative (570.615.7306/8139) immediately.

Contractor personnel working on station for less than 30 days may be required to log in and out at the Visitor's Center each day and will not be issued an Extended Entry Contractor's Badge.

The On Site Representative will provide information on how to obtain an Extended Entry Contractor's Badge if one is required.

Pursuant to federal regulations, all personnel and vehicles on Government property are subject to search by authorized personnel at any time.

All Contractors personnel are required to display the TYAD issued identification badge on their person at all times while present on the installation. Access to Government property will not be allowed without this identification badge. The badge is to be displayed on the person outer clothing, above the waist and in full view. Identification badges and vehicle passes issued to Contractor personnel remain the property of the U.S. Government and must be surrendered upon completion of the Contractor at the termination of individual employment, and when requested by the Government.

A list of all personnel working under this contract should be turned in immediately after award in order to allow sufficient time to process security information.

TYAD Security Requirements:

All TYAD contracts and other acquisition-related documents must ensure privacy and security controls follow the information, and that contractors and service providers protect Privacy Act information in the same way the organization adhering to the Federal Acquisition Regulations (FAR) Privacy Act provisions (Subparts 24.1 and 24.2) and include the specified contract clauses (Parts 52.224-1 and 52.224-2), as appropriate, to ensure that personal information is protected as mandated.

In addition to the changes authorized by the clause of this contract; should Force Protection Condition (FPCON) at the installation change, the Government may require changes in contractor security matters and/or processes.

FPCON impact on work levels. *(Please annotate with an X which may apply):*

___ During FPCONs Charlie and Delta, [XXX] services are discontinued. [XXX] services will resume when the FPCON level is reduced to level Bravo or lower.

___ This contract and its employees are considered mission essential. Therefore, all contractor employees are required to report for duty and remain on duty during declared emergencies and/or elevated FPCON levels unless otherwise directed by the contacting officer via the appropriate COR.

Contingency Operations Plan

The Contractor shall prepare and submit a Contingency Operations Plan to the Government. The Contingency Operations Plan shall document Contractor plans and procedures to maintain support during an emergency. The Contingency Operations Plan shall include the following:

- A description of the Contractor's emergency management procedures and policy
- A description of how the Contractor will account for their employees during an emergency
- Planned temporary work locations or alternate facilities
- How the Contractor will communicate with Government during emergencies

- A list of primary and alternate Contractor POCs, each with primary and alternate telephone numbers
- Procedures for protecting Government Furnished Equipment (GFE)/Government furnished property (if any)
- Procedures for safeguarding sensitive and/or classified Government information (if applicable)

Unscheduled gate closures by the Security Police may occur at any time causing all personnel entering or exiting a closed installation to experience a delay. This cannot be predicted or prevented. Contractors are not compensated for unexpected closures or delays. Vehicles operated by contractor personnel are subject to search pursuant to applicable regulations. Any moving violation of any applicable motor vehicle regulation may result in the termination of the contractor employee's installation driving privileges.

The contractor's employees shall become familiar with and obey the regulations of the installation; including fire, traffic, safety and security regulations while on the installation. Contractor employees should only enter restricted areas when required to do so and only upon prior approval. All contractor employees shall carry proper identification with them at all times. The contractor shall ensure compliance with all regulations and orders of the installation which may affect performance.

Antiterrorism (AT) Level I Training. All contractor employees, to include subcontractor employees, requiring access to Army installations, facilities, and controlled access areas shall complete AT Level I awareness training prior to contract report date. This training is required for any additional or new contractor employees, who start after that period. The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee, to the COR/POC within **10 calendar days** after completion of training by all employees and subcontractor personnel. AT level I awareness training is available at the following website: <http://jko.jten.mil/courses/at11/launch.html> for their training. Completion of contractor employee training will be documented on *ELTY form 583*, TYAD On-Post Training Record, or contractor equivalent. As applicable, contractor employees must complete annual AT awareness training as it pertains the length of the contract.

iWATCH Army Training. The contractor and all associated sub-contractors shall brief all employees on the local iWATCH Army Program. This will consist of utilizing the tools and media products on the informational iWATCH Army website to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR/POC. The iWATCH training is available at the following website: <https://myarmyonesource.com> select Family Programs and Services, in the drop down boxes select: Go To, iWATCH Army-"See Something, Say Something". The contractor shall notify the COR/POC within **10 calendar days** of review of the information on the website for any new employees or subcontractor personnel to assure the *ELTY form 583* or contractor equivalent is properly documented. Completion of contractor employee training will be documented on *ELTY form 583*, TYAD On-Post Training Record or contractor equivalent.

Access and General Protection/Security Policy and Procedures. Contractor and all associated sub-contractors employees shall comply with applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative). The contractor shall also provide all information required for

background checks to meet installation access requirements to be accomplished by TYAD Law Enforcement. Contractor workforce must comply with all personal identity verification requirements as directed by DoD, HODA, and/or local policy.

Contractor and all associated sub-contractors employees shall comply with adjudication standards and procedures using the National Crime Information Center Interstate Identification Index (NCIC-11I) and Terrorist Screening Database (TSDB) (Army Directive 2014-05/AR 190-13), applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by the government representative), or, at OCONUS locations, in accordance with status of forces agreements and other theater regulations.

A background check and approval from Tobyhanna Army Depot (TYAD) Law Enforcement is required for all contractor and subcontractor personnel prior to on-site access at TYAD. All persons seeking entrance to TYAD shall submit to and comply with all security standards and requirements in force at the time such persons are seeking entry. All contractors, regardless of resident status or citizenship, will be subject to vehicle search and intense in-processing by TYAD security personnel prior to being granted access to TYAD. This security screening process may be time consuming and access may be delayed or denied. The contractor shall ensure **ELTY Form 648-C** is completed for all contractor and subcontractor personnel requiring depot access to include warranty services. The TYAD point of contact (POC) will provide **ELTY Form 648-C, "Request Access to Tobyhanna Army Depot"** to the contractor/vendor at least **ten days** prior to the expected visit date for completion. The contractor/vendor shall return the completed **ELTY Form 648-C** to the TYAD POC in a timely manner so the same may be submitted to Security for processing no later than **seven days** prior to the visit. All of the required fields on the form shall be complete and accurate by the contractor/vendor for timely processing. This requirement is inclusive of on-site supervisory or managerial personnel and sub-contractor personnel that the Contractor anticipates will be performing work or visiting on-site. This security screening does not relieve the contractor of any responsibilities to conduct thorough pre-employment background checks and drug screening. Contractor workers will not be granted access to the work site until security screening is completed and access is approved. Any contractor personnel on-site who fail screening will not be permitted further access to TYAD. See *"Access and General Protection/Security Policy and Procedures"*.

Submit the completed **ELTY Forms 648-C** form(s) to the COR or POC. Ensure contracts include the provisions that check for the possibility of and prevent undocumented workers for inclusion in contracted work related to Army missions.

The company will ensure that its employees entering Army-controlled installations or facilities have obtained access badges and passes in accordance with facility regulations and that these badges and passes are obtained in advance so as not to delay the accomplishment of contracted services.

Common Access Card (CAC) and Information Systems/Network Access by Contractor Workers. *[If applicable.]* Before CAC issuance, the contractor employee requires, at a minimum, a favorably adjudicated National Agency Check with Inquiries (NACI) or an equivalent or higher investigation in accordance with Army Directive 2014-05. The contractor employee will be issued a CAC only if duties involve one of the following: (1) Both physical access to a DoD facility and access, via logon, to DoD networks on-site or remotely; (2) Remote access, via logon, to a DoD network using DoD-approved remote access procedures; or (3) Physical

access to multiple DoD facilities or multiple non-DoD federally controlled facilities on behalf of the DoD on a recurring basis for a period of 6 months or more. At the discretion of the sponsoring activity, an initial CAC may be issued based on a favorable review of the FBI fingerprint check and a successfully scheduled NACI at the Office of Personnel Management.

For contractors that do not require CAC, but require access to a DoD facility or installation. Contractor and all associated subcontractor employees shall comply with adjudication standards and procedures using the National Crime Information Center Interstate Identification Index (NCIC-11I) and Terrorist Screening Database (Army Directive 2014-05/AR 190-13); applicable installation, facility and area commander installation and facility access and local security policies and procedures (provided by Government representative); or, at OCONUS locations, in accordance with status-of-forces agreements and other theater regulations.

Collection of Badges: The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

- (1) When no longer needed for contract performance.
- (2) Upon completion of the Contractor employee's employment.
- (3) Upon contract completion or termination.

The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements. The Contractor shall insert the substance of this clause, including this paragraph, in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in of this section, unless otherwise approved in writing by the Contracting Officer. The company will return all issued U.S. Government Common Access Cards, installation badges, and/or access passes to the COR when the contract is completed or when a contractor employee no longer requires access to the installation or facility. Contractor personnel will obtain a vehicle pass for access to the military installation and Common Access Cards (CAC) for computer access, if applicable.

Security and privacy requirements for all Department of Defense-Tobyhanna (TYAD) information technology (IT) procurements.

Applicability: The requirements established in this document apply to all employees, contractors, and users authorized to participate in the TYAD IT procurement process. Further, the requirements established herein apply as the entire contract or order (hereafter referred to as a "contract"), or any portion thereof, includes either or both of the following:

- a. Access (Physical or Logical) to Government Information: Physical and Logical Access refers to when contractor personnel (and/or any subcontractor) are expected to have (1) routine physical access to an TYAD-controlled facility; (2) logical access to an TYAD-controlled information system; (3) access to government information, whether in an TYAD-controlled information system or in hard copy; or (4) any combination of circumstances (1) through (3) as

per OMB M-05-24, Implementation of Homeland Security Presidential Directive (HSPD) 12 - Policy for a Common Identification Standard for Federal Employees and Contractors.

b. Operate a Federal System Containing Information: A Contractor (and/or any subcontractor) employee will operate a federal system and information technology containing data that supports the TYAD mission. In addition to the Federal Acquisition Regulation (FAR) Subpart 2.1 definition of "information technology" (IT), the term as used in this section includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including support services), and related resources.

Requirements: Safeguarding Information and Information Systems In accordance with the Federal Information Processing Standards Publication (FIPS) 199, Standards for Security Categorization of Federal Information and Information Systems, the Contractor (and/or any subcontractor) shall:

a. Protect Government information and information systems in order to ensure:

- Confidentiality, which means preserving authorized restrictions on access and disclosure, based on the security terms found in this contract, including means for protecting personal privacy and proprietary information.
- Integrity, which means guarding against improper information modification or destruction, and ensuring information non-repudiation and authenticity.
- Availability, which means ensuring timely and reliable access to and use of information.

b. Provide security for any Contractor systems, and information contained therein, connected to a TYAD network or operated by the Contractor on behalf of TYAD regardless of location. In addition, if new or unanticipated threats or hazards are discovered by either the agency or contractor, or if existing safeguards have ceased to function, the discoverer shall immediately, within sixty (60) minutes or less, bring the situation to the attention of the other party.

c. Adopt and implement policies, procedures, controls, and standards that are in effect at the time of contract solicitation and required by the TYAD Information Security Program to ensure the confidentiality, integrity, and availability of government information and government information systems for which the Contractor is responsible under this contract or to which the Contractor may otherwise have access under this contract. Obtain the TYAD Information Security Program security requirements based on the National Institute of Standards and Technology (NIST) "Framework for Improving Critical Infrastructure Cybersecurity." The framework contains the five (5) core functions to "Identify," "Protect," "Detect," "Respond (to)," and "Recover (from)" any cybersecurity event.

d. Comply with the Privacy Act requirements and with the Federal Information Security Modernization Act (FISMA) and with the OMB memo M-17-12, Preparing for and Responding to a Breach of Personally Identifiable Information, Contractor Employee Personnel Security Screenings documents, and FAR clauses as applicable and incorporated into this solicitation/contract. Personally Identifiable Information is defined as below.

Per Office of Management and Budget (OMB) Circular A-130, Personally Identifiable Information (PII) is "information that can be used to distinguish or trace an individual's identity, either alone or when combined with other information that is linked or linkable to a specific

individual." Examples of PI/ include, but are Security and Privacy Requirements for Information Technology Procurements not limited to the following: social security number, date and place of birth, mother's maiden name, biometric records, etc.

Per TYAD, sensitive PII is PII that if released improperly could result in harm, embarrassment, inconvenience, or unfairness to the individual whose name or identity is linked to the information. Context must be accounted for in order to determine whether PII is sensitive. Some PII is always sensitive, and some is only sensitive when it is used in a particular context. For example, a list of people subscribing to a government newsletter is generally not sensitive PII; a list of people receiving treatment for substance abuse would always be considered sensitive PII.

The list below is not exhaustive. Context must be accounted for in order to determine whether PII is sensitive. The following types of information are always considered sensitive:

- Social Security Numbers (including using just the last 4 digits of the SSN)
- Date of birth
- Mother's maiden name
- Biometric identifiers (e.g., fingerprint, iris scan, voice print)
- Personal financial information, credit card and purchase card account numbers
- Citizenship and immigration status
- Criminal history• Computer access passwords and security questions
- Medical records

a. **Mandatory Training for All Contractor Staff** - All contractor (and/or any subcontractor) employees assigned to work on this contract shall complete the applicable TYAD Cybersecurity and Privacy Awareness training (provided upon contract award) before performing any work under this contract (this training is available to new contractors, even if they do not have a PIV card). Thereafter, the employees shall complete the TYAD Cybersecurity and Privacy Awareness training at least annually, during the life of this contract. All provided training shall be compliant with TYAD training policies. Contractor Employees Who Require Access to Government Information Systems. All contractor employees with access to a government information system must be registered in the Army Training Certification Tracking System (ATCTS) at commencement of services and must successfully complete the DOD Information Assurance (IA) Awareness prior to access to the information system and then annually thereafter.

b. **Training Records** - The contractor (and/or any subcontractor) shall maintain training records for all its employees working under this contract in accordance with TYAD policy. A copy of the training records shall be provided to the COR within 30 days after contract award and annually thereafter, or upon request.

Information assurance (IA)/information technology (IT) training. All contractor employees and associated sub-contractor employees must complete the DoD IA awareness training before issuance of network access and annually thereafter. All contractor employees working IA/IT functions must comply with DoD and Army training requirements in DoDD 8570.01, DoD 8570.01-M and AR 25-2 within six months of employment.

Information assurance (IA)/information technology (IT) certification. Per DoD 8570.01-M , DFARS 252.239.7001 and AR 25-2, the contractor employees supporting IA/IT functions shall

be appropriately certified upon contract award. The baseline certification as stipulated in DoD 8570.01-M must be completed upon contract award.

Security Clearances. *[If applicable.]* Performance of work will require access to classified information or equipment IAW the DD Form 254, Contract Security Classification Specification, provided as an attachment. Contractor shall comply with FAR 52.204-2, Security Requirements. This clause involves access to information classified "Confidential," "Secret," or "Top Secret" and requires contractors to comply with- (1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DoD 5220.22-M); (2) any revisions to DOD 5220.22-M, notice of which has been furnished to the contractor.

If, subsequent to the date of this contract, the security classification or security requirements under this contract are changed by the Government and if the changes cause an increase or decrease in security costs or otherwise affect any other term or condition of this contract, the contract shall be subject to an equitable adjustment as if the changes were directed under the Changes clause of this contract.

The Contractor agrees to insert terms that conform substantially to the language of this clause, but excluding any reference to the Changes clause of this contract, in all subcontracts under this contract that involve access to classified information. Contractor personnel performing IT sensitive duties are subject to investigative and assignment requirements IAW AR 25-2, AR 380-67, DoD 8570.0 and affiliated regulations. Army regulation available at www.apd.army.mil.

Threat Awareness and Reporting Program (TARP). *[If applicable.]* For all contractors with security clearances, per AR 381-12, TARP contractor employees must receive initial and annual TARP training by a CI Agent or other trainer as specified in 2-4b.

Contracts that Require an OPSEC Standing Operating Procedure/Plan. The contractor shall develop an OPSEC Standing Operating Procedure (SOP)/Plan within 60 calendar days of contract award, to be reviewed and approved by the responsible Government OPSEC officer, per AR 530-1, Operations Security. This SOP/Plan will include the government's critical information, why it needs to be protected, where it is located, who is responsible for it, and how to protect it. In addition, the contractor shall identify an individual who will be an OPSEC Coordinator. The contractor will ensure this individual becomes OPSEC Level II certified per AR 530-1.

Contracts that Require OPSEC Training. Per AR 530-1, Operations Security, new contractor employees must complete Level I OPSEC training within **30 calendar days** of their reporting for duty. All contractor employees must complete annual OPSEC awareness training. The training is available at the following website: <http://cdsetrain.dtic.mil/opsec/index.htm> The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee, to the COR/POC within **10 calendar days** after completion of training. Completion of contractor employee training will be documented on *ELTY form 583*, TYAD On-Post Training Record or contractor equivalent.

a. Contractor personnel shall not discuss government operations in public or over unprotected or unencrypted communications. Official Business, controlled unclassified information may only be transmitted as directed in the SOW/PWS.

b. Contractor personnel shall not discuss government operations in public or over unprotected or unencrypted communications. Official Business, controlled unclassified information may only be transmitted as directed in the SOW/PWS.

c. The Contractor shall not post to company websites, publications, newsletters or other media any images, data or information that reveal sensitive government operations, personnel, equipment, and/or classified or controlled unclassified information. When in doubt, company press releases related to this contract should be coordinated through the Contracting Officer Representative (COR) or Technical Point of Contact, as applicable.

d. Because observation of events, operations, physical changes, etc. may reveal National Security information, specific restrictions are needed to preclude unintentional release of this information to unauthorized parties. (Unauthorized disclosure and transfer of National Security Information is punishable under 18 USC§ 793.) Therefore, contractor personnel shall not disclose to unauthorized third parties, post to unofficial sites (including Social Networking sites) any images, data or information, or observed events that reveal sensitive government operations, personnel, equipment, including, but not limited to:

e. Tactics, techniques and procedures, production or work schedules, any visible or concealed modifications, upgrades, additions to vessels, aircraft, or weapons or equipment; increases, change, or decreases in work/deployment frequency or government personnel, vehicle, vessel or aircraft movements; specialized equipment orders, deliveries, shipments, etc., Unauthorized disclosures and attempts to solicit this type of information by unauthorized third parties or others not affiliated with this contract shall be reported to the installation Security Office, contract point of contact, and your company Facility Security Officer and/or the Defense Security Service. Non-Disclosure requirements remain in effect during the duration of this contract and indefinitely thereafter.

f. Government issued badges, identification shall be removed and/or concealed from plain sight when off station and shall not be left in vehicles or unprotected. Badges and passes may not be duplicated or copied or loaned to others. Lost or stolen identification badges, vehicle passes etc. will be immediately reported to the installation Security Office.

g. Practice OPSEC and implement countermeasures to protect CI and other sensitive unclassified information and execution of military operations performed or supported by the contractor in support of the mission. Protection of CI will include the adherence to and execution of countermeasures which the contractor initiates or as provided by TYAD, for CI on or related to the SOW/PWS.

h. It is strongly recommended the contractor mark and protect related internal production schedules, deliverables, inventories and shortages and identified vulnerabilities related to production of government material. Internal company markings e.g., Business Sensitive, etc., are appropriate for identifying the aforementioned as sensitive information. Specific Government-provided information, drawings etc., will be protected in accordance with guidance in applicable paragraphs of the SOW.

i. All government information must be destroyed at contract termination or returned to the government at the government's discretion.

Information Security (INFOSEC)

Contractor personnel must comply with local security requirements for entry and exit control for personnel and property at the Government leased facility or any Government facility where work is being performed.

Contractor employees will be required to comply with all Government security regulations and requirements. Initial and periodic security training and briefings will be required. Failure to comply with security requirements can cause for removal and the Contractor will not be permitted to provide service on this contract.

The Contractor shall not divulge any information about DoD files, data processing activities or functions, user identifications, passwords, or any other knowledge that may be gained, to anyone who is not authorized to have access to such information. The Contractor shall observe and comply with the security provisions in effect at the Government leased facility or any other Government facilities where work is being performed. Identification shall be worn and displayed as required.

COMSEC/IT Security. All communications with DOD organizations are subject to communications security (COMSEC) review. All telephone communications networks are continually subject to intercept by unfriendly intelligence organizations. DOD has authorized the military departments to conduct COMSEC monitoring and recording of telephone calls originating from, or terminating at, DOD organizations. Therefore, the contractor is advised that any time contractor place or receive a call they are subject to COMSEC procedures. The contractor shall ensure wide and frequent dissemination of the above information to all employees dealing with DOD information. The contractor shall abide by all Government regulations concerning the authorized use of the Government's computer network, including the restriction against using the network to recruit Government personnel or advertise job openings.

Safeguarding Controlled Unclassified Information (CUI)

CUI is defined as "information that laws, regulations, or Government-wide policies require to have safeguarding or dissemination controls, excluding classified information." The contractor (and/or any subcontractor) must comply with Executive Order 13556, Controlled Unclassified Information, (implemented at 32 CFR, part 2002) when handling CUI. 32 CFR 2002.4(aa) as implemented the term "handling" refers to "... any use of CUI, including but not limited to marking, safeguarding, transporting, disseminating, re- using, and disposing of the information." 81 Fed. Reg. 63323. All sensitive information that has been identified as CUI by a regulation or statute, handled by this solicitation/contract, shall be:

- a. Marked appropriately;
- b. Disclosed to authorized personnel on a "Need-To-Know" basis;
- c. Protected in accordance with NIST SP 800-53, Rev. 4 Security and Privacy controls for Federal Information Systems and Organizations applicable baseline if handled by a Contractor system operated on behalf of the agency, or NIST SP 800-171, Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations if handled by internal Contractor system; and
- d. Returned to TYAD control, destroyed when no longer needed, or held until otherwise directed. Destruction of information and/or data shall be accomplished in accordance with NIST SP 800-88, Guidelines for Media Sanitization.

Safeguarding Sensitive Information: For security purposes, information is or may be sensitive because it requires security to protect its confidentiality, integrity, and/or availability.

The contractor (and/or any subcontractor) shall protect all government information that is or may be sensitive in accordance with FISMA by securing it with a FIPS 140-2 validated solution.

Confidentiality, Integrity, Availability, and Nondisclosure of Information: Any information provided to the contractor (and/or any subcontractor) by TYAD or collected by the contractor on behalf of TYAD shall be used only for the purpose of carrying out the provisions of this contract and shall not be disclosed or made known in any manner to any persons except as may be necessary in the performance of the contract. The contractor assumes responsibility for protection of the confidentiality, integrity, and availability of Government records and shall ensure that all work performed by its employees and subcontractors shall be under the supervision of the contractor. Each contractor employee or any of its subcontractors at any level to whom any TYAD records may be made available or disclosed shall be notified in writing by the contractor that information disclosed to such employee or subcontractor can be used only for that purpose and to the extent authorized herein. The confidentiality, integrity, and availability of such information shall be protected in accordance with TYAD policies and instructions. Unauthorized disclosure of information will be subject to the TYAD sanction policies and/or governed by the following laws and regulations:

- 18 U.S.C. 641 (Criminal Code: Public Money, Property or Records);
- 18 U.S.C. 1905 (Criminal Code: Disclosure of Confidential Information); and
- 44 U.S.C. Chapter 35, Subchapter I (Paperwork Reduction Act).
- 18 U.S.C. 1030 The Computer Fraud and Abuse Act (CFAA)
- 44 U.S.C. 3301 Definition of Records

Government Access for Security Assessment: In addition to the Inspection Clause in the contract, the contractor (and/or any subcontractor) shall afford the Government access to the contractor's facilities, installations, operations, documentation, information systems, and personnel used in performance of this contract to the extent required to carry out a program of security assessment (to include vulnerability testing), investigation, and audit to safeguard Security and Privacy Requirements for Information Technology Procurements against threats and hazards to the confidentiality, integrity, and availability of federal data or to the protection of information systems operated on behalf of TYAD, including but are not limited to:

a. At any tier handling or accessing information, consent to and allow the Government, or an independent third party working at the Government's direction, without notice at any time during a weekday during regular business hours contractor local time, to access contractor and subcontractor installations, facilities, infrastructure, data centers, equipment (including but not limited to all servers, computing devices, and portable media), operations, documentation (whether in electronic, paper, or other forms), databases, and personnel which are used in performance of the contract. The purpose of the access is to facilitate performance inspections and reviews, security and compliance audits, and law enforcement investigations. For security audits, the audit may include but not be limited to such items as buffer overflows, open ports, unnecessary services, lack of user input filtering, cross site scripting vulnerabilities, Structured Query Language (SQL) injection vulnerabilities, and any other known vulnerabilities.

b. At any tier handling or accessing protected information, fully cooperate with all audits, inspections, investigations, forensic analysis, or other reviews or requirements needed to carry out requirements presented in applicable law or policy. Beyond providing access, full cooperation also includes, but is not limited to, disclosure to investigators of information sufficient to identify the nature and extent of any criminal or fraudulent activity and the

individuals responsible for that activity. It includes timely and complete production of requested data, metadata, information, and records relevant to any inspection, audit, investigation, or review, and making employees of the contractor available for interview by inspectors, auditors, and investigators upon request. Full cooperation also includes allowing the Government to make reproductions or copies of information and equipment, including, if necessary, collecting a machine or system image capture.

c. Cooperate with inspections, audits, investigations, and reviews.

National Defense Authorization Act Section 889 Compliance: DoD, GSA, and NASA have issued an interim rule amending the Federal Acquisition Regulation (FAR) to implement section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act (NOAA) for Fiscal Year (FY) 2019 (Pub. L. 115-232). Section 889(a)(1)(B) prohibits executive agencies from entering into, extending, or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, on or after August 13, 2020, unless an exception applies or a waiver is granted. See solicitation provision 52.204-24 and clause 52.204-25.

Physical Security: The Contractor shall be responsible for safeguarding all government equipment, information and property provided for Contractor use. At the close of each work period, government facilities, equipment and materials shall be secured.

Key Control. *[If applicable.]* The Contractor shall establish and implement methods of making sure all keys/key cards issued to the Contractor by the Government are not lost or misplaced and are not used by unauthorized persons. **NOTE:** All references to keys include key cards. No keys issued to the Contractor by the Government shall be duplicated. The Contractor shall develop procedures covering key control that shall be included in the Quality Control Plan. Such procedures shall include turn-in of any issued keys by personnel who no longer require access to locked areas. The Contractor shall immediately report any occurrences of lost or duplicate keys/key cards to the KO.

In the event keys, other than master keys, are lost and/or duplicated, the Contractor shall, upon direction of the KO, re-key or replace the affected lock or locks; however, the Government, at its option, may replace the affected lock or locks or perform re-keying. When the replacement of locks or re-keying is performed by the Government, the total cost of re-keying or the replacement of the locks or locks shall be deducted from the monthly payment due to the Contractor. In the event a master key is lost or duplicated, all locks and keys for that system shall be replaced by the Government and the total cost deducted from the monthly payment due to the Contractor.

The Contractor shall prohibit the use of Government issued keys/key cards by any persons other than the Contractor's employees. The Contractor shall prohibit the opening of locked areas by Contractor employees to permit entrance of persons other than Contractor employees engaged in the performance of assigned work in those areas or personnel authorized entrance by the KO.

Lock Combination. *[If applicable.]* The Contractor shall establish and implement methods of ensuring that all lock combinations are not revealed to unauthorized persons. The Contractor shall ensure that lock combinations are changed when personnel having access to the

combinations no longer have a need to know such combinations. These procedures shall be included in the Contractor's Quality Control Plan.

SPEC SET 23.26.29

VFD Drives VFDDRIVES

SECTION 01 33 00.00 99

SUBMITTAL PROCEDURES

01/2018

PART 1 GENERAL

1.1 SUMMARY

The Contracting Officer's Representative (COR) may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's Quality Control (CQC) System Manager and the Designer of Record, if applicable, to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals requiring Government approval are to be scheduled and made prior to the acquisition of the material or equipment covered thereby.

Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Safety Data Sheets (SDS) and in compliance with existing laws and regulations.

A submittal register showing items of equipment and materials for when submittals are required by the specifications is provided as "Appendix A - Submittal Register".

1.2 DEFINITIONS

1.2.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections.

Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals which are required prior to the start of construction.

Certificates of insurance

Surety bonds

List of proposed Subcontractors

List of proposed products

SECTION 01 33 00.00 99 Page 1

VFD Drives VFDDRIVES

Construction progress schedule

Network Analysis Schedule (NAS)

Submittal register

Schedule of prices or Earned Value Report

Accident Prevention Plan (APP)

List of Definable Features of Work (DFOW)

Production Activity Schedule

Quality Control (QC) plan

Environmental protection plan

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-04 Samples

Fabricated or unfabricated physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

SD-05 Design Data

SECTION 01 33 00.00 99 Page 2

VFD Drives VFDDRIVES

Design calculations, mix designs, analyses or other data pertaining to a part of work.

Design submittals, design substantiation submittals and extensions of design submittals.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a Canmaterial, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. Unless specified in another section, testing must have been within three years of date of contract award for the project.

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily logs and checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material

attesting that the product, system, or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor. The document purpose is to further promote the orderly progression of a portion of the work by documenting procedures, acceptability of methods, or personnel qualifications.

Confined space entry permits.

Text of posted operating instructions.

SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and (SDS) concerning impedances, hazards and safety precautions.

SD-09 Manufacturer's Field Reports

Documentation of the testing and verification actions taken by manufacturer's representative at the job site, in the vicinity of the job site, or on a sample taken from the job site, on a portion of the work, during or after installation, to confirm compliance with manufacturer's standards or instructions. The documentation must be SECTION 01 33 00.00 99 Page 3

VFD Drives VFDDRIVES

signed by an authorized official of a testing laboratory or agency and state the test results; and indicate whether the material, product, or system has passed or failed the test.

Factory test reports.

SD-10 Operation and Maintenance Data

Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel, including manufacturer's help and product line documentation necessary to maintain and install equipment. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.

This data is intended to be incorporated in an operations and maintenance manual or control system.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Submittals required for Guiding Principle Validation (GPV) or Third Party Certification (TPC).

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, except those SD-01 Pre-Construction Submittals noted above, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When

used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with this section.

SD-01 Preconstruction Submittals

Submittal Register; G

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

SECTION 01 33 00.00 99 Page 4

VFD Drives VFDDRIVES

1.4.1 Designer of Record Approved (DA)

Designer of Record (DOR) approval is required for extensions of design, critical materials, any deviations from the solicitation, the accepted proposal, or the completed design, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer's Representative (COR). The DOR review of submittals requiring approval will be completed by the DOR within 10 calendar days after date of receipt and returned to the COR. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings." Contractor to provide the Government with the number of copies designated hereinafter of all DOR approved submittals. The Government may review any or all Designer of Record approved submittals for conformance to the Solicitation, Accepted Proposal and the completed design. The Government will review all submittals designated as deviating from the Solicitation or Accepted Proposal, as described below. Design submittals to be in accordance with Section 01 33 16.00 99 DESIGN DATA (DESIGN AFTER AWARD). Generally, design submittals should be identified as SD-05 Design Data submittals.

1.4.2 Government Approved (G)

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer's Representative. Government approval is required for any deviations from the Solicitation or Accepted Proposal and other items as designated by the Contracting Officer's Representative. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings."

1.4.3 Government Conformance Review of Design (CR)

The Government will review all intermediate and final design submittals for conformance with the technical requirements of the solicitation. Section 01 33 16.00 99 DESIGN DATA (DESIGN AFTER AWARD) covers the design submittal and review process in detail. Review will be only for conformance with the applicable codes, standards and contract requirements. Design data includes the design documents described in Section 01 33 16.00 99 DESIGN DATA (DESIGN AFTER AWARD). Generally, design submittals should be identified as SD-05 Design Data submittals.

1.4.4 Designer of Record Approved/Government Conformance Review (DA/CR)

1.4.4.1 Deviations to the Accepted Design

Designer of Record approval and the Government's concurrence are required for any proposed deviation from the accepted design which still complies with the contract before the Contractor is authorized to proceed with material acquisition or installation. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings." If necessary to facilitate the project schedule, the Contractor and the DOR may discuss a submittal proposing a deviation with the Contracting Officer's Representative prior to officially

submitting it to the Government. However, the Government reserves the right to review the submittal before providing an opinion, if deemed necessary. In any case, the Government will not formally agree to or provide a preliminary opinion on any deviation without the DOR's approval or recommended approval. The Government reserves the right to non-concur

SECTION 01 33 00.00 99 Page 5

VFD Drives VFDDRIVES

with any deviation from the design, which may impact furniture, furnishings, equipment selections or operations decisions that were made, based on the reviewed and concurred design.

1.4.4.2 Substitutions

Unless prohibited or provided for otherwise elsewhere in the Contract, where the accepted contract proposal named products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification, and the Contractor desires to substitute manufacturer or model after award, submit a requested substitution for Government concurrence. Include substantiation, identifying information and the DOR's approval, as meeting the contract requirements and that it is equal in function, performance, quality and salient features to that in the accepted contract proposal. If the Contract otherwise prohibits substitutions of equal named products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification, the request is considered a "variation" to the contract. Variations are discussed below in paragraphs: "Designer of Record Approved/Government Approved" and "VARIATIONS."

1.4.5 Designer of Record Approved/Government Approved (DA/GA)

In addition to the above stated requirements for proposed deviations to the accepted design, both Designer of Record and Government Approval and, where applicable, a contract modification are required before the Contractor is authorized to proceed with material acquisition or installation for any proposed variation to the contract (the solicitation and/or the accepted proposal), which constitutes a change to the contract terms. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings." The Government reserves the right to accept or reject any such proposed deviation at its discretion.

1.4.6 For Information Only (FIO)

Submittals not requiring Government approval will be for information only. For Design-build construction all submittals not requiring Designer of Record or Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.5 PREPARATION

1.5.1 Transmittal Form

Use the transmittal form ENG Form 4025-R for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

1.5.2 Source Drawings for Shop Drawings

The entire set of Source Drawing files (DWG) will not be provided to the Contractor. Only those requested by the Contractor to prepare shop

SECTION 01 33 00.00 99 Page 6

VFD Drives VFDDRIVES

drawings may be provided. Request the specific Drawing Number only for the preparation of Shop Drawings. These drawings may only be provided after award.

1.5.2.1 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction data for the referenced project. Any other use or reuse shall be at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim and waives to the fullest extent permitted by law, any claim or cause of action of any nature against the Government, its agents or sub consultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic Source Drawing files are not construction documents. Differences may exist between the Source Drawing files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic Source Drawing files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished Source Drawing files, the signed and sealed construction documents govern. The Contractor is responsible for determining if any conflict exists. Use of these Source Drawing files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic Source Drawing files for use in producing construction data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

1.5.3 Electronic File Format

Provide submittals in electronic format, with the exception of material samples required for SD-04 Samples items. In addition to the electronic submittal, provide hard copies of the submittals in the quantities as specified in the paragraphs below. Maintain hard copies of approved submittals at the field locations (field office, site facilities, etc.) for use by Contractor and Government personnel. Use submittal tracking and transmittal documents (Eng Form 4025). Compile the submittal file as a single, complete document, to include the Transmittal Form described within. Name the electronic submittal file specifically according to its contents, coordinate the file naming convention with the Contracting Officer's Representative. Electronic files must be of sufficient quality that all information is legible. Use PDF as the electronic format, unless otherwise specified or directed by the Contracting Officer's Representative. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is both searchable and can be copied. If documents are scanned, Optical Character Resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature, or scan of a signature.

SECTION 01 33 00.00 99 Page 7

VFD Drives VFDDRIVES

Email electronic submittal documents fewer than 10MB to an email address as directed by the Contracting Officer's Representative. Provide electronic documents over 10 MB on a CD-ROM, or through an electronic file sharing system such as the DoD SAFE Web Application when granted an upload invitation by Government personnel. Located at the following website: <https://safe.apps.mil/>.

Provide hard copies of submittals when requested by the Contracting Officer's Representative. Up to four additional hard copies of any submittal may be requested at the discretion of the Contracting Officer's Representative, at no additional cost to the Government.

1.6 QUANTITY OF SUBMITTALS

1.6.1 Number of Copies of SD-02 Shop Drawings

Submit two copies of submittals of shop drawings requiring review and approval only by QC organization and two copies of shop drawings requiring review and approval by Contracting Officer's Representative.

1.6.2 Number of Copies of SD-03 Product Data and SD-08 Manufacturer's Instructions

Submit in compliance with quantity requirements specified for shop drawings.

1.6.3 Number of Samples SD-04 Samples

- a. Submit two samples, or two sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by approving authority and one will be returned to Contractor.
- b. Submit one sample panel or provide one sample installation where directed. Include components listed in technical section or as directed.
- c. Submit one sample installation, where directed.
- d. Submit one sample of non-solid materials.

1.6.4 Number of Copies SD-05 Design Data and SD-07 Certificates

Submit in compliance with quantity requirements specified for shop drawings.

1.6.5 Number of Copies SD-06 Test Reports and SD-09 Manufacturer's Field Reports

Submit in compliance with quantity and quality requirements specified for shop drawings other than field copies of test results that will be submitted with QC reports.

1.6.6 Number of Copies of SD-10 Operation and Maintenance Data

Submit three copies of O&M Data to the Contracting Officer's Representative for review and approval.

SECTION 01 33 00.00 99 Page 8

VFD Drives VFDDRIVES

1.6.7 Number of Copies of SD-01 Preconstruction Submittals and SD-11 Closeout Submittals

Unless otherwise specified, submit in compliance with quantity requirements specified for shop drawings.

1.7 FOR INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer's Representative is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer's Representative from requiring removal and

replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.8 SUBMITTAL REGISTER

Prepare and maintain submittal register, as the work progresses. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by Government; retain data which is output in columns (a), (g), (h), and (i) as approved. A submittal register showing items of equipment and materials for which submittals are required by the specifications is provided as an attachment. This list may not be all inclusive and additional submittals may be required. Maintain a submittal register for the project as specified herein. The Government will provide the initial submittal register in electronic format with the following fields completed, to the extent that will be required by the Government during subsequent usage.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns, including dates on which submittals are received and returned by the Government.

The Designer of Record develops a complete list of submittals during design and identify required submittals in the specifications, and use the list to prepare the Submittal Register. The list may not be all inclusive and additional submittals may be required by other parts of the contract. Complete the submittal register and submit it to the Contracting Officer's Representative for approval within 30 calendar days after Notice to Proceed. The approved submittal register will serve as a scheduling document for submittals and will be used to control submittal actions throughout the contract period. Coordinate the submit dates and need

SECTION 01 33 00.00 99 Page 9

VFD Drives VFDDRIVES

dates with dates in the Contractor prepared progress schedule. Submit monthly or until all submittals have been satisfactorily completed, updates to the submittal register showing the Contractor action codes and actual dates with Government action codes. Revise the submittal register when the progress schedule is revised and submit both for approval.

1.8.1 Use of Submittal Register

Submit submittal register. Submit with QC plan and project schedule. Verify that all submittals required for project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

Column (g) Contractor Submit Date: Scheduled date for approving authority to receive submittals.

Column (h) Contractor Approval Date: Date Contractor needs approval of submittal.

1.8.2 Contractor Use of Submittal Register

Update the following fields with each submittal throughout contract.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.

Column (l) List date of submittal transmission.

Column (q) List date approval received.

1.8.3 Approving Authority Use of Submittal Register

Update the following fields.

Column (b) Transmittal Number: Contractor assigned list of consecutive numbers.

Column (l) List date of submittal receipt.

Column (m) through (p) List Date related to review actions.

Column (q) List date returned to Contractor.

1.8.4 Copies Delivered to the Government

Deliver one copy of submittal register updated by Contractor to Government with each invoice request.

1.9 VARIATIONS

Variations from contract requirements require both Designer of Record (DOR) and Government approval pursuant to contract Clause FAR 52.236-21 and will be considered where advantageous to Government.

SECTION 01 33 00.00 99 Page 10

VFD Drives VFDDRIVES

1.9.1 Considering Variations

Discussion with Contracting Officer's Representative prior to submission, after consulting with the DOR, will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP). Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.9.2 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer's Representative, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government, including the DOR's written analysis and approval. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

Check the column "variation" of ENG Form 4025-R for submittals which include proposed deviations requested by the Contractor. Set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.9.3 Warranting that Variations are Compatible

When delivering a variation for approval, Contractor, including its Designer(s) of Record, warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.9.4 Review Schedule Extension

In addition to normal submittal review period, a period of 20 working days will be allowed for consideration by the Government of submittals with variations.

1.10 SCHEDULING

Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 7 calendar days will be allowed and shown on the register for review and approval of submittals for HVAC control systems.

a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.

b. Submittals called for by the contract documents will be listed on the register. If a submittal is called for but does not pertain to the

SECTION 01 33 00.00 99 Page 11

VFD Drives VFDDRIVES

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's Representative does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the register or marked "N/A."

c. Re-submit register and annotate monthly by the Contractor with actual submission and approval dates. When all items on the register have been fully approved, no further re-submittal is required.

d. Carefully control procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

e. Period of review for each resubmittal is the same as for initial submittal.

1.10.1 Government Reviewed Design

The Government will review design submittals for conformance with the technical requirements of the solicitation. Section 01 33 16.00 99 DESIGN DATA (DESIGN AFTER AWARD) covers the design submittal and review process in detail. Government review is required for deviation from the completed design. Review will be only for conformance with the contract requirements. Included are only those construction submittals for which the Designer of Record design documents do not include enough detail to ascertain contract compliance. The Government may, but is not required, to review extensions of design such as structural steel or reinforcement shop drawings.

1.11 GOVERNMENT APPROVING AUTHORITY

When approving authority is Contracting Officer's Representative, the Government will:

a. Note date on which submittal was received from the QC Manager.

b. Review submittals for approval within scheduling period specified and only for conformance with project design concepts and compliance with contract documents.

c. Identify returned submittals with one of the actions defined in paragraph REVIEW NOTATIONS and with markings appropriate for action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date submittals. Electronic email will be sent from the Government to the Contractor with the Review Notation, as specified below. Hard copies of submittals will not be returned. If the Government performs a conformance review of other Designer of Record approved submittals, the submittals will be so identified and returned, as

described above.

1.11.1 Review Notations

Government review will be completed within 14 calendar days after date of receipt of submission by the Government. Submittals will be returned to the Contractor with the following notations:

SECTION 01 33 00.00 99 Page 12

VFD Drives VFDDRIVES

- a. Submittals marked "approved" or "accepted" authorize the Contractor to proceed with the work covered.
- b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize the Contractor to proceed with the work covered provided he takes no exception to the corrections.
- c. Submittals marked "not approved" or "disapproved," or "revise and resubmit," indicate noncompliance with the contract requirements or design concept, or that submittal is incomplete. Resubmit with appropriate changes. No work shall proceed for this item until resubmittal is approved.
- d. Submittals marked "not reviewed" will indicate submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.

1.12 DISAPPROVED SUBMITTALS

Make corrections required by the Contracting Officer's Representative.

If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications; notice as required under the FAR clause entitled CHANGES, is to be given to the Contracting Officer's Representative. Contractor is responsible for the dimensions and design of connection details and construction of work. Failure to point out deviations may result in the Government requiring rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.13 APPROVED SUBMITTALS

The Contracting Officer's Representative's approval or acceptance of submittals is not to be construed as a complete check, and indicates only that the general method of construction, design, general method of construction, materials, detailing and other information appear to meet the Solicitation and Accepted Proposal.

Approval or acceptance will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for design, dimensions, all design extensions, such as the design of adequate connections and details, etc., and the satisfactory construction of all work.

After submittals have been approved or accepted by the Contracting Officer's Representative, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

SECTION 01 33 00.00 99 Page 13

VFD Drives VFDDRIVES

1.14 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor shall assure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not approved will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer's Representative for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

Approval of the Contractor's samples by the Contracting Officer's Representative does not relieve the Contractor of his responsibilities under the contract.

1.15 WITHHOLDING OF PAYMENT

No payment for materials incorporated in the work will be made if all required Designer of Record or required Government approvals have not been obtained. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.

1.16 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements is to be similar to the following:

SECTION 01 33 00.00 99 Page 14

VFD Drives VFDDRIVES

| CONTRACTOR |

||

| (Firm Name) |

||

||

||

| _____ Approved |

||

||

| _____ Approved with corrections as noted on submittal data and/or |

| attached sheets(s) |

||

||

||

| SIGNATURE: _____ |

||

TITLE:	
DATE:	

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION**3.1 MEASUREMENT AND PAYMENT**

No separate measurement or payment will be made for the work specified in this section and all costs in connection therewith shall be included in the costs of all the bid items.

-- End of Section --

SECTION 01 33 00.00 99 Page 15

SUBMITTAL FORM, Jan 96 PREVIOUS EDITION IS OBSOLETE PAGE 1 OF 1 PAGES

VFD Drives

26 29 23 SD-02 Shop Drawings

1.5.1 G Schematic Diagrams

1.5.2 G Interconnecting Diagrams

SD-03 Product Data

2.1 G Adjustable Speed Drives

2.3 G Wires and Cables

1.5.3 Equipment Schedule

SD-06 Test Reports

3.3.1 G Performance Verification Tests;

SD-08 Manufacturer's Instructions

1.5.4 Installation instructions

SD-09 Manufacturer's Field

Reports

1.5.5 Standard Products

SD-10 Operation and Maintenance

Data

2.1 Adjustable Speed Drives

SUBMITTAL REGISTER CONTRACT NO.

TITLE AND LOCATION CONTRACTOR

CONTRACTOR:

SCHEDULE DATES

CONTRACTOR

ACTION

APPROVING AUTHORITY

A

C

T

I

V

I

T

Y

N

O

T

R

A

N

S

M
I
T
T
A
L
N
O
S
P
E
C
S
E
C
T
DESCRIPTION
ITEM SUBMITTED
P
A
R
A
G
R
A
P
H

C
L
A
S
S
I
F
I
C
A
T
I
O
N
G
O
V
T
O
R
A
/
E
R
E
V
W

R SUBMIT
APPROVAL
NEEDED
BY
MATERIAL
NEEDED
BY

A
C
T
I
O
N
C
O
D
E
DATE
OF
ACTION
DATE FWD
TO APPR
AUTH/
DATE RCD
FROM
CONTR
DATE FWD
TO OTHER
REVIEWER
DATE RCD
FROM OTH
REVIEWER

A
C
T
I
O
N
C
O
D
E
DATE
OF
ACTION
MAILED
TO
CONTR/
DATE RCD
FRM APPR
AUTH REMARKS

(a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r)

VFD Drives VFDDRIVES

SECTION 26 29 23

ADJUSTABLE SPEED DRIVE (ASD) SYSTEMS UNDER 600 VOLTS

02/20, CHG 1: 05/21

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

EUROPEAN COMMITTEE FOR STANDARDIZATION (CEN/CENELEC)

EN 61800-3 (2017) Requirements for the Control of
Electromagnetic Interference

Characteristics of Subsystems and Equipment

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE 519 (2022) Standard for Harmonic Control in
Electrical Power Systems

IEEE C62.41.1 (2002; R 2008) Guide on the Surges
Environment in Low-Voltage (1000 V and
Less) AC Power Circuits

IEEE C62.41.2 (2002) Recommended Practice on
Characterization of Surges in Low-Voltage
(1000 V and Less) AC Power Circuits

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

IEC 61000-3-12 (2012) Electromagnetic Compatibility (EMC)

- Part 3-12: Limits - Limits for harmonic
currents produced by equipment connected
to public low-voltage systems with input
current >16 A and ≤ 75 A per phase

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA 250 (2020) Enclosures for Electrical Equipment
(1000 Volts Maximum)

NEMA ICS 3.1 (2019) Guide for the Application,
Handling, Storage, Installation and
Maintenance of Medium-Voltage AC

Contactors, Controllers and Control Centers

NEMA ICS 6 (1993; R 2016) Industrial Control and
Systems: Enclosures

NEMA ICS 7 (2020) Adjustable-Speed Drives

NEMA ICS 7.2 (2015) Application Guide for AC Adjustable
Speed Drive Systems

SECTION 26 29 23 Page 1

VFD Drives VFDDRIVES

NEMA ICS 61800-2 (2005) Adjustable Speed Electrical Power
Drive Systems Part 2: General

Requirements - Rating Specifications for
Low Voltage Adjustable Frequency A.C.
Power Drive Systems

NEMA MG 1 (2021) Motors and Generators

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (2020; TIA 22-1; ERTA 1 2022) National
Electrical Code

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

47 CFR 15 Radio Frequency Devices

UNDERWRITERS LABORATORIES (UL)

UL 489 (2016; Rev 2019) UL Standard for Safety

Molded-Case Circuit Breakers, Molded-Case

Switches and Circuit-Breaker Enclosures

UL 61800-5-1 (2016) Adjustable Speed Electrical Power

Drive Systems - Part 5-1: Safety
Requirements - Electrical, Thermal and
Energy

1.2 RELATED REQUIREMENTS

Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM applies to this section with additions and modifications specified herein.

1.3 SYSTEM DESCRIPTION

1.3.1 Performance Requirements

1.3.1.1 Electromagnetic Interference Suppression

Computing devices, as defined by 47 CFR 15 and EN 61800-3 rules and regulations, must be certified to comply with the requirements for class A computing devices and labeled.

1.3.1.2 Electromechanical and Electrical Components

Ensure electrical and electromechanical components of the Adjustable Speed Drive (ASD) do not cause electromagnetic interference to adjacent electrical or electromechanical equipment while in operation.

1.3.2 Electrical Requirements

1.3.2.1 Power Line Surge Protection

IEEE C62.41.1 and IEEE C62.41.2, IEEE 519, IEC 61000-3-12 Control panel must have surge protection, included within the panel to protect the unit from damaging transient voltage surges. Surge protective device must be mounted near the incoming power source and properly wired to all three phases and ground. Fuses must not be used for surge protection.

SECTION 26 29 23 Page 2

VFD Drives VFDDRIVES

1.3.2.2 Sensor and Control Wiring Surge Protection

I/O functions as specified must be protected against surges induced on control and sensor wiring installed outdoors and as shown. Test the inputs and outputs in both normal mode and common mode using the following two waveforms:

- a. A 10 microsecond by 1000 microsecond waveform with a peak voltage of 1500 volts and a peak current of 60 amperes.
- b. An 8 microsecond by 20 microsecond waveform with a peak voltage of 1000 volts and a peak current of 500 amperes.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government.]

Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Schematic Diagrams; G

Interconnecting Diagrams; G

SD-03 Product Data

Adjustable Speed Drives; G

Wires and Cables; G

Equipment Schedule

SD-06 Test Reports

Performance Verification Tests; G

SD-08 Manufacturer's Instructions

Installation instructions

SD-09 Manufacturer's Field Reports

Standard Products

SD-10 Operation and Maintenance Data

Adjustable Speed Drives, Data Package 4

1.5 QUALITY ASSURANCE

1.5.1 Schematic Diagrams

Submit diagrams showing circuits and device elements for each replaceable module. Schematic diagrams of printed circuit boards are permitted to group functional assemblies as devices, provided that sufficient

SECTION 26 29 23 Page 3

VFD Drives VFDDRIVES

information is provided for government maintenance personnel to verify proper operation of the functional assemblies.

1.5.2 Interconnecting Diagrams

Show interconnections between equipment assemblies, and external interfaces, including power and signal conductors. Include for enclosures and external devices.

1.5.3 Equipment Schedule

Provide schedule of equipment supplied. Schedule must provide a cross reference between manufacturer data and identifiers indicated in shop drawings. Schedule must include the total quantity of each item of equipment supplied and data indicating compatibility with motors being driven. For complete assemblies, such as ASD's, provide the serial numbers of each assembly, and a sub-schedule of components within the assembly. Provide recommended spare parts listing for each assembly or component.

1.5.4 Installation Instructions

Provide installation instructions issued by the manufacturer of the equipment, including notes and recommendations, prior to shipment to the site. Provide operation instructions prior to acceptance testing.

1.5.5 Standard Products

Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship and:

- a. Have been in satisfactory commercial or industrial use for 2 years prior to bid opening including applications of equipment and materials under similar circumstances and of similar size.
- b. Have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period.
- c. Where two or more items of the same class of equipment are required, provide products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in this section.

1.6 DELIVERY AND STORAGE

Store delivered equipment to protect from the weather, humidity and temperature variations, dirt and dust, or other contaminants.

1.7 WARRANTY

The complete system must be warranted by the manufacturer for a period of one year. Repair or replace any component failing to perform its function as specified and documented at no additional cost to the Government.

Items repaired or replaced must be warranted for an additional period of at least one year from the date that it becomes functional again, as specified in FAR 52.246-21 Warranty of Construction.

SECTION 26 29 23 Page 4

VFD Drives VFDDRIVES

1.8 MAINTENANCE

1.8.1 Maintenance Support

During the warranty period, provide on-site, on-call maintenance services

by drive manufacturer's personnel on the following basis: The service must be on a per-call basis with 36 hour response. Contractor is responsible for the maintenance of all hardware and software of the system during the warranty period. Various personnel of different expertise must be sent on-site depending on the nature of the maintenance service required. Costs must include travel, local transportation, living expenses, and labor rates of the service personnel while responding to the service request. The provisions of this Section are not in lieu of, nor relieve the Contractor of, warranty responsibilities covered in this specification. Should the result of the service request be the uncovering of a system defect covered under the warranty provisions, all costs for the call, including the labor necessary to identify the defect, must be borne by the Contractor.

1.8.2 Technical Support

Provide the ASDs with manufacturer's technical telephone support in English, readily available during normal working hours.

PART 2 PRODUCTS

2.1 ADJUSTABLE SPEED DRIVES (ASD)

Provide adjustable speed drive to control the speed of induction motor(s). The ASD must include the following minimum functions, features and ratings.

- a. Input circuit breaker per UL 489 with a minimum of 10,000 amps symmetrical interrupting capacity and door interlocked external operator.
- b. A converter stage per UL 61800-5-1 must change fixed voltage, fixed frequency, ac line power to a fixed dc voltage. The converter must utilize a full wave bridge design incorporating diode rectifiers. Silicon Controlled Rectifiers (SCR) are not acceptable. The converter must be insensitive to three phase rotation of the ac line and must not cause displacement power factor of less than .95 lagging under any speed and load condition.
- c. An inverter stage must change fixed dc voltage to variable frequency, variable ac voltage for application to a standard NEMA MG 1 Part 30 motor designed for use with adjustable frequency power supplies. Switch the inverter to produce a sine coded pulse width modulated (PWM) output waveform.
- d. The ASD shall be capable of supplying 110 percent of rated full load current for one minute at maximum ambient temperature.
- e. The ASD must be designed to operate from a 230 volt, plus or minus 10 percent, three phase, 60 Hz supply, and control motors with a corresponding voltage rating.
- f. Acceleration and deceleration time must be independently adjustable from one second to 60 seconds.

SECTION 26 29 23 Page 5

VFD Drives VFDDRIVES

Adjust decelerating time by[providing an external dynamic braking resistor designed to meet NEMA ICS 61800-2 to be capable of decelerating six times the motor inertia with no more than 150 percent of rated current with the motor at its base speed. Required deceleration time may be achieved using not only dynamic braking resistor but with other methods described in NEMA ICS 7.2-2015 paragraph 5.2.5.

- g. Adjustable full-time current limiting must limit the current to a preset value which must not exceed 110 percent of the controller rated current. The current limiting action must maintain the V/Hz ratio constant so that variable torque can be maintained. Short time

starting override must allow starting current to reach 175 percent of controller rated current to maximum starting torque.

h. The controllers must be capable of producing an output frequency over the range of 3 Hz to 60 Hz (20 to one speed range), without low speed cogging. Over frequency protection must be included such that a failure in the controller electronic circuitry must not cause frequency to exceed 110 percent of the maximum controller output frequency selected.

i. Minimum and maximum output frequency must be adjustable over the following ranges: 1) Minimum frequency 3 Hz to 50 percent of maximum selected frequency; 2) Maximum frequency 40 Hz to 60 Hz.

j. The controller efficiency at any speed must not be less than 96 percent.

k. The controllers must be capable of being restarted into a motor coasting in the forward direction without tripping.

l. Protection of power semiconductor components must be accomplished without the use of fast acting semiconductor output fuses. Subjecting the controllers to any of the following conditions must not result in component failure or the need for fuse replacement:

- (1) Short circuit at controller output
- (2) Ground fault at controller output
- (3) Open circuit at controller output
- (4) Input undervoltage
- (5) Input overvoltage
- (6) Loss of input phase
- (7) AC line switching transients
- (8) Instantaneous overload
- (9) Sustained overload exceeding 115 percent of controller rated current
- (10) Over temperature
- (11) Phase reversal

SECTION 26 29 23 Page 6

VFD Drives VFDDRIVES

m. Solid state motor overload protection must be included such that current exceeding an adjustable threshold must activate a 60 second timing circuit. Should current remain above the threshold continuously for the timing period, the controller will automatically shut down.

n. Include slip compensation circuit that will sense changing motor load conditions and adjust output frequency to provide speed regulation of NEMA MG 1 Part 30 designed for use with adjustable frequency power supplies motors to within plus or minus 0.5 percent of maximum speed without the necessity of a tachometer generator.

o. The ASD must be factory set for manual restart after the first protective circuit trip for malfunction (overcurrent, undervoltage, overvoltage or overtemperature) or an interruption of power. The ASD must be capable of being set for automatic restart after a selected time delay. If the drive faults again within a specified time period (adjustable 0-60 seconds), a manual restart will be required.

p. The ASD must include external fault reset capability. All the necessary logic to accept an external fault reset contact must be included.

q. Provide critical speed lockout circuitry to prevent operating at frequencies with critical harmonics that cause resonant vibrations. The ASD must have a minimum of three user selectable bandwidths.

- r. Provide properly sized NEMA rated by-pass and isolation contactors to enable operation of motor in the event of ASD failure. Install mechanical and electrical interlocks between the by-pass and isolation contactors. Provide a selector switch and transfer delay timer. Motor overload and short circuit protective features must remain in use during the bypass mode.
- s. Each individual ASD must meet the following Total Harmonic Distortion (THD) requirements at the input terminals to the factory assembly of the ASD or at the load disconnecting means serving the ASD and filter assembly. These measurements should be taken with the drive set at 90 percent frequency (rpms) and the motor under a minimum of 50 percent demand.
- (1) The Voltage THD should not exceed 2.0 percent THD.
 - (2) The Current THD should not exceed 15.0 percent THD.
 - (3) If the standard factory ASD does not meet or exceed these requirements the factory must install appropriate equipment (Harmonic Traps, Filters, different Drive technology, etc.) to mitigate the distortion to assure performance of the VFD is within the limits.
 - (4) These tests should be performed at the Manufacturers Laboratory facilities and submitted as part of the Product Data Submittals, in order to prevent the necessity of adding mitigation equipment in the field. If the requirements listed above are met, IEEE 519 will also be met.

t. Minimum Operating Conditions. Designed and constructed ASD's to
SECTION 26 29 23 Page 7
VFD Drives VFDDRIVES

operate within the following service conditions:

- (1) Ambient Temperature Rating: 0 to 120 degrees F.
- (2) Non-condensing relative humidity rating: less than 95 percent.
- (3) Ambient rating: Not exceed 3,300 feet.

2.1.1 ASD for Industrial Application

Provide the following operator control and monitoring devices mounted on the front panel of the ASD:

- a. Manual speed potentiometer.
- b. Hand-Off-Auto (HOA) switch.
- c. Power on light.
- d. Drive run power light.
- e. Local display[capable of including ASD status, frequency, motor RPM, phase current, fault diagnostic in descriptive text, and all programmed parameters].

2.2 ENCLOSURES

Provide equipment enclosures conforming to NEMA 250, NEMA ICS 7, and NEMA ICS 6, with a heater if located outdoors. An HMCP device shall provide the disconnecting means. The operating handle shall protrude through the door, but the disconnect shall not be mounted on the door. The handle shall indicate ON, OFF, and tripped conditions. The handle shall have provisions to accommodate a minimum of three padlocks in the OFF position. Interlocks shall prevent unauthorized opening or closing of the ASD door with the disconnect handle in the ON position. The door handle interlock should have provisions to be defeated by qualified maintenance personnel.

2.3 WIRES AND CABLES

All wires and cables must conform to NEMA 250, NEMA ICS 7, NFPA 70.

2.4 SOURCE QUALITY CONTROL

2.4.1 ASD Test Report

To ensure quality, each ASD must be subject to a series of in-plant quality control inspections before approval for shipment from the manufacturer's facilities. Provide test reports.

PART 3 EXECUTION

3.1 INSTALLATION

Per NEMA ICS 3.1, install equipment in accordance with the approved manufacturer's printed installation drawings, instructions, wiring diagrams, and as indicated on project drawings and the approved shop drawings. A field representative of the drive manufacturer must supervise the installation of all equipment, and wiring.

SECTION 26 29 23 Page 8

VFD Drives VFDDRIVES

3.2 GROUNDING

Per NEMA ICS 7.2, ASD must be solidly grounded to the main distribution.

3.3 FIELD QUALITY CONTROL

Specified products must be tested as a system for conformance to specification requirements prior to scheduling the acceptance tests.

Conduct performance verification tests in the presence of Government representative, observing and documenting complete compliance of the system to the specifications. Submit a signed copy of the test results, certifying proper system operation before scheduling tests.

3.3.1 Performance Verification Tests

"Performance Verification Test" plan must provide the step by step procedure required to establish formal verification of the performance of the ASD. Compliance with the specification requirements must be verified by inspections, review of critical data, demonstrations, and tests. The Government reserves the right to witness all tests, review data, and request other such additional inspections and repeat tests as necessary to ensure that the system and provided services conform to the stated requirements. Inform the Government 14 calendar days prior to the date the test is to be conducted.

-- End of Section

APPENDIX E ENVIRONMENTAL POLIC

12 July 2017

1

Standard Specifications for Projects Under the
National Environmental Policy Act
in Accordance with 32 CFR 651

Proponent ELTY-ISR-E

****Spill Response Procedures 1-2-3****

1. Stop work
2. Call 911
3. Evacuate Area

*****Damaged Asbestos?*****

Call Environmental Branch (EB) at 615-
7098

*****Environmental Questions?*****

Call EB 615-7098

1. Air Pollution Control

The contractor must control fugitive emissions, including dust, during the course of their contract. The contractor must obtain approval from the Environmental Branch (EB) prior to exhausting equipment to the outside. The contractor must not allow any pollutant or particulate

matter to be released to the atmosphere at levels that are visible from outside of Tobyhanna Army Depot (TYAD). The contractor must not perform work that will release pollutants or particulate matter to the atmosphere when the wind speed exceeds ten miles per hour and will result in adverse effects to the surrounding areas. TYAD will monitor the wind speed; it is the contractor's responsibility to obtain wind speed information through the Contracting Officer Representative (COR).

2. Asbestos

The contractor must ensure that all materials used in the performance of this contract are asbestos-free.

Unless specified in the contract, the contractor must not disturb any existing Asbestos-Containing Material (ACM) in the performance of this contract. If ACM, or suspect ACM might

be disturbed in performance of this contract, the contractor must avoid coming in contact with the material and immediately notify the COR and the Contract Administrator in writing. The COR must coordinate with EB to have the material tested to determine if there is ACM. If the material is determined to be ACM and the contractor cannot avoid disturbing the material, the COR will notify the Contracting Officer. The Contracting Officer will direct a change pursuant to the contract clauses entitled "Changes" and "Differing Site Conditions." If ACM, or suspect ACM has been disturbed, the contractor must immediately notify the COR and call the EB. The

ISR-E-G-45

12 July 2017

2

contractor will shut down and not move any equipment or supplies near the damaged ACM. The contractor will evacuate all non-contaminated contractor personnel from the immediate vicinity. Any contractor personnel thought to be contaminated with asbestos must remain in the area until the EB responds. If the damaged material is determined to be ACM and there is potential for further damage, the Contracting Officer will direct a change pursuant to the clauses of the contract clauses entitled "Changes" and "Differing Site Conditions."

Asbestos abatement required under the contract as originally awarded must be in accordance with United Facilities Guide Specification 02 83 14 00 10 and as otherwise required in the contract. Asbestos abatement not required under the contract as originally awarded, can be incorporated into the existing contract via contract modification, or by the Government taking responsibility for the asbestos abatement. The method of acquiring the abatement is at the discretion of the Government. The contractor must have an asbestos abatement work plan that has been approved by EB prior to beginning any asbestos abatement work.

3. Backflow

The contractor shall have a backflow prevention device installed on all contractor equipment that is connected to Tobyhanna Army Depot's (TYAD) water distribution system. The contractor shall have a water meter installed to monitor water consumption during all phases of the contract. Water use will be reported monthly to the Environmental Branch.

4. Burning

The contractor must not burn refuse and debris anywhere on TYAD.

5. Buy Recycled-Content Materials

The Contractor must comply with Resource Conservation and Recovery Act (RCRA) Section 6002 (42 U.S.C. 6962, Federal Procurement) in the acquisition of materials with recycled content to meet the standards of Executive Order 13693, Planning for Federal Sustainability in the Next Decade; March 19, 2015. Specific designated items in this contract for which recycled content standards have been established have been set forth in the specification (e.g., insulation, roofing materials, carpet, carpet pad, paint, floor tiles, shower and restroom dividers). Recovered Material Certification: As required by the RCRA, the contractor must certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by the applicable contract specifications (see Federal Acquisition Regulation (FAR) Provision 52.223-4, Recovered Material Certification). Prior to application for final payment, the contractor must provide a report in accordance with FAR Clause 52.223-9, Estimate of Percentage of Recovered Material Content for Environmental Protection Agency (EPA) Designated Items, to the Contracting Office. Compliance with this program does not relieve the

contractor from meeting all other specification requirements.

6. Cultural Resources

The contractor must not adversely affect any property listed on the National Register of Historic Places (NRHP) or properties eligible for inclusion on the NRHP without consultation and approval from the EB through the COR. If there is a discovery of any historic properties, including archeological sites and graveyards, work will cease immediately until requirements of National Historic Preservation Act, as amended, have been met. All archaeological artifacts

ISR-E-G-45

12 July 2017

3

found at TYAD or TYAD-controlled properties are U. S. Government property until a determination is made otherwise.

7. Demolition Notification

If a project involves the demolition of any load-bearing structural members, whether or not asbestos is present, 25 days prior to the demolition, the Commonwealth of Pennsylvania Asbestos Abatement and Demolition/Renovation Notification Form 2700-FM-BAQ0021 must be submitted to EB as specified in the Unified Facilities Guide Specification 02 82 13.00 10. The contractor may obtain a copy of the form from the EB.

8. Drinking Water

The contractor must not perform any work on the TYAD potable water system prior to obtaining approval from the EB and the Installation Planning and Maintenance Division certified operator through the COR. If a permit is required due to construction or proposed chemical feed changes, it will be the responsibility of the contractor to obtain all permits associated with the project. Permit applications will first be reviewed and approved by the Environmental Branch before being submitted to regulatory authorities. Any piping or additions added to the TYAD water system must be disinfected following American Water Works Association circular C651-14 "Disinfecting Water Mains." Construction will be kept outside of drinking water wellhead protection zones when feasible. All new buildings and remodeled buildings will be equipped with a water meter that can easily be read from the exterior of the building.

9. Endangered Species

The contractor is responsible for meeting requirements of the Endangered Species Act of 1973. The contractor must not disturb any endangered species, their habitat or offspring during the implementation of this contract.

10. Emergency/Spills

All emergencies and spills must be reported to the TYAD Fire Department by calling 911 from a TYAD phone or (570) 615-7300. If a 911 call is placed on a cell phone, the call will go to the Monroe County Emergency Office. Notify the Monroe County Emergency Office that you are at TYAD and the call will be forwarded to TYADs Fire Department. The contractor must ensure all personnel working on site are trained in the proper procedure according to 29 CFR 1910.120 (if applicable) to initiate a spill response to handle the hazardous substances they are working with. The contractor will take the necessary actions to prevent and contain spills of hazardous materials.

11. Energy Efficiency

The Energy Policy Act of 2005 section 109 and the Energy Independence and Security Act of 2007 require all new construction at federal facilities to be 30% better than ASHRAE 90.1. Energy Policy Act of 2005 section 104 and the Energy Independence and Security Act of 2007 require all new equipment to be Energy Star qualified when available. This is applicable to heating, ventilation and air conditioning equipment, plumbing, building materials, lighting, commercial food service equipment and appliances.

ISR-E-G-45

12 July 2017

4

12. Environmental Automation and Control Systems

The contractor will not alter, modify, remove or tamper with any environmental automation or control system unless previous arrangement have been made with EB. This includes sensors,

programmable logic controllers, equipment housing, power supplies, meters or other hardware/sensor technology.

13. Erosion and Sedimentation Control

The contractor shall protect streams, lakes and wetlands from sediment discharges caused by the contractor's activities. The contractor shall also provide (where applicable) an erosion and sedimentation control plan in compliance with state and local laws and regulations, to the COR for approval prior to executing any soil-disturbing activities. The contractor must submit a National Pollutant Discharge Elimination System Permit to the Pennsylvania Department of Environmental Protection (PADEP) prior to any construction activity that encompasses more than one acre. All permits must be reviewed and approved by the EB prior to being sent to any regulatory authority. The contractor shall not disturb any wetlands. Contractor will remove all silt fencing and other temporary control measures once the site is stabilized. Contractor will remove all spoils from TYAD unless a previously approved disposal site has been established. The contract COR will be responsible for management and control of the spoils disposal site.

14. Fluorescent and Mercury-Bearing Lamps

The contractor is to collect, containerize, manage and recycle fluorescent and mercury-bearing lamps in accordance with 40 CFR 273, Standards for Universal Waste Management. A copy of the manifest/Bill of Lading must be given to the EB through the COR five days in advance of shipment by the contractor so that it can be reviewed for accuracy and completeness. The contractor must install low mercury bulbs when available.

15. Hazardous Materials Stored and Labeled

The contractor must ensure all hazardous materials (HM) at the work site are properly stored and labeled. The contractor must not leave any HM behind at the completion of the job for any reason. HM must not be stored outside without adequate secondary containment and shelter.

16. Hazardous Waste

The contractor must ensure that all hazardous wastes (HW) at the work site are properly stored and labeled in a pre-approved location designated by the EB. The contractor must provide copies of any shipping documents for HW/Universal Waste/Toxic Substances Control Act waste. If the TYAD EPA number is being used for shipping purposes, only EB is authorized to sign a manifest and the manifest (or copy) must be supplied prior to the day of shipment for review. The EB will keep originals. If HW or waste requiring special handling (e.g., asbestos) is being turned over to the government for disposal, the contractor must notify the EB through the COR when the waste is ready to be moved.

17. ISO 14001

TYAD is an ISO 14001 certified facility. All contractor and subcontractor employees on site must comply with TYAD Regulation 200-5, "Environmental Management System (EMS)." The contractor may obtain these regulations through the project COR.

ISR-E-G-45

12 July 2017

5

18. Limit of Disturbance

The contractor must confine the limit of disturbance of the project to the smallest area possible.

19. Mercury-Bearing Equipment

The contractor must not install any equipment, switches, or devices (including thermostats) that contain mercury or lead.

20. Safety Data Sheets (SDSs)

The contractor must submit SDSs for all hazardous materials proposed for use, including paints, solvents, adhesives, etc., to the EB through the COR five working days prior to material being brought on post. The contractor must keep a copy of all SDSs required for the project at the jobsite.

21. Migratory Bird Protection

The contractor is responsible for meeting requirements of the Migratory Bird Treaty Act of 1918 (as amended). The contractor must not disturb any migratory bird, their nesting area or offspring during the implementation of this contract.

22. National Pollutant Discharge Elimination System (NPDES) Permits

The contractor must not perform any work on existing NPDES structures or treatment units unless previously approved in writing by the Installation Planning and Maintenance Division certified operators and the Environmental Branch. This includes work within the sewage treatment plant, sewage lift stations, sewage conveyance pipes, Industrial Operations Facility pretreatment plant, and storm water sewer systems. If a permit is required, it will be the responsibility of the contractor to obtain all permits prior to work being performed. All permit application packages must first be reviewed by the Environmental Branch prior to being sent to any regulatory authority.

23. Net Zero Water

The contractor will minimize the use of potable water during the construction project. Water used during the construction project will be monitored and measured using portable water meters if possible. Installed restroom equipment will consist of high-efficiency fixtures that use reduced volumes of water. Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building after meeting the Energy Policy Act of 1992 fixture performance requirements. Automatic hands-free flushometers will not be used. Water-free urinals will not be used. Flushometers will be the piston variety that fail in the closed position. New building construction and renovations will include installation of a water meter that is capable of being read from the outside of the building.

24. Noise

The contractor must not allow the noise level to exceed 65 decibels at any point outside TYAD property. If noise levels exceed 65 decibels, a plan must be prepared by the contractor to mitigate the noise levels and submit to the EB for approval through the COR. The contractor will monitor the fence line to confirm this limit.

ISR-E-G-45

12 July 2017

6

25. Ozone Depleting Substances (ODS)

The contractor must be responsible for ensuring that all personnel who perform maintenance and repair activities on refrigeration equipment have been trained and certified by an EPA-approved Section 608 program. The contractor must not use Class I or Class II ODS or install equipment that contains Class I or II ODS.

25. Paints

The contractor must not use paints containing zinc chromate or strontium chromate pigments and paints containing lead in excess of 0.06 percent by weight of the total nonvolatile content (calculated as lead metal).

26. Pest Management

At no time during the execution of this contract must the contractor provide a food source or harborage for any pests. The contractor must coordinate through the COR to the EB prior to application any pesticide usage. Pesticides are required to be approved by the EB. The contractor must report all usage of pesticides through the COR to the EB. After completion of the contract, the contractor must ensure there is no passage for pests to enter facilities or structures related to work performed by the contractor.

27. Polychlorinated Biphenyls (PCBs)

The contractor must not bring items containing PCBs onto TYAD. Light ballasts that are clearly marked "Contains no PCBs," or that are marked with a manufacture date after 1978 must be disposed of by the contractor as construction demolition debris. Any light ballast that is not marked as containing no PCBs that has a manufacture date prior to 1978, or that cannot be determined whether it contains PCBs, must be disposed of by the contractor at an approved and licensed facility for PCBs. The contractor must submit a shipping manifest and certificate of disposal of the PCB-containing items to the EB through the COR.

28. Recycling

The contractor must comply with TYADs general recycling plan for recyclable materials such as aluminum, steel, cardboard, paper, plastic and wood. The contractor should contact the EB for additional information on the recycling of materials through the COR. The COR will coordinate with EB to have the contractor recycle metals, cardboard, etc., through TYADs recycling

program. All Construction and Demolition (C&D) material transferred from a construction project into the TYAD recycling program must be segregated and material type and weights submitted to the project COR for consolidation. Any material entering the TYAD recycling program that is not documented and properly reported will be absorbed into the TYAD recycling program and not count towards the C&D requirement of the project. Clean wood shall be recycled by the contractor off TYAD property.

29. Refuse and Construction Demolition Debris Removal and Disposal

During the performance of all construction, renovation and demolition projects, a minimum of 60 percent of all non-hazardous construction demolition debris shall be diverted from the landfill for reuse or recycling. The contractor shall provide written certification to the COR of the type and tonnage of debris reused or recycled from the contract. All refuse and the construction demolition debris not recovered for reuse or recycling shall be disposed of at a PADEP permitted ISR-E-G-45

12 July 2017

7

and Monroe County Municipal Waste Management Authority authorized facility. The contractor shall comply with the Monroe County Solid Waste Management Plan and PA Act 90, including all licensing requirements. Monroe County has specific landfills that is must be transported to per Monroe County guidance which is available on the county website (<http://www.thewasteauthority.com>) and any contractors can call the Monroe County Municipal Waste Management Authority at (570) 643-6100. The contractor shall provide a disposal certificate or landfill weight slip to the COR for all solid waste disposed of during the performance of this contract. The COR will then provide copies of the disposal certificate or landfill weight slips with the quarterly consolidated C&D report from The Installation Planning and Maintenance Division to EB.

30. Removal Materials

The contractor must remove from the site prior to the acceptance of work by the Government, all materials not identified to remain in place, including excess paints, building materials and equipment purchased by the contractor for the execution of this project.

31. Site Preservation and Restoration

The contractor must ensure that the land resources associated under this contract be preserved in their present condition, or be restored to a like condition after completion of construction. This post construction appearance will appear to be natural and not detract from the appearance of the project.

32. Trees and Shrubs Protection

The contractor must be responsible for the protection of all trees and shrubs on site. The contractor must not allow any heavy equipment, vehicular traffic or stockpiling of materials within ten feet from the drip line of any tree. The contractor must not allow any toxic materials to be stored within 100 feet (35.5 meters) of the drip line of any tree. The contractor must not nail protective devices, signs, utility boxes or other objects to trees to be retained on the site.

33. Unexploded Ordnance (UXO)

All work that is done in the UXO area must include the support and clearance by a UXO technician. In addition, all personnel entering the UXO area must have UXO recognition training. The COR will escort the contractor to the EB for UXO recognition training. The COR will provide a map of the UXO area to the contractor.

34. Water Quality

The contractor shall not pollute streams, lakes or reservoirs. All work under this contract shall be performed in such a manner that pollution will not be created in streams, surface waters or underground water located within, or adjacent to the project area. The contractor shall not spill, emit, dump or otherwise discharge any hazardous, toxic, harmful or unauthorized pollutant, substance or material, including petroleum products, cleaning agents or paints, onto the ground, into the air or into any waters or nearby storm drain. The contractor shall execute any preventative measures required to prevent any hazardous, toxic or harmful material stored or used on the project site from entering any stormwater drain. Nothing shall be allowed to spill, emit, dump or otherwise discharge any hazardous, toxic or harmful material or pollutant into any

sink, toilet, drain, utility or receptacle without written permission from the EB through the COR.

ISR-E-G-45

12 July 2017

8

The contractor shall protect streams, lakes and wetlands from sediment discharges caused by his activities.

APPENDIX G ELECTRICAL DESIGN

TOBYHANNA ARMY DEPOT

Electrical Requirements

Design and Construction Standards

Revised 10 January 2018

ii

Tobyhanna Army Depot

Electrical Design & Construction Standards

TABLE OF CONTENTS

1. GENERAL REQUIREMENTS	1
1.1 Preface	1
1.2 Terms Used	1
1.3 References	1
1.4 Approval	2
1.5 Warranty	2
1.6 O&M Manuals	2
1.7 Temporary Electrical	2
2. SPECIFIC ELECTRICAL DISTRIBUTION SYSTEM REQUIREMENTS FOR INTERIOR INSTALLATIONS.	2
2.1 CONDUITS	2
2.1.1 General	2
2.1.2 Rigid Aluminum Conduit	2
2.1.3 Rigid Nonmetallic Conduit	3
2.1.4 Intermediate Metal Conduit (IMC)	3
2.1.5 Electrical, Zinc-Coated Steel Metallic Tubing (EMT)	3
2.1.6 Flexible Metal Conduit (FMC)	3
2.1.7 Metal-Clad Cable, Type MC	3
2.1.8 Surface Metal Raceways	3
2.1.9 Busways	3
2.2. CABINETS, BOXES AND FITTINGS	3
2.3. WIRES AND CABLES	3
2.3.1 Grounding Conductors	4
2.3.2 Neutrals	4
2.3.3 Conductors	4
2.4. SWITCHES	5
2.4.1 Toggle Switches	5
2.4.2 Disconnect Switches	5
2.5 RECEPTACLES	6
iii	
2.6 PANELBOARDS	6
2.7 MOTORS AND CONTROLLERS	6
2.8 LIGHTING	7
2.8.1 General	7
2.8.2 Interior	7
2.8.3 Emergency Lighting	8
2.9 GROUNDING	9
2.9.1 General Grounding Requirements	9

2.9.2 Grounding Separately Derived Systems	9
2.9.3 Grounding New Construction	9
2.9.4 Grounding Rehabilitation Work	10
2.10 OVERCURRENT PROTECTION	10
2.10.1 Feeder Taps	10
2.10.2 Transformer Overcurrent Protection	13
3. SPECIFIC ELECTRICAL DISTRIBUTION SYSTEM REQUIREMENTS FOR EXTERIOR INSTALLATIONS.	13
3.1 Exterior Lighting	13
3.2 Pad-Mounted Transformers	13
3.3 Duct Lines	14
3.4 Trenching And Backfilling	15
4. LIGHTNING PROTECTION.	
4.1 Compliance	16
4.2 Requirements.....	16
4.3 Documents	17
4.4 Materials	17
4.5 Installation Oversight	17
4.6 Installation	17

1

1. GENERAL REQUIREMENTS

1.1 Preface - These requirements are written for project designers. It is expected that these requirements will be used during design to understand the particular needs of TYAD. These requirements will help the designer as he prepares the plans and job specific specifications. Reference to standards is limited, as they will be covered in the job specific specifications. Annex 'A' is a compilation of requirements in bullet format for the designer to mark-up for specific jobs and include in the construction requirements.

1.2 Terms Used - The terms "as approved", "approved", or "shall be approved" means that written approval shall be granted by the Electrical Engineering Department of the Directorate of Installation Services – Division of Installation Planning and Maintenance, Tobyhanna Army Depot (TYAD). This office is the Authority Having Jurisdiction (AHJ) and is responsible for approving equipment, materials, an installation, or a procedure in accordance with the requirements of 2017 Edition of the NFPA-70.

1.3 References - All applications shall be in accordance with the latest edition of the following documents and any listing requirements. Other referenced documents in the job specifications are also applicable. Where there is any conflict between references, the most stringent shall be applicable unless approved otherwise by the AHJ. AHJ shall approve the list of applicable codes:

- ☐ 2017 Edition National Electrical Code (NEC), NFPA-70
- ☐ Life Safety Code, NFPA-101
- ☐ 2017 National Electrical Safety Code (NESC), IEEE C-2
- ☐ IESNA Lighting Handbook – 9th Edition
- ☐ EM 385-1-1, Safety and Health Requirements Manual
- ☐ 2017 Edition of NFPA 780 Standard for Installation of Lightning Protection Systems.

☐ OSHA 29 CFR 1910.132d requires that employers assess the workplace to determine if hazards are present, and that employees use the types of Personal Protective Equipment (PPE) needed to protect them from the hazards. Written certification must be furnished, verifying that a hazard assessment has been performed for each particular location.

☐ 2015 edition of the NFPA 70E, Article 110.9 (B)(1)(b) requires that an arc-flash hazard risk analysis be performed to protect personnel from the possibility of injury. The analysis is used to determine the level of hazard and the proper PPE for the given task.

2

□ National Electrical Safety Code (NESC) Part 4, Section 41 requires that – effective January 1, 2012 – employers ensure an assessment is performed, to determine the potential exposure to an electric arc for employees who work on or near energized parts of equipment

1.4 Approval - Require that catalog cut sheets submitted for design review or approval by the Authority Having Jurisdiction (AHJ) be marked so that the selected item is obvious, such as by use of arrows. i.e. The actual item and description on a catalog cut sheet shall be highlighted in this way. Actual cut sheets of the equipment being installed shall be submitted, not sales sheets of a general nature.

1.5 Warranty - Warranty shall start at turnover and include all labor required during the warranty period. All equipment shall be new, not refurbished, unless specifically approved otherwise by the AHJ.

1.6 O&M Manuals - O&M Manuals shall be furnished in 6 copies (3 for TYAD) unless approved otherwise by the AHJ. O&M Manuals shall be available prior to placing equipment in service and transmitted on Form 4025 Transmittal Sheet.

1.7 Temporary Electrical – Temporary wiring and lighting requirements shall be in accordance with EM 385-1-1, Safety and Health Requirements Manual. Section 11 of this manual covers Electrical requirements in general and paragraph 11.D Temporary Wiring and Lighting contains the specific requirements. The term Government Designated Authority shall be interpreted to mean AHJ.

2. SPECIFIC ELECTRICAL DISTRIBUTION SYSTEM REQUIREMENTS FOR INTERIOR INSTALLATIONS.

2.1 CONDUITS

2.1.1 General

Minimum size conduit shall be 3/4" unless approved otherwise. Bushings shall be installed on the ends of all conduits and end fittings, before pulling of conductors. Where wholly insulated bushings are used, they shall be used with a locknut. Wholly insulated bushings must engage a minimum of 3 full threads. Conduits for control wiring shall be run separate from conduits containing power conductors. Conduits supported from steel beams using beam clamps shall be of the cast metal type.

Conduit fill calculations shall be made in accordance with NEC Chapter 9, Table 1.

2.1.2 Rigid Aluminum Conduit – Only allowed for 400 Hz circuits, unless approved otherwise. Where rigid aluminum conduit is specified, aluminum boxes and fittings shall be used also. For in-slab, conduit, boxes and fittings for use with 400Hz circuits shall be rigid plastic. Support in accordance with NEC 344.30.

3

2.1.3 Rigid Nonmetallic Conduit - PVC Type EPC-40 in accordance with NEMA TC 2, in ground only to include under slabs, but not installed in rock. Stub-ups shall be PVC coated IMC. Allowed for corrosive locations as approved. Support in accordance with NEC 352.30.

2.1.4 Intermediate Metal Conduit (IMC) - Zinc-Coated Steel only – As allowed by the NEC, except that it shall be PVC coated at the factory (NEMA RN-1, 40 mils thick), when used in concrete or rock beneath a slab-on-grade and when installed in wet or damp locations indoors and outdoors. Minimal field repair of PVC coating shall be allowed. Support in accordance with NEC 342.30.

2.1.5 Electrical, Zinc-Coated Steel Metallic Tubing (EMT) - Shall be allowed within buildings in dry locations, both exposed and concealed. Use in wet areas and outside in protected areas such as under canopies, with use of compression type fittings. Support in accordance with NEC 358.30.

2.1.6 Flexible Metal Conduit (FMC) - Allowed only for connection of equipment subject to vibration. FMC is not intended as a general-purpose raceway for long distances and shall be limited to 6 feet in length unless approved by the AHJ. Use Liquidtight Flexible Metal Conduit (LFMC), Steel, for damp or wet locations as allowed by the NEC. Support in accordance with NEC 348.30.

2.1.7 Metal-Clad Cable, Type MC – This type cable shall be allowed on a limited basis such as within existing metal stud walls. In new construction, MC cable shall only be allowed within metal stud walls to a junction box mounted at the top of the wall.

Typically, runs of MC cable shall be limited to 10 feet or less for lighting. Use in other locations shall be as approved by the AHJ.

2.1.8 Surface Metal Raceways – Shall be allowed, as approved, only in administrative areas in buildings being renovated or improved.

2.1.9 Busways – All busways shall be non-ventilated and shall have full neutrals and grounding conductors. Plug-in switches or breakers shall be used on the busway for feeds to equipment.

2.2. CABINETS, BOXES AND FITTINGS

Close any unused openings in cabinets, boxes or fittings. All boxes and fittings shall match the type of conduit being used. Provide all pull boxes, junction boxes and fittings with covers approved for the purpose. As part of the design, provide fill calculations and wire bending space calculations for cabinets, boxes and fittings. Boxes and fittings supports from steel beams shall use cast metal beam clamps. Box fill calculations shall be made in accordance with NEC 314.16(B)

2.3. WIRES AND CABLES

4

2.3.1 Grounding Conductors - A separate green grounding conductor shall be run with all circuits. Raceways shall not be used as the sole grounding means. Grounding conductors No. 4 AWG and larger may be marked in the field with green marking tape or other methods allowed by NEC 250.119(A).

2.3.2 Neutrals – Full neutrals shall be run with every branch circuit. i.e. No shared neutrals for branch circuits. For circuits with nonlinear loads of 25% or greater, the neutral shall be considered a current carrying conductor. Where the load is likely to exceed the neutral conductor rating due to nonlinear loads, such as in systems furniture, the neutral shall be oversized to compensate for this additional loading. In all cases, the neutral conductor shall conform to the requirements of NEC 310.15(B)(4)(c). True RMS measuring ammeters shall be used to determine neutral loading where nonlinear loads are encountered.

2.3.3 Conductors – All conductors shall be copper. Conductors No. 6 AWG and larger diameter shall be stranded. Conductors No. 8 AWG and smaller diameter shall be solid, except that conductors for remote control, alarm, and signal circuits, classes 1, 2, and 3, may be stranded unless specifically approved otherwise. Minimum size for branch circuits shall be No. 12 AWG; for Class 1 remote-control and signal circuits, No. 14 AWG; for Class 2 low-energy, remote-control and signal circuits, No. 16 AWG; and for Class 3 low-energy, remote-control, alarm and signal circuits, No. 22 AWG. Run control circuits in a separate conduit, unless otherwise approved by the AHJ.

2.3.3.1 Insulation – Unless specified or indicated otherwise or required by NFPA 70, power and lighting wires shall be 600-volt rated. In outdoor damp or wet locations XHHW-2. In indoor dry applications - Type THWN/THHN except that grounding wire may be type TW; remote-control and signal circuits shall be Type TW or TF. Where lighting fixtures require 90-degree Centigrade (C) conductors, provide only conductors with 90-degree C insulation or better. Be sure conduit fill calculations are based on largest diameter insulation type allowed. Designer may select other insulation types which may be more suitable for a particular project with prior approval. For rewiring project where existing conduit is to be utilized, specify types THHN and THWN. Designer should use THWN values (75°C) for ampacities of THWN/THHN per NEC 110.14(C)(1)(a) or (b). Fire alarm cable shall be type FPL unless designated otherwise.

2.3.3.2 Color Code - Provide for service, feeder, branch, control, and signaling circuit conductors. Color shall be green for grounding conductors and white or gray for neutrals as indicated below. Color of ungrounded conductors in different voltage systems shall be as indicated below.

208/120 volt, three-phase (Ø):

Ø A – black

Ø B – red

Ø C – blue

Neutral – white

5

480/277 volt, three-phase (Ø):

Ø A – brown

Ø B – orange

Ø C – yellow

Neutral – gray

120/240 volt, single-phase (Ø): Black and red for ungrounded conductors with a white neutral.

For conductors No. 6 AWG and smaller diameter, color coding shall be by factory_applied, color-impregnated insulation. For conductors No. 4 AWG and larger diameter, color coding shall be by colored marking tape designed for the purpose and shall be applied in each exposed location such as cabinets, boxes and fittings. Where more than 3' of conductor is exposed, it shall be marked at 3' intervals. Each marking shall include at least 3 complete circles around the conductor, each separated from the next by the width of the marking tape.

For rehab work, if there is no existing color code convention, the requirements here will be utilized. Where an existing system is encountered that utilizes different color coding, that color coding shall continue to be used. Travelers for 3-way and 4-way switches shall be allowed to be striped (other than green). Use wire wrap labeling for control circuits to match drawings.

2.3.3.3 Terminations – Any copper to aluminum connections or terminations, where allowed, shall be made using approved connectors and antioxidant compound as required by NEC 110.14. Integrity of electrical equipment and connections shall be maintained in accordance with NEC 110.12(B). Nonconductive coatings on equipment to be grounded shall be removed from threads and other contact surfaces to ensure good electrical continuity or be connected by means of fittings designed so as to make such removal unnecessary as required by NEC 250.12. Grounding conductors and bonding jumpers shall be connected by one of the methods listed in NEC 250.8(A).

2.4. SWITCHES

2.4.1 Toggle Switches – Minimum of 20 ampere switches shall be used. Circuit breakers shall not be used as switches.

2.4.2 Disconnect Switches – Use heavy duty-type switches at installations where frequent use interrupting large currents is required and where the voltage exceeds 240 volts. General duty switches are acceptable where used to supply workbenches from busways, unless large currents are frequently interrupted. Local switches for equipment shall be mounted adjacent to equipment and within 6'-6" above the finished floor. Each switch or breaker shall feed a single piece of equipment. Fused switches shall utilize Class R fuseholders and fuses. Switches serving as motor-disconnect means shall be 6

horsepower rated. Provide for use of fuse reducers, such as when a 100 ampere switch needs to be fused at 60 amperes.

2.5 RECEPTACLES

Receptacles shall meet the requirements for UL 498, hard use, heavy-duty type and minimum of 20 ampere. Use twist-lock NEMA configured receptacles for lighting fixtures in industrial areas. Use receptacles sized to match equipment ratings and plugs.

2.6 PANELBOARDS

New work – In industrial Areas, main and distribution panelboards shall be Square-D, I_Line panels and matching breakers. Smaller panels can be Type NQ for 208Y/120 volts and NF for 480Y/277 volts. Design all panels for 25% spare capacity in amperes and

spaces. Smaller panels shall include 10% spare breakers. In areas other than industrial areas, use of panels other than described here shall be approved. Panelboards shall require nameplates made from engraved laminated melamine plastic with white lettering, minimum 1/4" high, as approved by TYAD.

Rehab work - Use of panels other than described above shall be approved. Where circuit breakers are added to or replaced in an existing panelboard, Labeling of new circuits and update of index cards shall be required for existing panels. All new panelboards shall require nameplates made from engraved laminated melamine plastic with white lettering, minimum 1/4" high, using the naming convention provided by TYAD. Update grounding in accordance with this document for new circuits. Where a panel is replaced that doesn't have a ground, a grounding conductor will be installed all the way to the main service ground.

Electrical circuit breaker panelboards shall be labeled with the serial number of the primary piece of equipment being supplied

Series ratings – Where series ratings are utilized, the designer shall comply with NEC 240.86(B) & (C) for new work and NEC 240.86(A) & (C) for existing installations. Series combination systems shall be marked in accordance with NEC 110.22. Any additional breakers or breaker replacement in an existing panelboard shall utilize exact replacement breakers to match existing.

2.7 MOTORS AND CONTROLLERS

Motors 1-hp and larger shall have electronic phase-voltage monitors designed to protect motors from phase-loss, under-voltage, and overvoltage. Single-phase motors shall be rated high efficiency and poly-phase motors shall be rated premium efficiency.

7

2.8 LIGHTING

2.8.1 General – LED fixtures used in the industrial area shall use a color temperature range of 4000 °K to 5000°K. LED fixtures shall be equipped with dimming drivers.

2.8.2 Interior - Where possible, interior lighting will consist of LED fixtures with Dimmable Drivers operated at 277V. Office area LED fixtures shall be no brighter than 3500°K and must be dimmable. Fixtures will be either supported by mounting directly to the structure or below the structure with minimum 3/8" all thread rod or other means pending approval by the AHJ except, wires equivalent to ceiling supports wires shall be allowed to support fixtures in suspended ceilings. Where mounted in suspended ceilings, fixtures shall be independently supported from the structure by a minimum of four support wires, one on each corner of the fixture. A single support at each end of the fixture tied to both corners shall also be allowed. Overall support shall be rated for a total of 150 lbs/fixture. Ceiling grid clips are not allowed as an alternative to independently supported light fixtures. In open ceiling industrial areas, all fixtures shall be furnished with 6 foot SO type cords and twist-lock NEMA configured plugs.

Fixtures shall not be used as a raceway for circuit conductors unless listed and marked for use as a raceway per NEC 410.64. Wiring supplying luminaries connected together shall comply with NEC 410.65. Branch-circuit conductors within 3 inches of a ballast shall have an insulation temperature rating of not less than 90 °C unless supplying a fixture listed and marked as suitable for a different insulation temperature per NEC 410.68.

Unless furnished with integral disconnect means, LED fixtures installed in industrial areas and not in lay-in ceilings, shall be furnished with a 6 foot SO type cord and twist_lock NEMA configured plugs. The receptacles for the fixtures shall be within 3 feet

horizontally and 2 feet vertically of the fixtures served and securely supported from the building structure or with minimum 3/8" all thread rods. Support is generally required at least in two locations per fixture, normally in the center of the each end of the fixture.

Fixtures for industrial work areas shall generally be a type similar or equal (as approved) to Lithonia Lighting Corporation "I-BEAM LED" series lights with semi-diffuse acrylic diffusers for glare control and equipped with 6 foot cords and twist-lock NEMA configured plugs. Maximum fixtures allowed on a circuit will be based on NEC

requirements. The minimum branch circuit conductor size, before application of any adjustment or correction factors, shall have an allowable ampacity not less than 125% of the continuous load. Adjustment and correction factors include any applicable derating factors such as correction factors for higher ambient temperatures and adjustment factors such as more than three current carrying conductors as described in NEC 310.15(B)(2). Lighting circuits shall be considered continuous loads.

8

2.8.3 Emergency Lighting

2.8.3.1 Automated Systems

An 'Automated System' is a centrally powered emergency lighting system that performs independent self testing for a multiple of fixtures.

All buildings with Automated Systems must be upgraded when renovated. The contractor will submit a lighting design and photometric drawing to the electrical engineer in the Engineering Division of DPW for approval. After approval, the contractor can then upgrade the emergency lighting system.

If the contractor is not upgrading emergency lighting system, then the contractor will need to provide a lighting design of the area six (6) months before construction so DPW will be able to contract the work out separately.

Buildings with Automated Systems include:

Building 1A Building 1B Building 1C Building 1D
Building 1E Building 2 Building 3 Building 4
Building 5 Building 6 Building 7 Building 8
Building 9 Building 10 Building 11 Building 12
Building 13 Building 15 Building 55 Building 58
Building 72 Building 221 Building 230 Building 333

2.8.3.2 Non-Automated Systems

A 'Non-Automated System' consists of individual emergency lighting fixtures that are tied in the building lighting system.

All buildings with Non-Automated Systems must be upgraded when the area lighting is being upgraded or renovated. All fixtures must be preapproved by an Electrical Engineer in DPW Engineering Division.

Buildings with Non-Automated Systems include:

Building 14 Building 16 Building 17 Building 18
Building 19 Building 20 Building 21 Building 23
Building 24 Building 34 Building 41 Building 54
Building 56 Building 66 Building 69 Building 72A
Building 74 Building 86 Building 87 Building 88
Building 89 Building 93 Building 98 Building 103
Building 104 Building 123 Building 215 Building 218
Building 220 Building 233 Building 241 Building 310
Building 334 Building 335 Building 403 Building 700
Building 701 Building 702 Building 703 Building 816
Building 3002 Building 3005 Building 73

9

All exit and emergency lights shall be approved by the AHJ.

2.9 GROUNDING

2.9.1 General Grounding Requirements - Equipment grounding conductors shall be bonded to each junction box or enclosure. Exposed metal mounting brackets for boxes shall be grounded by connection to the grounding conductor by a bonding jumper. Door fronts on control cabinets that contain electrical equipment shall be provided with a bonding jumper to the box by the manufacturer unless the equipment is listed as meeting grounding requirements. All equipment installation grounding requires approval. All underground and any grounding connections that are not readily accessible shall have all connections by exothermic welding or other permanent non-reversible means approved by the AHJ. Ground Rods shall be 10 foot, 3/4" copper clad.

Where critically clean low noise grounding systems are needed, consideration should be given to the use of isolated equipment grounding schemes where the equipment grounding conductor feeding receptacles is insulated and connected to the ground terminals of an isolated ground receptacle.

2.9.2 Grounding Separately Derived Systems – For separately derived systems such as dry type transformers or emergency generators, a system bonding jumper shall be installed at the same location where the grounding electrode conductor terminates to the neutral terminal of the separately derived system. This termination can be made at the separately derived system or the system disconnecting means, but not at both locations. The grounding electrode shall be as near as practicable to and preferably in the same area as the grounding electrode conductor connection to the system. Connections to the grounding electrode shall be made in the following order, depending on availability and proximity to the separately derived system: First, structural metal grounding electrode as specified in NEC 250.52(A)(2). It is expected that normally, the structural metal of the building will be grounded in accordance with NEC 250.52(A)(2) and will be used as the grounding electrode with the grounding electrode conductor sized in accordance with NEC 250.66; Second, the nearest metal water pipe grounding electrode as specified in NEC 250.52(A)(1); Third, a separate driven ground.

2.9.3 Grounding New Construction – All new construction will require a single point ground. All grounding will be tied back to this single point with separately derived systems being grounded in accordance with the paragraph above. Require all grounds to be tested to assure they are 25 ohms or less using the fall-of-potential method described in IEE Standard 81. Test instruments shall have visible dated calibration labels that are no more than 6 months old for analog instruments and 12 months for digital instruments in accordance with International Electrical Testing Association (NETA) requirements. Require additional rods or additional sections where 25 ohms is not reached with a single rod. Grounding test wells shall be provided for main service 10

ground. Submit written results of each test to AHJ, and indicate location of rods as well as resistance and soil conditions at time measurements were made.

2.9.4 Grounding Rehabilitation Work – Verify existing grounding of any electrical rehabilitation work to assure the existing ground meets the 25 ohms or less. If the existing ground does not meet this requirement, require that it be modified to achieve this minimum requirement. Newly installed conduits shall contain grounding conductors that are bonded to each junction box or enclosure.

2.10 OVERCURRENT PROTECTION

2.10.1 Feeder Taps – Conductors shall be permitted to be tapped, without over-current protection at the tap, to a feeder as specified in NEC 240.21(B)(1) through (B)(5). We will concentrate on NEC 240.21(B)(1) through (B)(3) and NEC 240.21(C) for transformer secondary conductors.

General Requirements:

(1) Tap conductors shall be in raceways if they leave the enclosure.

(2) Tap conductors don't extend beyond the equipment they supply.

(3) Provisions of 240.4(B) to allow conductors to be protected at the next higher standard over-current protective device (OCPD), does not apply to tap conductors.

(4) Do not use a tap conductor to supply another conductor, or "tap a tap".

NOTE: THE AUTHORITY HAVING JURISDICTION (AHJ) AT THE TOBYHANNA ARMY DEPOT IS THE DIRECTORATE OF INSTALLATION SERVICES, DIVISION OF INSTALLATION PLANNING & MAINTENANCE – ENGINEERING BRANCH, ELECTRICAL ENGINEERING DEPARTMENT.

Specific Requirements:

(1) NEC 240.21(B)(1) Taps not over 10 feet long:

- a. Not less than the load served.
- b. Not less than the rating of the device served or rating of the OCPD served.
- c. Have an ampacity that is not less than 10 percent of the ampacity of the OCPD that protects the feeder.

(2) NEC 240.21(B)(2) Taps not over 25 feet long:

- a. Have an ampacity that is not less than 1/3 of the rating of the OCPD that protects the feeder.

200 A circuit
breaker

The 1/0 AWG tap conductors cannot exceed 10' in length

12

- b. Tap conductors must terminate in a single circuit breaker or set of fuses that will limit the load to the ampacity of the tap conductors.

(3) NEC 240.21(B)(3) Taps supplying a transformer with primary plus secondary not over 25 feet long:

- a. Transformer primary conductors must have an ampacity at least 1/3 the rating of the OCPD protecting the feeder conductors. i.e. The #8 conductors are rated 50A, which is more than the required 1/3 of the 110A fuse (37A).
- b. Transformer secondary conductors must have an ampacity that is not less than the value of the primary-to-secondary voltage ratio multiplied by 1/3 of the rating of the OCPD protecting the feeder conductors. i.e. #3 transformer secondary conductors are rated 100A, which is more than 1/3 of the feeder OCPD ($110/3=37A$) times the primary-to-secondary voltage ratio of 2.31 ($37 \times 2.31=85.47A$).

- c. The secondary conductors terminate in a single circuit breaker or set of fuses that limit the load current to not more than the conductor ampacity.

10 FT.

#4 AWG

rated

Panelboard

With 100A

Main Breaker

#1 AWG

rated

70A primary

OCPD in

panelboard 45KVA Transformer

480V to 208Y/120V

3PH, 4W, Ratio 2.3

13

(1) NEC 240.21(C)(2) Transformer secondary conductors supplying a single load or each set of conductors supplying separate loads, shall be allowed without an OCPD as follows:

- a. NEC 240.21(C)(2) Secondary conductors not over 10 feet long.
- b. Not less than the load served.
- c. Not less than the rating of the device or OCPD served

2.10.2 Transformer Over-current Protection – In addition to the feeder conductor protection discussed above, transformers shall be protected in accordance with NEC 450.3 and Table 450.3(B).

3. SPECIFIC ELECTRICAL DISTRIBUTION SYSTEM REQUIREMENTS FOR EXTERIOR INSTALLATIONS.

3.1 Exterior Lighting - shall be LED type to match the existing lighting used in the area for roadways and entrances. Wall pack type lights shall require shades. All

decorative type lights shall be approved by the AHJ. Lighting levels shall be in accordance with the recommendations of the IES Lighting Handbook.

3.2 Pad-Mounted Transformers

Pad-mounted transformers shall comply with ANSI C57.12.26 and shall be of the loop feed type. Pad-mounted transformer stations shall be assembled and coordinated by one manufacturer and each transformer station shall be shipped as a complete unit so that field installation requirements are limited to mounting each unit on a concrete pad and connecting it to primary and secondary lines. Stainless steel pins and hinges shall be provided. Barriers shall be provided between high- and low-voltage compartments. High-voltage compartment doors shall be interlocked with low-voltage compartment doors to prevent access to any high-voltage section unless its associated low-voltage section door has first been opened. Compartments shall be sized to meet the specific dimensional requirements of ANSI C57.12.26. Pentahead locking bolts shall be provided with provisions for a padlock.

Transformers will normally be delta primary and wye secondary configuration.

Impedance (Z%) shall be submitted for approval by the AHJ. Bil rating shall be 90 KV on the primary side and a minimum of 10 KV on the secondary side.

Provide nameplate information in accordance with IEEE ANSI/IEEE C57.12.00.

Nameplates shall indicate the number of liters/gallons and composition of liquid dielectric, and shall be permanently marked with a statement that the transformer dielectric is non-PCB classified, with less than 2 ppm PCB content. Certifications shall be related to serial numbers on transformer nameplates. Transformer dielectric

14

exceeding the 2 ppm PCB content or transformers without the certification will be considered as PCB insulated and will not be accepted. All new pad mounted oil filled transformers shall be provided with Cooper Envirotemp FR3 (or approved equal) dielectric transformer coolant

Grounding for pad mounted transformers shall include tying the neutral for the primary and secondary together and to a ground rod. As a minimum, ground rods shall be installed at each corner of the concrete pad and be interconnected by a counterpoise conductor installed around the concrete pad and sized in accordance with the NEC and NESC requirements.

Coordinated power system protection analysis, in accordance with UFGS for Underground Electrical Distribution Systems, shall be performed on systems with supply transformers greater than 750kVA or as required by the AHJ.

3.3 Duct Lines

Numbers and sizes of ducts shall be as indicated. Duct lines shall be laid with a minimum slope of 4 inches per 100 feet. Depending on the contour of the finished grade, the high-point may be at a terminal, a manhole, a hand-hole, or between manholes or hand-holes. Short-radius manufactured 90-degree duct bends may be used only as approved by the AHJ. The minimum manufactured bend radius shall be 18 inches for ducts of less than 3 inch diameter, and 36 inches for ducts 3 inches or greater in diameter. Otherwise, long sweep bends having a minimum radius of 25 feet shall be used for a change of direction of more than 5 degrees, either horizontally or vertically. Both curved and straight sections may be used to form long sweep bends, but the maximum curve used shall be 30 degrees and manufactured bends shall be used. Ducts shall be provided with end bells whenever duct lines terminate in manholes or hand-holes. In any case, ducts and cable installation shall assure that cable bending radius does not exceed 12 times the cable diameter. In no case, shall the conductors installed in duct lines be subjected to pulling tension in excess of that allowed by the cable manufacturer. Where the contractor uses RGS or IMC in duct or elbows in a duct line, they shall be factory coated plastic or equivalent field applied protection as approved by the AHJ.

Ducts shall be kept clean of concrete, dirt, or foreign substances during construction. Field cuts requiring tapers shall be made with proper tools and match factory tapers. A

coupling recommended by the duct manufacturer shall be used whenever an existing duct is connected to a duct of different material or shape. Ducts shall be stored to avoid warping and deterioration with ends sufficiently plugged to prevent entry of any water or solid substances. Ducts shall be thoroughly cleaned before being laid. Plastic ducts shall be stored on a flat surface and protected from the direct rays of the sun.

Ducts requiring concrete encasements shall comply with NFPA 70, except that electrical duct bank configurations for ducts 6 inches in diameter and larger shall be determined by calculation and as shown on the drawings. The separation between adjacent electric

15 power and communication ducts shall conform to IEEE C2. Duct line encasements shall be monolithic construction. Where a connection is made to a previously poured encasement, the new encasement shall be well bonded or doweled to the existing encasement. The Contractor shall submit proposed bonding method for approval of the AHJ. At any point, except railroad crossings, tops of concrete encasements shall be not less than the cover requirements listed in NFPA 70. At railroad crossings, duct lines shall be encased with concrete and reinforced as indicated to withstand specified surface loadings. Tops of concrete encasements shall be not less than 5 feet below tops of rails unless otherwise indicated.

Where ducts are jacked under existing pavement, rigid steel conduit will be installed because of its strength. To protect the corrosion-resistant conduit coating, pre-drilling or installing conduit inside a larger iron pipe sleeve (jack-and-sleeve) is required. For crossings of existing railroads greater than 50 feet in length, the pre-drilling method or the jack-and-sleeve method will be used. Guided method of drilling using HDPE type duct shall be limited to those locations acceptable to the AHJ. Separators or spacing blocks shall be made of steel, concrete, plastic, or a combination of these materials placed not farther apart than 4 feet on centers. Ducts shall be securely anchored to prevent movement during the placement of concrete and joints shall be staggered at least 6 inches vertically.

Joints in each type of duct shall be made up in accordance with the manufacturer's recommendations for the particular type of duct and coupling selected and as approved. Plastic duct joints shall be made by brushing plastic solvent cement on insides of plastic coupling fittings and on outsides of duct ends. Each duct and fitting shall then be slipped together with a quick 1/4-turn twist to set the joint tightly.

Duct line markers shall be provided as indicated. In addition to markers, a 5 mil brightly colored plastic tape, not less than 3 inches in width and suitably inscribed at not more than 10 feet on centers with a continuous metallic backing and a corrosion-resistant 1 mil metallic foil core to permit easy location of the duct line, shall be placed approximately 12 inches below finished grade level of such lines. Pole risers from underground duct installations shall consist of RGS, IMC or Schedule 80 PVC conduit.

3.4 Trenching And Backfilling

NOTE THAT TYAD IS A PENNSYLVANIA ONE CALL FACILITY. AT A MINIMUM OF ONE WEEK PRIOR TO DIGGING, THE CONTRACTOR SHALL SUBMIT A PA ONE CALL REQUEST TO THE COR. WHEN THE ONE CALL IS COMPLETED ISP&M - ENGINEERING WILL ISSUE DIG PERMIT SHALL BE ISSUED TO THE CONTRACTOR. ONCE THE PERMIT IS IN HAND, THE CONTRACTOR SHALL PROCEED WITH EXCAVATION.

16

Direct burial ducts shall be installed with the top of duct lines below the frost line in accordance with NFPA 70 and IEEE C2. Duct lines shall be installed with a minimum of 3 inches of earth around each duct, except that between adjacent electric power and communication ducts, 12 inches of earth is required. Bottoms of trenches shall be graded toward manholes or handholes and shall be smooth and free of stones, soft spots, and sharp objects. Where bottoms of trenches comprise materials other than sand, a 3 inch layer of sand shall be laid first and compacted to approximate densities of surrounding firm soil before installing ducts. Joints in adjacent tiers of duct shall be

vertically staggered at least 6 inches. The first 6 inch layer of backfill cover shall be sand compacted as previously specified. The rest of the excavation shall be backfilled and compacted in 3 to 6 inch layers. Duct banks shall be stacked to the ground to prevent movement during concrete placement. However, high-tiered banks shall use a wooden frame or equivalent form to hold ducts in alignment prior to backfilling. The Contractor is responsible for movement of construction machinery and equipment over pipes and utilities during construction. Excavation made with power-driven equipment is not permitted within two feet of known Government-owned utility or subsurface construction. For work immediately adjacent to or for excavations exposing a utility or other buried obstruction, excavate by hand. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the AHJ. Report any damage to utility lines or subsurface construction immediately to the AHJ. Excavations deeper than 5 feet require shoring and sheeting unless approved otherwise by the AHJ. Submit a Shoring and Sheeting plan for approval 15 days prior to starting work. Submit drawings and calculations, certified by a registered professional engineer, describing the methods for shoring and sheeting of excavations. Finish shoring, including sheet piling, and install as necessary to protect workmen, banks, adjacent paving, structures, and utilities. Remove shoring, bracing, and sheeting as excavations are backfilled, in a manner to prevent caving.

4.0 LIGHTNING PROTECTION SYSTEMS SECTION:

4.1 A lightning protection system that is in compliance with 2017 edition of NFPA 780 shall be considered for each new or renovated building.

Alternative systems that are not in complete compliance with NFPA 780 shall not be considered. The contractor shall review the building and surrounding structures to ascertain the requirements for such a system using NFPA 780 risk assessment calculation and shall coordinate the determination of risk and loss factors with the COR.

4.2 Any proposed new or modified lightning protection system shall meet the applicable requirements of 2017 version of NFPA 780. The final installation shall meet the requirements of and shall be certified as a UL Master Label System.

17

4.3 The contractor shall produce drawing(s) that define air terminal locations, approximate locations of conductor runs, locations of down conductors, grounding, etc. Construction documents shall require final drawings to be produced by the installer, that confirm all air terminal locations, material selections, connection details, etc. Air terminal locations shall be reviewed by the COR to ensure that locations chosen are coordinated to the greatest extent possible with the architectural elements of the building.

4.4 All air terminals, conductors, electrodes, grounding materials, etc. shall be copper. Care shall be taken to ensure that the copper components will not come in direct contact with aluminum building materials. Components and materials used in the lightning protection system shall be tested and listed to the requirements of UL 96.

4.5 The installation shall be performed under the direct supervision of a L.P.I. (Lightning Protection Institute) certified "Master Installer".

4.6 The lightning protection installation, including all support materials, shall be compatible with all building materials it comes into contact with. No combination of materials shall be used that form an electrolytic couple of such a nature that corrosion is accelerated in the presence of moisture. If contact between dissimilar metals is unavoidable provide waterproof seals so that moisture is permanently excluded from the junction of such metals. All embedded, buried, or otherwise inaccessible connections shall be

made using listed exothermic weld kits.

SPECIAL INSTRUCTIONS

1. Solicitation is in accordance with FAR Part 36, Construction and Architect-Engineer Contracts, as applicable. This requirement is a small business set-a-side.
2. A Site Visit will be conducted on 8 February 2023. The meeting location will be the Visitor Control Center at the Scranton Gate. Attendees are encouraged to arrive 15 minutes before scheduled time to allow for processing. If visitors do not possess a TYAD issued Contractor badge, they will be required to present a valid, Government issued photo ID in order to gain access to the base (vehicle registration and insurance may also be required). Information provided, as well as answers to any general questions, shall not affect the terms and conditions of the solicitation and Dave Hudak, [Phone: 570-615-9954](tel:570-615-9954); [Email: david.t.hudak.civ@army.mil](mailto:david.t.hudak.civ@army.mil)
3. Quotes shall be submitted no later than Wednesday, 22 February 2023, 1200 EST via e-mail to the Purchasing Agent Maria.T.Lucarine.civ@army.mil. Quote must include a completed copy of the Price Breakdown Sheet, any signed amendments, (2) past performances and technical submittal.
4. Email Transmissions – The Government will not consider submissions that were delayed, or otherwise not timely delivered to the Purchasing Agent’s email inbox, due to complications with the contractor’s or the Government’s service providers, to include email maintenance, firewall, delivery to any other email inbox, (i.e. junk folder, spam folder, etc.). Contractors should anticipate delays in transmission and are advised to plan ahead and begin transmitting their submission in enough time to ensure successful delivery prior to the submission deadline. If the contractor does not receive written confirmation of receipt from the purchasing agent, (via “Read Receipt” or manual reply to acknowledge receipt), before the established deadline, it is the responsibility of the contractor to contact the purchasing agent,) to confirm that their submission was received.
5. Any resultant award will be a Firm Fixed Price Contract.
6. BASIS OF AWARD: The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be the best value to the Government. THREE (3) evaluation factors: Price, Technical and Past Performance will be used. Please send two (2) past performances with your bid. Technical - The Government will evaluate the quote as providing or complying with all the requirements set forth in the Statement of Work (SOW). The technical submittal shall describe in detail how the offeror will satisfy the stated requirements and is not to be a parroting of the SOW. The government reserves the right to award to other than the lowest price the government reserves the right to communicate with one or more offerors as deemed necessary.
7. CONTRACTOR SUBMITTED QUESTIONS: Offerors are advised to submit any questions regarding this solicitation in writing as soon as practical but no later than five (5) calendar days

prior to solicitation response date to Maria.T.Lucarine.civ@army.mil . Answers will be consolidated in the form of Questions and Answers in an amendment to the solicitation. Questions received after this time will not be answered.

8. Department of Labor (DOL) Davis Bacon Act (DBA) Wage Determination No.
 NAME OF CLASSIFICATION: [BUILDING](#); Decision Number/Date – Davis-Bacon Act WD # PA20230098;
 Superseded General Decision Number: PA20230098 and any amendments thereto which are listed below.
 Modification Number 1, Dated: 01/13/2023

9. QUOTE REQUIREMENTS:

- a. Contractor Quotation
- b. Signed SF18
- c. All Signed Amendments
- d. Two Past Performance documents
- e Price Breakdown Sheet filled out that is attached.
- f. Technical

10. Payment Bonds may be required per FAR 28.102-1 (b)(1)(i).

11. Period of Performance is only an estimate.

12. **THE MAGNITUDE OF THIS REQUIREMENT IS ESTIMATED OVER \$35K. QUOTERS ARE ADVISED THAT PAYMENT PROTECTION (BONDS) (SEE CLAUSE 52.228-0013) WILL BE REQUIRED OF THE SUCCESSFUL OFFEROR FOR ANY AWARD THAT EXCEEDS \$35K. PAYMENT PROTECTION WILL BE REQUIRED PRIOR TO THE COMMENCEMENT OF PERFORMANCE. NOTE- REFERENCE SF18, BLOCK 6. THE DATE NOTE IS SUPERCEDED BY THE COMPLETION SCHEDULE FOUND IN CLAUSE 52.211-10.**

RATE OF WAGES

RATE OF WAGES CONTRACTING OFFICER NOTICE

*****DO NOT UPDATE WAGE RATES ONCE YOU'VE DETERMINED AWARDEE*****

(a) The minimum wages paid to laborers and mechanics on this project, as determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the pertinent locality, are as set forth below. (This clause is inoperative if the contract is in the amount of \$2,000 or less).

(b) Any class of laborers and mechanics, including apprentices and trainees, not listed below employed on this contract shall be reclassified conformably to the schedule set out below by mutual agreement between the Contractor and class of labor concerned, subject to the prior approval of the Contracting Officer, and to the following criteria being satisfied:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination;
- (ii) The classification is utilized in the area by the construction industry;
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

In the event that a listed classification in fact performs the work of the missing classification, then that listed classification wage rate shall be used for the laborers or mechanics performing the said work. Information regarding whether a listed classification is documented as performing the work of the missing classification is available from the union in cases where the listed rate for the candidate classification was obtained from a union; or the information is available from DOL if the listed rate of the candidate classification is based upon a DOL survey. A classification rate can be determined as being from a DOL survey or from a union rate by the identifier above the classification: if the identifier shows the first few letters of the classification (e.g., carpenters may show "carp", plumbers may show "plum"), the rate is a union rate; if, however, the identifier starts with "SU", the rate is based on a DOL survey. All identifiers starting with "SU" are non-union rates. Questions regarding whether a classification with a rate based upon a survey (i.e., non-union) is documented as doing the work of the missing classification may be posed to DOL at the regional office at (215) 861-5830.

(c) For purposes of a conformance, in the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the questions, accompanied by the recommendation of the Contracting Officer, shall be referred to the Department of Labor for final determination.

NAME OF CLASSIFICATION OF ELECTRICIAN **BUILDING**

Decision Number/Date – PA20230098

and any amendments thereto which are listed below.

Modification Number : 1 01/13/2023

(d)(1) A Contractor may employ apprentices on Government Construction projects. The Contractor, prior to using apprentices on the contract work must submit to the Contracting Officer written evidence of registration of such employees in a program which has been accepted either by the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, or by a state apprenticeship and training agency approved and recognized by BAT. Trainees may be employed only under programs approved by BAT. The Contractor also shall be required to submit written evidence of apprentice to journey man and trainee to journeyman ratios and wage rates including fringe benefit payments established for his program in the project area. Upon receipt of such submission, the Contracting Officer shall accept these ratios and rates for the purposes of determining the Contractor's compliance with the Davis Bacon Act clause.

(2) Whenever a contractor has classified employees as apprentices or trainees without complying with the foregoing requirements, the classification shall be rejected, and the Contractor shall be required to pay such employees at the rates applicable to the classification of the work they actually performed.

THE MAGNITUDE OF THIS REQUIREMENT IS ESTIMATED BETWEEN \$25K- \$100K

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
0001	POP 27-FEB-2023 TO 27-JUL-2023	N/A	SEE BELOW FOR SEPARATE SHIPPING INSTRUCT XXX XXX PA 00000 FOB: Destination	W25G1V

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.204-7	System for Award Management	OCT 2018
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	JUN 2020
52.204-16	Commercial and Government Entity Code Reporting	AUG 2020
52.204-18	Commercial and Government Entity Code Maintenance	AUG 2020
52.204-19	Incorporation by Reference of Representations and Certifications.	DEC 2014
52.204-22	Alternative Line Item Proposal	JAN 2017
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities	NOV 2021
52.219-6	Notice Of Total Small Business Set-Aside	NOV 2020
52.222-6	Construction Wage Rate Requirements	AUG 2018
52.222-7	Withholding of Funds	MAY 2014
52.222-8	Payrolls and Basic Records	JUL 2021
52.222-9	Apprentices and Trainees	JUL 2005
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	MAY 2014
52.222-12	Contract Termination-Debarment	MAY 2014
52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	MAY 2014
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	MAY 2014
52.222-50	Combating Trafficking in Persons	NOV 2021
52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	JUN 2020
52.225-10	Notice of Buy American Requirement--Construction Materials	MAY 2014
52.228-5	Insurance - Work On A Government Installation	JAN 1997
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 2014
52.232-27	Prompt Payment for Construction Contracts	JAN 2017
52.232-39	Unenforceability of Unauthorized Obligations	JUN 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	NOV 2021
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.236-5	Material and Workmanship	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-17	Layout of Work	APR 1984
52.242-14	Suspension of Work	APR 1984
52.243-5	Changes and Changed Conditions	APR 1984
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	DEC 2019
252.213-7000	Notice to Prospective Suppliers on Use of Supplier Performance Risk System in Past Performance Evaluations	SEP 2019
252.225-7001	Buy American And Balance Of Payments Program-- Basic	JUN 2022

252.225-7002	Qualifying Country Sources As Subcontractors	MAR 2022
252.225-7048	Export-Controlled Items	JUN 2013
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

52.204-17 OWNERSHIP OR CONTROL OF OFFEROR (AUG 2020)

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

Commercial and Government Entity (CAGE) code means—

- (1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity by unique location; or
- (2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency (NSPA) to entities located outside the United States and its outlying areas that the DLA Commercial and Government Entity (CAGE) Branch records and maintains in the CAGE master file. This type of code is known as a NATO CAGE (NCAGE) code.

Highest-level owner means the entity that owns or controls an immediate owner of the offeror, or that owns or controls one or more entities that control an immediate owner of the offeror. No entity owns or exercises control of the highest level owner.

Immediate owner means an entity, other than the offeror, that has direct control of the offeror. Indicators of control include, but are not limited to, one or more of the following: Ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees.

(b) The Offeror represents that it [☐] has or [☐] does not have an immediate owner. If the Offeror has more than one immediate owner (such as a joint venture), then the Offeror shall respond to paragraph (c) and if applicable, paragraph (d) of this provision for each participant in the joint venture.

(c) If the Offeror indicates ``has" in paragraph (b) of this provision, enter the following information:

Immediate owner CAGE code:

Immediate owner legal name: ____

(Do not use a ``doing business as" name)

Is the immediate owner owned or controlled by another entity?:

[☐] Yes or [☐] No.

(d) If the Offeror indicates ``yes" in paragraph (c) of this provision, indicating that the immediate owner is owned or controlled by another entity, then enter the following information:

Highest-level owner CAGE code:

Highest-level owner legal name:

(Do not use a ``doing business as" name)

(End of provision)

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

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

(a) Definitions. As used in this provision-

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

(b) Prohibition.

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

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

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

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

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

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

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

(d) Representations. The Offeror represents that--

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

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

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

(e) Disclosures.

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

(i) For covered equipment--

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

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

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

(ii) For covered services--

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

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

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

(i) For covered equipment--

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

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

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

(ii) For covered services--

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

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

(End of provision)

52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (NOV 2021)

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

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means--

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means--

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled--

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or

(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition

applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.

(c) Exceptions. This clause does not prohibit contractors from providing--

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

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

(d) Reporting requirement.

(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at <https://dibnet.dod.mil>. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at <https://dibnet.dod.mil>.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services.

(End of clause)

52.204-26 COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES--REPRESENTATION (OCT 2020)

(a) Definitions. As used in this provision, "covered telecommunications equipment or services" and "reasonable inquiry" have the meaning provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

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

(c) Representations.

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

(2) After conducting a reasonable inquiry for purposes of this representation, the offeror represents that it [____] does, [____] does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services.

(End of provision)

52.209-2 PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS-- REPRESENTATION (NOV 2015)

(a) Definitions. Inverted domestic corporation and subsidiary have the meaning given in the clause of this contract entitled Prohibition on Contracting with Inverted Domestic Corporations (52.209-10).

(b) Government agencies are not permitted to use appropriated (or otherwise made available) funds for contracts with either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation, unless the exception at 9.108-2(b) applies or the requirement is waived in accordance with the procedures at 9.108-4.

(c) Representation. The Offeror represents that--

(1) It [____] is, [____] is not an inverted domestic corporation; and

(2) It [____] is, [____] is not a subsidiary of an inverted domestic corporation.

(End of provision)

52.209-10 Prohibition on Contracting With Inverted Domestic Corporations. (NOV 2015)

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

Inverted domestic corporation means a foreign incorporated entity that meets the definition of an inverted domestic corporation under 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c).

Subsidiary means an entity in which more than 50 percent of the entity is owned--

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) If the contractor reorganizes as an inverted domestic corporation or becomes a subsidiary of an inverted domestic corporation at any time during the period of performance of this contract, the Government may be prohibited from paying for Contractor activities performed after the date when it becomes an inverted domestic corporation or subsidiary. The Government may seek any available remedies in the event the Contractor fails to perform in accordance with the terms and conditions of the contract as a result of Government action under this clause.

(c) Exceptions to this prohibition are located at 9.108-2.

(d) In the event the Contractor becomes either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation during contract performance, the Contractor shall give written notice to the Contracting Officer within five business days from the date of the inversion event.

(End of clause)

52.209-11 REPRESENTATION BY CORPORATIONS REGARDING DELINQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER ANY FEDERAL LAW (FEB 2016)

(a) As required by sections 744 and 745 of Division E of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), and similar provisions, if contained in subsequent appropriations acts, the Government will not enter into a contract with any corporation that--

(1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless an agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or

(2) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

(b) The Offeror represents that--

(1) It is [] is not [] a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

(2) It is [] is not [] a corporation that was convicted of a felony criminal violation under a Federal law within the preceding 24 months.

(End of provision)

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

The Contractor shall be required to (a) commence work under this contract within 14 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 150 days. The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (OCT 2022)

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

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

Small business concern--

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (d) of this clause.

(2) Affiliates, as used in this definition, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership, common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

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

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

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

(3) For long-term contracts--

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

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

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

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

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

- (1) Was set aside for small business and has a value above the simplified acquisition threshold;
- (2) Used the HUBZone price evaluation preference regardless of dollar value, unless the Contractor waived the price evaluation preference; or
- (3) Was an 8(a), HUBZone, service-disabled veteran-owned, economically disadvantaged women-owned, or women-owned small business set-aside or sole-source award regardless of dollar value.
- (f) Except as provided in paragraph (h) of this clause, the Contractor shall make the representation(s) required by paragraph (b) and (c) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause, or with its offer for an order (see paragraph (c) of this clause), that the data have been validated or updated, and provide the date of the validation or update.
- (g) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (f) or (h) of this clause.
- (h) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:
- (1) The Contractor represents that it [] is, [] is not a small business concern under NAICS Code assigned to contract number .
- (2) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [] is, [] is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.
- (3) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [] is, [] is not a women-owned small business concern.
- (4) Women-owned small business (WOSB) joint venture eligible under the WOSB Program. The Contractor represents that it [] is, [] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [The Contractor shall enter the name and unique entity identifier of each party to the joint venture: .]
- (5) Economically disadvantaged women-owned small business (EDWOSB) joint venture. The Contractor represents that it [] is, [] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [The Contractor shall enter the name and unique entity identifier of each party to the joint venture: .]
- (6) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [] is, [] is not a veteran-owned small business concern.
- (7) [Complete only if the Contractor represented itself as a veteran-owned small business concern in paragraph (h)(6) of this clause.] The Contractor represents that it [] is, [] is not a service-disabled veteran-owned small business concern.
- (8) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that--

(i) It [] is, [] is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR part 126; and

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

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

(End of clause)

52.222-55 MINIMUM WAGES FOR CONTRACTOR WORKERS UNDER EXECUTIVE ORDER 14026 (JAN 2022)

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

"United States" means the 50 states, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, Johnston Island, Wake Island, and the outer Continental Shelf as defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331, et seq.).

"Worker"--

(1) (i) Means any person engaged in performing work on, or in connection with, a contract covered by Executive Order 14026, and --

(A) Whose wages under such contract are governed by the Fair Labor Standards Act (29 U.S.C. chapter 8), the Service Contract Labor Standards statute (41 U.S.C. chapter 67), or the Wage Rate Requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV);

(B) Other than individuals employed in a bona fide executive, administrative, or professional capacity, as those terms are defined in 29 CFR part 541;

(C) Regardless of the contractual relationship alleged to exist between the individual and the employer.

(ii) Includes workers performing on, or in connection with, the contract whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(c).

(iii) Also includes any person working on, or in connection with, the contract and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.

(2)(i) A worker performs on a contract if the worker directly performs the specific services called for by the contract; and

(ii) A worker performs in connection with a contract if the worker's work activities are necessary to the performance of a contract but are not the specific services called for by the contract.

(b) Executive Order minimum wage rate.

(1) The Contractor shall pay to workers, while performing in the United States, and performing on, or in connection with, this contract, a minimum hourly wage rate of \$15.00 per hour beginning January 30, 2022.

(2) The Contractor shall adjust the minimum wage paid, if necessary, beginning January 1, 2023, and annually thereafter, to meet the applicable annual E.O. minimum wage. The Administrator of the Department of Labor's Wage and Hour Division (the Administrator) will publish annual determinations in the Federal Register no later than 90 days before the effective date of the new E.O. minimum wage rate. The Administrator will also publish the applicable E.O. minimum wage on <https://www.sam.gov> (or any successor Web site), and a general notice on all wage determinations issued under the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, that will provide information on the E.O. minimum wage and how to obtain annual updates. The applicable published E.O. minimum wage is incorporated by reference into this contract.

(3)(i) The Contractor may request a price adjustment only after the effective date of the new annual E.O. minimum wage determination. Prices will be adjusted only for increased labor costs (including subcontractor labor costs) as a result of an increase in the annual E.O. minimum wage, and for associated labor costs (including those for subcontractors). Associated labor costs shall include increases or decreases that result from changes in social security and unemployment taxes and workers' compensation insurance, but will not otherwise include any amount for general and administrative costs, overhead, or profit.

(ii) Subcontractors may be entitled to adjustments due to the new minimum wage, pursuant to paragraph (b)(2). Contractors shall consider any subcontractor requests for such price adjustment.

(iii) The Contracting Officer will not adjust the contract price under this clause for any costs other than those identified in paragraph (b)(3)(i) of this clause, and will not provide duplicate price adjustments with any price adjustment under clauses implementing the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute.

(4) The Contractor warrants that the prices in this contract do not include allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(5) A pay period under this clause may not be longer than semi-monthly, but may be shorter to comply with any applicable law or other requirement under this contract establishing a shorter pay period. Workers shall be paid no later than one pay period following the end of the regular pay period in which such wages were earned or accrued.

(6) The Contractor shall pay, unconditionally to each worker, all wages due free and clear without subsequent rebate or kickback. The Contractor may make deductions that reduce a worker's wages below the E.O. minimum wage rate only if done in accordance with 29 CFR 23.230, Deductions.

(7) The Contractor shall not discharge any part of its minimum wage obligation under this clause by furnishing fringe benefits or, with respect to workers whose wages are governed by the Service Contract Labor Standards statute, the cash equivalent thereof.

(8) Nothing in this clause shall excuse the Contractor from compliance with any applicable Federal or State prevailing wage law or any applicable law or municipal ordinance or any applicable contract establishing a minimum wage higher than the E.O. 14026 minimum wage. However, wage increases under such other laws or municipal ordinances are not subject to price adjustment under this subpart.

(9) The Contractor shall pay the E.O. minimum wage rate whenever it is higher than any applicable collective bargaining agreement(s) wage rate.

(10) The Contractor shall follow the policies and procedures in 29 CFR 23.240(b) and 23.280 for treatment of workers engaged in an occupation in which they customarily and regularly receive more than \$30 a month in tips.

(c)(1) This clause applies to workers as defined in paragraph (a). As provided in that definition--

- (i) Workers are covered regardless of the contractual relationship alleged to exist between the contractor or subcontractor and the worker;
- (ii) Workers with disabilities whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(c) are covered; and
- (iii) Workers who are registered in a bona fide apprenticeship program or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship, are covered.

(2) This clause does not apply to--

- (i) Fair Labor Standards Act (FLSA)-covered individuals performing in connection with contracts covered by the E.O., i.e. those individuals who perform duties necessary to the performance of the contract, but who are not directly engaged in performing the specific work called for by the contract, and who spend less than 20 percent of their hours worked in a particular workweek performing in connection with such contracts;
- (ii) Individuals exempted from the minimum wage requirements of the FLSA under 29 U.S.C. 213(a) and 214(a) and (b), unless otherwise covered by the Service Contract Labor Standards statute, or the Wage Rate Requirements (Construction) statute. These individuals include but are not limited to--

(A) Learners, apprentices, or messengers whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(a);

(B) Students whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(b); and

(C) Those employed in a bona fide executive, administrative, or professional capacity (29 U.S.C. 213(a)(1) and 29 CFR part 541).

(d) Notice. The Contractor shall notify all workers performing work on, or in connection with, this contract of the applicable E.O. minimum wage rate under this clause. With respect to workers covered by the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, the Contractor may meet this requirement by posting, in a prominent and accessible place at the worksite, the applicable wage determination under those statutes. With respect to workers whose wages are governed by the FLSA, the Contractor shall post notice, utilizing the poster provided by the Administrator, which can be obtained at www.dol.gov/agencies/whd/government-contracts, in a prominent and accessible place at the worksite. Contractors that customarily post notices to workers electronically may post the notice electronically provided the electronic posting is displayed prominently on any Web site that is maintained by the contractor, whether external or internal, and customarily used for notices to workers about terms and conditions of employment.

(e) Payroll Records. (1) The Contractor shall make and maintain records, for three years after completion of the work, containing the following information for each worker:

- (i) Name, address, and social security number;
- (ii) The worker's occupation(s) or classification(s);
- (iii) The rate or rates of wages paid;
- (iv) The number of daily and weekly hours worked by each worker;
- (v) Any deductions made; and

(vi) Total wages paid.

(2) The Contractor shall make records pursuant to paragraph (e)(1) of this clause available for inspection and transcription by authorized representatives of the Administrator. The Contractor shall also make such records available upon request of the Contracting Officer.

(3) The Contractor shall make a copy of the contract available, as applicable, for inspection or transcription by authorized representatives of the Administrator.

(4) Failure to comply with this paragraph (e) shall be a violation of 29 CFR 23.260 and this contract. Upon direction of the Administrator or upon the Contracting Officer's own action, payment shall be withheld until such time as the noncompliance is corrected.

(5) Nothing in this clause limits or otherwise modifies the Contractor's payroll and recordkeeping obligations, if any, under the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, or any other applicable law.

(f) Access. The Contractor shall permit authorized representatives of the Administrator to conduct investigations, including interviewing workers at the worksite during normal working hours.

(g) Withholding. The Contracting Officer, upon his or her own action or upon written request of the Administrator, will withhold funds or cause funds to be withheld, from the Contractor under this or any other Federal contract with the same Contractor, sufficient to pay workers the full amount of wages required by this clause.

(h) Disputes. Department of Labor has set forth in 29 CFR 23.510, Disputes concerning contractor compliance, the procedures for resolving disputes concerning a contractor's compliance with Department of Labor regulations at 29 CFR part 23. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. These disputes include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the Department of Labor, or the workers or their representatives.

(i) Antiretaliation. The Contractor shall not discharge or in any other manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under or related to compliance with the E.O. or this clause, or has testified or is about to testify in any such proceeding.

(j) Subcontractor compliance. The Contractor is responsible for subcontractor compliance with the requirements of this clause and may be held liable for unpaid wages due subcontractor workers.

(k) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (k) in all subcontracts, regardless of dollar value, that are subject to the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

(End of clause)

52.222-62 PAID SICK LEAVE UNDER EXECUTIVE ORDER 13706 (JAN 2022)

(a) Definitions. As used in this clause (in accordance with 29 CFR 13.2)--

Child, domestic partner, and domestic violence have the meaning given in 29 CFR 13.2.

Employee--(1)(i) Means any person engaged in performing work on or in connection with a contract covered by Executive Order (E.O.) 13706; and

(A) Whose wages under such contract are governed by the Service Contract Labor Standards statute (41 U.S.C. chapter 67), the Wage Rate Requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV), or the Fair Labor Standards Act (29 U.S.C. chapter 8);

(B) Including employees who qualify for an exemption from the Fair Labor Standards Act's minimum wage and overtime provisions;

(C) Regardless of the contractual relationship alleged to exist between the individual and the employer; and

(ii) Includes any person performing work on or in connection with the contract and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.

(2)(i) An employee performs "on" a contract if the employee directly performs the specific services called for by the contract; and

(ii) An employee performs "in connection with" a contract if the employee's work activities are necessary to the performance of a contract but are not the specific services called for by the contract.

Individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship has the meaning given in 29 CFR 13.2.

Multiemployer plan means a plan to which more than one employer is required to contribute and which is maintained pursuant to one or more collective bargaining agreements between one or more employee organizations and more than one employer.

Paid sick leave means compensated absence from employment that is required by E.O. 13706 and 29 CFR part 13.

Parent, sexual assault, spouse, and stalking have the meaning given in 29 CFR 13.2.

United States means the 50 States and the District of Columbia.

(b) Executive Order 13706. (1) This contract is subject to E.O. 13706 and the regulations issued by the Secretary of Labor in 29 CFR part 13 pursuant to the E.O.

(2) If this contract is not performed wholly within the United States, this clause only applies with respect to that part of the contract that is performed within the United States.

(c) Paid sick leave. The Contractor shall--

(1) Permit each employee engaged in performing work on or in connection with this contract to earn not less than 1 hour of paid sick leave for every 30 hours worked;

(2) Allow accrual and use of paid sick leave as required by E.O. 13706 and 29 CFR part 13;

(3) Comply with the accrual, use, and other requirements set forth in 29 CFR 13.5 and 13.6, which are incorporated by reference in this contract;

(4) Provide paid sick leave to all employees when due free and clear and without subsequent deduction (except as otherwise provided by 29 CFR 13.24), rebate, or kickback on any account;

(5) Provide pay and benefits for paid sick leave used no later than one pay period following the end of the regular pay period in which the paid sick leave was taken; and

(6) Be responsible for the compliance by any subcontractor with the requirements of E.O. 13706, 29 CFR part 13, and this clause.

(d) Contractors may fulfill their obligations under E.O. 13706 and 29 CFR part 13 jointly with other contractors through a multiemployer plan, or may fulfill their obligations through an individual fund, plan, or program (see 29 CFR 13.8).

(e) Withholding. The Contracting Officer will, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this or any other Federal contract with the same Contractor, so much of the accrued payments or advances as may be considered necessary to pay employees the full amount owed to compensate for any violation of the requirements of E.O. 13706, 29 CFR part 13, or this clause, including--

(1) Any pay and/or benefits denied or lost by reason of the violation;

(2) Other actual monetary losses sustained as a direct result of the violation; and

(3) Liquidated damages.

(f) Payment suspension/contract termination/contractor debarment. (1) In the event of a failure to comply with E.O. 13706, 29 CFR part 13, or this clause, the contracting agency may, on its own action or after authorization or by direction of the Department of Labor and written notification to the Contractor take action to cause suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(2) Any failure to comply with the requirements of this clause may be grounds for termination for default or cause.

(3) A breach of the contract clause may be grounds for debarment as a contractor and subcontractor as provided in 29 CFR 13.52.

(g) The paid sick leave required by E.O. 13706, 29 CFR part 13, and this clause is in addition to the Contractor's obligations under the Service Contract Labor Standards statute and Wage Rate Requirements (Construction) statute, and the Contractor may not receive credit toward its prevailing wage or fringe benefit obligations under those Acts for any paid sick leave provided in satisfaction of the requirements of E.O. 13706 and 29 CFR part 13.

(h) Nothing in E.O. 13706 or 29 CFR part 13 shall excuse noncompliance with or supersede any applicable Federal or State law, any applicable law or municipal ordinance, or a collective bargaining agreement requiring greater paid sick leave or leave rights than those established under E.O. 13706 and 29 CFR part 13.

(i) Recordkeeping. (1) The Contractor shall make and maintain, for no less than three (3) years from the completion of the work on the contract, records containing the following information for each employee, which the Contractor shall make available upon request for inspection, copying, and transcription by authorized representatives of the Administrator of the Wage and Hour Division of the Department of Labor:

(i) Name, address, and social security number of each employee.

(ii) The employee's occupation(s) or classification(s).

(iii) The rate or rates of wages paid (including all pay and benefits provided).

(iv) The number of daily and weekly hours worked.

(v) Any deductions made.

- (vi) The total wages paid (including all pay and benefits provided) each pay period.
 - (vii) A copy of notifications to employees of the amount of paid sick leave the employee has accrued, as required under 29 CFR 13.5(a)(2).
 - (viii) A copy of employees' requests to use paid sick leave, if in writing, or, if not in writing, any other records reflecting such employee requests.
 - (ix) Dates and amounts of paid sick leave taken by employees (unless the Contractor's paid time off policy satisfies the requirements of E.O. 13706 and 29 CFR part 13 as described in 29 CFR 13.5(f)(5), leave shall be designated in records as paid sick leave pursuant to E.O. 13706).
 - (x) A copy of any written responses to employees' requests to use paid sick leave, including explanations for any denials of such requests, as required under 29 CFR 13.5(d)(3).
 - (xi) Any records reflecting the certification and documentation the Contractor may require an employee to provide under 29 CFR 13.5(e), including copies of any certification or documentation provided by an employee.
 - (xii) Any other records showing any tracking of or calculations related to an employee's accrual or use of paid sick leave.
 - (xiii) The relevant contract.
 - (xiv) The regular pay and benefits provided to an employee for each use of paid sick leave.
 - (xv) Any financial payment made for unused paid sick leave upon a separation from employment intended, pursuant to 29 CFR 13.5(b)(5), to relieve the Contractor from the obligation to reinstate such paid sick leave as otherwise required by 29 CFR 13.5(b)(4).
- (2)(i) If the Contractor wishes to distinguish between an employee's covered and noncovered work, the Contractor shall keep records or other proof reflecting such distinctions. Only if the Contractor adequately segregates the employee's time will time spent on noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. Similarly, only if the Contractor adequately segregates the employee's time may the Contractor properly refuse an employee's request to use paid sick leave on the ground that the employee was scheduled to perform noncovered work during the time he or she asked to use paid sick leave.
- (ii) If the Contractor estimates covered hours worked by an employee who performs work in connection with contracts covered by the E.O. pursuant to 29 CFR 13.5(a)(1)(i) or (iii), the Contractor shall keep records or other proof of the verifiable information on which such estimates are reasonably based. Only if the Contractor relies on an estimate that is reasonable and based on verifiable information will an employee's time spent in connection with noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. If the Contractor estimates the amount of time an employee spends performing in connection with contracts covered by the E.O., the Contractor shall permit the employee to use his or her paid sick leave during any work time for the Contractor.
- (3) In the event the Contractor is not obligated by the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, or the Fair Labor Standards Act to keep records of an employee's hours worked, such as because the employee is exempt from the Fair Labor Standards Act's minimum wage and overtime requirements, and the Contractor chooses to use the assumption permitted by 29 CFR 13.5(a)(1)(iii), the Contractor is excused from the requirement in paragraph (i)(1)(iv) of this clause and 29 CFR 13.25(a)(4) to keep records of the employee's number of daily and weekly hours worked.
- (4)(i) Records relating to medical histories or domestic violence, sexual assault, or stalking, created for purposes of E.O. 13706, whether of an employee or an employee's child, parent, spouse, domestic partner, or other individual

related by blood or affinity whose close association with the employee is the equivalent of a family relationship, shall be maintained as confidential records in separate files/records from the usual personnel files.

(ii) If the confidentiality requirements of the Genetic Information Nondiscrimination Act of 2008 (GINA), section 503 of the Rehabilitation Act of 1973, and/or the Americans with Disabilities Act (ADA) apply to records or documents created to comply with the recordkeeping requirements in this contract clause, the records and documents shall also be maintained in compliance with the confidentiality requirements of the GINA, section 503 of the Rehabilitation Act of 1973, and/or ADA as described in 29 CFR 1635.9, 41 CFR 60-741.23(d), and 29 CFR 1630.14(c)(1), respectively.

(iii) The Contractor shall not disclose any documentation used to verify the need to use 3 or more consecutive days of paid sick leave for the purposes listed in 29 CFR 13.5(c)(1)(iv) (as described in 29 CFR 13.5(e)(1)(ii)) and shall maintain confidentiality about any domestic abuse, sexual assault, or stalking, unless the employee consents or when disclosure is required by law.

(5) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(6) Nothing in this contract clause limits or otherwise modifies the Contractor's recordkeeping obligations, if any, under the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, the Family and Medical Leave Act, E.O. 14026, their respective implementing regulations, or any other applicable law.

(j) Interference/discrimination.

(1) The Contractor shall not in any manner interfere with an employee's accrual or use of paid sick leave as required by E.O. 13706 or 29 CFR part 13. Interference includes, but is not limited to--

(i) Miscalculating the amount of paid sick leave an employee has accrued;

(ii) Denying or unreasonably delaying a response to a proper request to use paid sick leave;

(iii) Discouraging an employee from using paid sick leave;

(iv) Reducing an employee's accrued paid sick leave by more than the amount of such leave used;

(v) Transferring an employee to work on contracts not covered by the E.O. to prevent the accrual or use of paid sick leave;

(vi) Disclosing confidential information contained in certification or other documentation provided to verify the need to use paid sick leave; or

(vii) Making the use of paid sick leave contingent on the employee's finding a replacement worker or the fulfillment of the Contractor's operational needs.

(2) The Contractor shall not discharge or in any other manner discriminate against any employee for--

(i) Using, or attempting to use, paid sick leave as provided for under E.O. 13706 and 29 CFR part 13;

(ii) Filing any complaint, initiating any proceeding, or otherwise asserting any right or claim under E.O. 13706 and 29 CFR part 13;

(iii) Cooperating in any investigation or testifying in any proceeding under E.O. 13706 and 29 CFR part 13; or

(iv) Informing any other person about his or her rights under E.O. 13706 and 29 CFR part 13.

(k) Notice. The Contractor shall notify all employees performing work on or in connection with a contract covered by the E.O. of the paid sick leave requirements of E.O. 13706, 29 CFR part 13, and this clause by posting a notice provided by the Department of Labor in a prominent and accessible place at the worksite so it may be readily seen by employees. Contractors that customarily post notices to employees electronically may post the notice electronically, provided such electronic posting is displayed prominently on any Web site that is maintained by the Contractor, whether external or internal, and customarily used for notices to employees about terms and conditions of employment.

(l) Disputes concerning labor standards. Disputes related to the application of E.O. 13706 to this contract shall not be subject to the general disputes clause of the contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR part 13. Disputes within the meaning of this contract clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the Department of Labor, or the employees or their representatives.

(m) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (m), in all subcontracts, regardless of dollar value, that are subject to the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

(End of clause)

52.225-1 BUY AMERICAN--SUPPLIES (OCT 2022)

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

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

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

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

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

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

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

Component means an article, material, or supply incorporated into an end product.

Cost of components means--

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

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

Critical component means a component that is mined, produced, or manufactured in the United States and deemed critical to the U.S. supply chain. The list of critical components is at FAR 25.105.

Domestic end product means--

(1) For an end product that does not consist wholly or predominantly of iron or steel or a combination of both--

(i) An unmanufactured end product mined or produced in the United States;

(ii) An end product manufactured in the United States, if--

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 60 percent of the cost of all its components, except that the percentage will be 65 percent for items delivered in calendar years 2024 through 2028 and 75 percent for items delivered starting in calendar year 2029. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Components of unknown origin are treated as foreign. Scrap generated, collected, and prepared for processing in the United States is considered domestic; or

(B) The end product is a COTS item; or

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

End product means those articles, materials, or supplies to be acquired under the contract for public use.

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

Foreign end product means an end product other than a domestic end product.

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

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

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

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

(b) 41 U.S.C. chapter 83, Buy American, provides a preference for domestic end products for supplies acquired for use in the United States. In accordance with 41 U.S.C. 1907, the domestic content test of the Buy American statute is waived for an end product that is a COTS item (see 12.505(a)(1)), except that for an end product that consists wholly or predominantly of iron or steel or a combination of both, the domestic content test is applied only to the iron and steel content of the end product, excluding COTS fasteners.

(c) Offerors may obtain from the Contracting Officer a list of foreign articles that the Contracting Officer will treat as domestic for this contract.

(d) The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the solicitation entitled "Buy American Certificate."

(End of clause)

52.225-9 BUY AMERICAN—CONSTRUCTION MATERIALS (OCT 2022)

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

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

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

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

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

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

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

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

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

Cost of components means--

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

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

Critical component means a component that is mined, produced, or manufactured in the United States and deemed critical to the U.S. supply chain. The list of critical components is at FAR 25.105.

Critical item means a domestic construction material or domestic end product that is deemed critical to U.S. supply chain resiliency. The list of critical items is at FAR 25.105.

Domestic construction material means--

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

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

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

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 60 percent of the cost of all its components, except that the percentage will be 65 percent for items delivered in calendar years 2024 through 2028 and 75 percent for items delivered starting in calendar year 2029. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. Components of unknown origin are treated as foreign; or

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

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

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

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

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

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

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

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

(b) Domestic preference.

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

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

none

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

(i) The cost of domestic construction material would be unreasonable.

(A) For domestic construction material that is not a critical item or does not contain critical components.

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

(2) For construction material that is not a COTS item and does not consist wholly or predominantly of iron or steel or a combination of both, if the cost of a particular domestic construction material is determined to be unreasonable or there is no domestic offer received, and the low offer is for foreign construction material that is manufactured in the United States and does not exceed 55 percent domestic content, the Contracting Officer will treat the lowest offer of foreign construction material that exceeds 55 percent domestic content as a domestic offer and determine whether the cost of that offer is unreasonable by applying the evaluation factor listed in paragraph (b)(3)(i)(A)(1) of this clause.

(3) The procedures in paragraph (b)(3)(i)(A)(2) of this clause will no longer apply as of January 1, 2030.

(B) For domestic construction material that is a critical item or contains critical components.

(1) The cost of a particular domestic construction material that is a critical item or contains critical components, subject to the requirements of the Buy American statute, is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent plus the additional preference factor identified for the critical item or construction material containing critical components listed at FAR 25.105.

(2) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both, if the cost of a particular domestic construction material is determined to be unreasonable or there is no domestic offer received, and the low offer is for foreign construction material that does not exceed 55 percent domestic content, the Contracting Officer will treat the lowest foreign offer of construction material that is manufactured in the United States and exceeds 55 percent domestic content as a domestic offer, and determine whether the cost of that offer is unreasonable by applying the evaluation factor listed in paragraph (b)(3)(i)(B)(1) of this clause.

(3) The procedures in paragraph (b)(3)(i)(B)(2) of this clause will no longer apply as of January 1, 2030.

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

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

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

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

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

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

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

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

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

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

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

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

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

Foreign and Domestic Construction Materials Price Comparison

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

Item 1:

Foreign construction material.... _____
 Domestic construction material... _____
 Item 2:
 Foreign construction material.... _____
 Domestic construction material... _____

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

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

[Include other applicable supporting information.]

(End of clause)

52.228-13 ALTERNATIVE PAYMENT PROTECTIONS (JULY 2000)

(a) The Contractor shall submit one of the following payment protections:

PAYMENT BOND SF25A REV 08-16

(b) The amount of the payment protection shall be 100 percent of the contract price.

(c) The submission of the payment protection is required within 10 days of contract award.

(d) The payment protection shall provide protection for the full contract performance period plus a one-year period.

(e) Except for escrow agreements and payment bonds, which provide their own protection procedures, the Contracting Officer is authorized to access funds under the payment protection when it has been alleged in writing by a supplier of labor or material that a nonpayment has occurred, and to withhold such funds pending resolution by administrative or judicial proceedings or mutual agreement of the parties.

(f) When a tripartite escrow agreement is used, the Contractor shall utilize only suppliers of labor and material that signed the escrow agreement.

(End of clause)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

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

(b) Site visits may be arranged during normal duty hours by contacting: Site Visit 8 Feb 23 at 1000

Name: DAVID.T.HUDAK.CIV@ARMY.MIL

Address:

Telephone: 570-615-9954

(End of provision)

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

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

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

(End of provision)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

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

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

(End of clause)

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (DEC 2018)

(a) Definitions. As used in this clause—

“Department of Defense Activity Address Code (DoDAAC)” is a six position code that uniquely identifies a unit, activity, or organization.

“Document type” means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

“Local processing office (LPO)” is the office responsible for payment certification when payment certification is done external to the entitlement system.

“Payment request” and “receiving report” are defined in the clause at 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(b) Electronic invoicing. The WAWF system provides the method to electronically process vendor payment requests and receiving reports, as authorized by Defense Federal Acquisition Regulation Supplement (DFARS) 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall—

(1) Have a designated electronic business point of contact in the System for Award Management at <https://www.sam.gov>; and

(2) Be registered to use WAWF at <https://wawf.eb.mil/> following the step-by-step procedures for self-registration available at this web site.

(d) WAWF training. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the “Web Based Training” link on the WAWF home page at <https://wawf.eb.mil/>.

(e) WAWF methods of document submission. Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) WAWF payment instructions. The Contractor shall use the following information when submitting payment requests and receiving reports in WAWF for this contract or task or delivery order:

(1) Document type. The Contractor shall submit payment requests using the following document type(s):

(i) For cost-type line items, including labor-hour or time-and-materials, submit a cost voucher.

(ii) For fixed price line items—

(A) That require shipment of a deliverable, submit the invoice and receiving report specified by the Contracting Officer.

CONSTRUCTION INVOICE

(B) For services that do not require shipment of a deliverable, submit either the Invoice 2in1, which meets the requirements for the invoice and receiving report, or the applicable invoice and receiving report, as specified by the Contracting Officer.

DESTINATION

(iii) For customary progress payments based on costs incurred, submit a progress payment request.

(iv) For performance based payments, submit a performance based payment request.

(v) For commercial item financing, submit a commercial item financing request.

(2) Fast Pay requests are only permitted when Federal Acquisition Regulation (FAR) 52.213-1 is included in the contract.

[Note: The Contractor may use a WAWF “combo” document type to create some combinations of invoice and receiving report in one step.]

(3) Document routing. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

<i>Field Name in WAWF</i>	<i>Data to be entered in WAWF</i>
Pay Official DoDAAC	HQ0303
Issue By DoDAAC	W25G1V
Admin DoDAAC**	W25G1V

Inspect By DoDAAC	_____
Ship To Code	_____
Ship From Code	_____
Mark For Code	_____
Service Approver (DoDAAC)	W25G1V
Service Acceptor (DoDAAC)	W25G1V
Accept at Other DoDAAC	_____
LPO DoDAAC	_____
DCAA Auditor DoDAAC	_____
Other DoDAAC(s)	_____

(4) Payment request. The Contractor shall ensure a payment request includes documentation appropriate to the type of payment request in accordance with the payment clause, contract financing clause, or Federal Acquisition Regulation 52.216-7, Allowable Cost and Payment, as applicable.

(5) Receiving report. The Contractor shall ensure a receiving report meets the requirements of DFARS Appendix F.

(g) WAWF point of contact.

(1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

DAVID.T.HUDAK.CIV@ARMY.MIL WAWF ACCEPTOR

MARIA.T.LUCARINE.CIV@ARMY.MIL PURCHASING AGENT

DAVID.K.KERN2.CIV@ARMY.MIL 570-615-8733

(2) Contact the WAWF helpdesk at 866-618-5988, if assistance is needed.

(End of clause)

252.232-7017 ACCELERATING PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS--PROHIBITION ON FEES AND CONSIDERATION (DEC 2022)

(a) Definition. Accelerated payment, as used in this clause, means a payment made to a small business subcontractor as quickly as possible, with a goal of 15 days or less after receipt of payment from the Government or receipt of a proper invoice from the subcontractor, whichever is later.

(b) In accordance with 10 U.S.C. 3801(b)(2), the Contractor shall not require any further consideration from or charge fees to the small business subcontractor when making accelerated payments, as defined in paragraph (a) of

this clause, to subcontractors under the clause at FAR 52.232-40, Providing Accelerated Payments to Small Business Subcontractors.

(c) Subcontracts. Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including those for the acquisition of commercial items.

(End of clause)

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

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

(b) The Contractor shall--

- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
-------	------	-------------

(End of clause)

AMC-LEVEL PROTEST PROGRAM (JUL 2012) ACC-APG TYD 5152.233-4001

If you have complaints about this procurement, it is preferable that you first attempt to resolve those concerns with the responsible Contracting Officer. However, you can also protest to Headquarters, AMC. The HQ, AMC-Level Protest Program is intended to encourage interested parties to seek resolution of their concerns within AMC as an

Alternative Dispute Resolution forum, rather than filing a protest with the General Accounting Office (GAO) or other external forum. Contract award or performance is suspended during the protest to the same extent, and within the same time periods, as if filed at the GAO. The AMC protest decision goal is to resolve protests within 20 working days from filing. To be timely, protests must be filed within the periods specified in FAR 33.103. Send protests (other than protests to the Contracting Officer) to:

Headquarters U.S. Army Materiel Command
Office of Command Counsel
4400 Martin Road
Rm: A6SE040.001
Redstone Arsenal, AL 35898-5000
Fax: (256) 450-8840
E-mail: amcprotests@conus.army.mil

The AMC-Level Protest Procedures are accessible via the Internet at:
www.amc.army.mil/amc/commandcounsel.html. If Internet access is not available, contact the Contracting Officer or HQ, AMC, to obtain the AMC-Level Protest Procedures.

(End of clause)

INSURANCE REQUIREMENTS

INSURANCE REQUIREMENTS - CONTRACTING OFFICER'S NOTICE

The contractor shall procure and maintain during the entire period of his performance under this contract the following minimum insurance:

(a) **WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY.** Contractors are required to comply with applicable Federal and State Worker's Compensation and Occupational Disease Statutes. If the Employer's liability section of the insurance policy, except then contract operations are so commingled with a contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in states with exclusive or monopolistic funds that do not permit Worker's Compensation to be written by private carriers.

(b) **GENERAL LIABILITY.** Bodily Injury Liability Insurance Coverage written on the comprehensive form of policy of at least \$500,000 per occurrence shall be required. Property Damage Liability Insurance is not normally required.

(c) **AUTOMOBILE LIABILITY.** Automobile Liability Insurance written on the comprehensive form of policy is required. The policy shall provide for Bodily Injury and Property Damage Liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for Bodily Injury and \$20,000 per occurrence for Property Damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

SAFETY STANDARDS

CONTRACTOR SAFETY STANDARDS FOR TYAD

Below are some “installation specific” safety standards which contractors are required to adhere to while performing any work on Tobyhanna Army Depot. It is the contractor’s responsibility to incorporate these particular requirements into their daily operations at all times while under contract and to institute these specifics into their overall site safety controls. These do not substitute or deflect in any way the requirement to institute and adhere to all OSHA 1910 & 1926, ARMY 385-10, USACE EM385-1-1, and DoD 6055.01 job site safety standards as well while performing contract work under the provisions of FAR Clause 52.236-13 on Tobyhanna Army Depot.

It is the responsibility of the contractor to enforce the below requirements as well as all current revisions of the above referenced standards. Failure to enforce safety requirements on the depot can result in immediate stop works, safety stand down orders and even complete termination of the contract.

Important Phone Numbers:

Fire or Emergency: 911

Fire Department – (Non-Emergency): 570-615-7300

Security: 570-615-7550

Safety Office - 570-615-7027

S.10.0 THE CONTRACTOR IS SOLELY RESPONSIBLE AND LIABLE FOR JOB- SITE SAFETY.

1. Review of the project plans and other documents by any government appointed official does not constitute an acceptance of Federal responsibility or liability for the adequacy of the safety measures identified for the job or for the Contractor's compliance with all applicable safety rules and regulations.
2. The Contractor remains solely responsible and liable for job-site safety at all times during the term of the contract. No outside personnel (other than ET, COR, TYAD Safety, or other government appointed contract personnel) are allowed onto the job site at any time during contract without prior permissions and/or escort by the ET, COR or KO.
3. Tobyhanna Army depot has restrictions on the use of fossil fuels in all buildings. The contractor must follow the TYAD fossil fuel memorandum of understanding requirements pertaining to such uses as noted below:

TYAD has restrictions on the use of fossil fuels in all buildings. When it is determined that electric or other alternatively-fueled vehicles are insufficient or unavailable for movement of material within the buildings on the installation, fossil-fueled vehicles can be used only when all alternatives of accepted electric material movement equipment have been considered, and the last option is use of a fossil fuel vehicle or project failure. This includes any situations where safety of employees and equipment may be jeopardized. Convenience will never be an acceptable justification to utilize fossil-fueled vehicles. The Government Designated Representative (GDR) will notify the appropriate supervisor(s) or leader(s) in the area where the need to utilize a fossil fuel vehicle is required. The supervisor / leader will take the necessary steps to notify the employees in the work area of the option to leave the area during the material movement process. The GDR and Contractor will also document all actions the Contractor took to utilize electric or other alternatively-fueled vehicles. The documentation will specifically state why electric or alternatively-fueled vehicles are insufficient. The documentation may be in the form of signed memo or email and must be completed within 24-hours after the usage of the fossil-fueled vehicle. A copy of the documentation will be provided to the Union and the Safety Division

4. All direct construction supervision, including subcontractors, must as a minimum, complete an OSHA 10 hour safety course for construction. These certificates must be submitted as part of the site safety plan BEFORE construction activities start.
5. **RED CARD PROGRAM** - Tobyhanna Army Depot utilizes a program to allow employees to stop an action which is considered unsafe. Employees carry small red cards that can be thrown down when employee sees an action they consider unsafe. Work ceases until TYAD management can decide if it is safe or not. Contractors are required to comply with this program. If a TYAD employee presents the red card to the contractor, the contractor must stop working until the COR and Safety Office can determine if there is a safety hazard or not.
6. All contractor personnel, to include subcontractors, vendors, suppliers, or visitors, when performing any type of work activity, or gaining access through an occupied area or shop - must have all applicable PPE that is required for the area to include, but not limited to, hardhats, safety glasses, hearing protection, and respirator protection. Notify both COR & Area Supervision, for access approval and prior to any work activities being performed.

S.10.1 CODE COMPLIANCE

Tobyhanna Army Depot requires full contractor compliance with all safety regulations and standards. The Contractor is responsible for maintaining, monitoring and enforcing all rules, regulations and codes, by ALL personnel working for the contractor including all subcontractors. These codes include:

Title 29 Code of Federal Regulations-1910 (OSHA General Industry Standards)

Title 29 Code of Federal Regulations-1926 (Construction Industry Standards)

National Fire Protection Association Codes

Uniform Facilities Code

Department of Army 385-10,

Department of Defense 6055.1

Unified Facilities Guide Specifications (UFGS)

USACE EM385-1-1

All other codes as required to maintain safety standards.

S.10.2 JOB HAZARD ANALYSIS (JHA) / ACTIVITY HAZARD ANALYSIS (AHA)

Prior to the start of work, the contractor shall prepare a JHA / AHA for each phase of work that will be done under the contract. This will be completed in accordance with all applicable OSHA safety requirements. A phase is any operations involving a certain type of work. Examples include demolition, excavation, masonry work, concrete pouring, roofing, and electrical wiring. Work done by each subcontractor is also a phase. The JHA / AHA will:

1. List the activity being performed and identify the sequence of work steps.
2. List the hazards associated with each step, and the procedures and training required to eliminate or reduce the risk to an acceptable level.

S.10.3 SITE SPECIFIC SAFETY & ACCIDENT PREVENTION PLANS

Contractors will submit a written Site Specific Safety / Contractor Accident Prevention Plan prior to beginning construction. The plan must follow the guidelines in OSHA 1926:

1. Who will implement the plan, including who is responsible for safety and accident prevention?
2. A means for coordinating and controlling subcontractors and suppliers.
3. Safety training.
4. Who will investigate accidents?
5. Emergency response.
6. Job site cleanup and safe access.
7. Public safety requirements such as signs and barricades.

S .10.4 FALL PROTECTION

1. Personnel performing works at a height six feet or more from any lower level, shall comply with OSHA 29 CFR 1926.500 through 1926.503 safety standards.
2. There are no certified anchorage points or permanent guardrail systems on any TYAD roof. Most roofs of the depot are more than 20 feet high.
3. Contractors and their employees must be protected from falling off the edge of the roof, regardless of how briefly the employees are at the edge of the roof.

S.10.5 ELECTRICAL SAFETY

Follow the current Tobyhanna Army Depot standard. This standard is based on NFPA 70E.

Copies of the TYAD Electrical standard may be obtained by request from the ET, COR or KO on the project or service contract.

S.10.6 DEPOT REQUIRED PERMITS / APPROVALS

Permits are required for:

1. **Excavation**: Contractors must utilize the PA 1 Call system and coordinate with contracting officer representative (COR) for excavations prior to any groundbreaking including digging, drilling and stake driving. See appendix L for permitting details.
2. **Trenching**: Contractors will adhere to OSHA requirements and receive approval from TYAD Safety office before any trenching deeper than 5 feet is performed. Notifications of such activities will be provided to the COR along with required plans, requests and permits prior to any trenching works being performed. Contractor is responsible for field verifying all utilities and underground entities. Excavation or trench greater than 4 foot in depth that remains open greater than (1) day OR left unattended for any period of time shall have a safety orange construction fence installed around the perimeter of the opening. Caution tape or cones for this purpose is unacceptable.
3. **Confined Space**: All confined space works on TYAD are to be considered as permit required entries and Contractor must first request and be provided with an approved "signed" permit from TYAD Safety Office prior to any confined space entry. Contractor will refer to all OSHA requirements and must have a confined space plan and all appropriate safety equipment. Contractor is to request approval from TYAD Safety office through COR prior to entry.
4. **Burning / fire**: Hot work permits must be obtained daily from the Fire Department.
5. **Cranes**: For use of cranes and all WHE and LHE at TYAD see S.10.13
6. **Army Radiation Permits**: Non-Army agencies (including other military Services, vendors, and civilian contractors) require an Army Radiation Permit (ARP) to use, store, or possess ionizing radiation sources on TYAD (see 32 CFR 655). Non-Army applicants will apply by letter with supporting documentation to the Depot Commander. The letter should be submitted so that the Depot Commander receives the application at least 30 days before the requested start date of the permit. The ARP application will specify start and stop dates for the ARP and describe the intended use of the radioactive material.

For sealed sources of radiation, i.e. Moisture Soil Density Gauges, the application must include a valid Nuclear Regulatory Commission (NRC) Radioactive Materials License that allows the applicant to use the source as specified in the ARP

application, current leak test certificates, operator training records and calibration certificates for any equipment that may be utilized at TYAD.

For machine produced ionizing radiation sources, i.e. X-ray Equipment, the application must include the appropriate state authorization that allows the applicant to use the source as specified in the ARP application along with operator training records and calibration certificates for any equipment that may be utilized at TYAD.

ARPs will not be issued for more than 12 months at a time.

S.10.7 CONFINED SPACES

1. All Confined Spaces at TYAD are considered as Permit-Required Confined Spaces.
2. Contractors must fully comply with all OSHA regulations for Confined Space Operations, including on-site use and availability of a Confined Space Entry Permit / Checklist.
3. Contractors must notify the COR and receive TYAD Safety Office approval prior to entry and only after they've received permissions and acceptance of their Accident Prevention Plan and associated Activity Hazard Analysis (AHAs). The contractor and / or the COR will then notify Fire and Emergency Services of the Confined Space Entry.
4. Upon completion, the contractor will notify the TYAD Safety Office and discuss whether any new hazards were added to the Confined Space and will submit the completed Confined Space Entry Permit / Checklist for record.

S.10.8 LOCKOUT/TAGOUT PROCEDURE

1. The Contractor shall perform this work in accordance with 29 CFR § 910.147-The Control of Hazardous Energy requirements.
2. The Contractor shall notify the COR that a lockout/tag out system is going to be used.

3. The contractor is to request the COR to notify them if TYAD is using anylockouts / tag outs in the construction area.
4. The Contractor shall locate and identify all isolating devices.
5. The Contractor shall shut down the equipment normally.
6. The Contractor shall isolate all energy using appropriate methodology.
7. After all work is complete, the Contractor shall remove the energy isolating device and restore the equipment to service.
8. The Contractor shall notify the COR that energy is again restored.

S.10.9 PROTECTION TO THE DRINKING WATER SYSTEM

1. The contractor will not perform any work on the depot potable water system until prior approval is obtained from the Environmental Branch and the certified operator through the Directorate of Installation Services COR.

S.10.10 PROTECTION OF PERSONNEL

At no time is any depot employee to be put at risk to illness or injury. No construction actions are exempt from this requirement.

1. Where pedestrian and driver safety is endangered, use appropriate traffic barricades. Use anchor barricades to prevent displacement by wind. Institute PA DOT regulations and OSHA requirements. Notify the COR prior to beginning such work.
2. Where demolition is required, a Demolition Plan describing the steps and individual Definable Features of Works (DFOWs) as well as safety protocols, controls and oversight is required to be submitted to the COR for review prior to works being performed. Continuously evaluate the condition of the structure being demolished and take action to protect personnel working around the project site. No structural element will be left standing without sufficient support to prevent collapse.

3. Contractor shall provide personal protective equipment (PPE) and provide training for use, for all visitors requiring entry into the regulated area.
4. Subcontractors, vendors, and delivery personnel are the responsibility of the prime contract and must follow the same regulations the prime contractor does.

S.10.11 FIRE AND EMERGENCY SERVICES

Hot Work Permits will be issued by Fire Department upon request. All requests must be made at least thirty (30) minutes prior to the expected start time by contracting the fire department.

1. Contractors are required to have fully charged and operable contractor provided fire extinguisher, in quantities and properly spaced per OSHA requirements that are appropriate for the type of possible fire. Fire extinguisher shall be immediately available for inspection by the fire department upon an inspection of the worksite and shall remain at the work site at all times. At a minimum, 10 pound class 4A, 60B or C multi-purpose dry chemical fire extinguisher or equivalent shall be provided.
2. A fire watch must be in place during the hot work and for 30 minutes after the HWP operation. Upon completion of the thirty (30) minute, post hot work fire watch, the contractor shall contact the fire department to report the work is complete.
3. Use of a plasma torch will require special approval by the fire department.
4. Any fire, even one that is extinguished, must be reported to the fire department.
5. Ambulance services are provided at a cost to contractors. The contracted ambulance service provider will transport to the nearest hospital. Advanced Life Support, helicopter transport, etc. is all at the contractor's expense.
6. The fire department will respond to all fire, ambulance, hazmat and confined space incidents.

S.10.12 IF AN INCIDENT HAPPENS

1. Any serious injury or medical emergency: Immediately call emergency responders

- Dial 911 and give accurate location and nature of emergency. Make sure to tell the operator that you are calling from Tobyhanna Army Depot.
- Send someone to the nearest exit to assist responders.
- Treat victims to the best of your ability.
- Notify COR / call work order desk at 570-615-7805 if there is any blood or body fluids that must be cleaned up.

2. In the event of the smell of natural gas:

- Call dial 911 and give accurate location and nature of emergency. Make sure to tell the operator that you are calling from Tobyhanna Army Depot.
- Have all personnel evacuate the area if the smell is significant.
- Upon arrival of fire personnel, provide information as to specific equipment and exact location of potential leak.

3. In the case of a fire:

- If the fire is small, use a fire extinguisher and call 911.
- Otherwise, dial 911 and pull the fire alarm.
- Evacuate the building.

S.10.13 CRANE LIFT OPERATIONS AT TOBYHANNA ARMY DEPOT

A Lift Plan for Crane Operations will be submitted to the ET/COR for approval by the TYAD Safety Office at least 14 days prior to a lift operation. It will conform to all applicable OSHA regulations and requirements and shall include:

1. A description of the operation to be performed, specific personnel assignments (Lift Director, Safety Coordinator, Operator, rigger, etc.) and signaling and any other details pertaining to activities during the lift.

2. A drawn Site Plan with specifications including work zone, support equipment locations, evacuation area, traffic control, electrical power line clearances (if applicable), lift path, surface conditions at crane location, etc.
3. Training/Certifications (scans) for crane operator and other lift-team members included in the lift operation.
4. Equipment nomenclature and a certificate of comprehensive annual inspection records, including any deficiencies and corrective action.
5. Load chart for crane, with target capacities specific to the crane/boom configuration and lift details clearly marked.
6. Lift calculations, including rigging components and configuration.
7. Weather conditions are always part of the ongoing safety assessment and may result in rescheduling of the lift.
8. Only approved operators are allowed to operate or move the crane for any reason.

A Production Lift Plan pertains to repetitive lifts within a work project and may be outlined with one lift plan depicting the nomenclature and general capacities of the equipment to be utilized. Besides the eight items above, the plan will also include how often the crane will be used and how traffic and personnel safety will be handled. A separate traffic plan will be required for vetting and approval prior to any lifts taking place.

S.10.14 APPLICATION OF ANY ODOR PRODUCING MATERIAL

1. Any application of any paint, epoxy, adhesive or anything else that produces an offensive odor must be coordinated with the COR or POC before starting. This is particularly true of the construction work in a building occupied by Tobyhanna employees.
2. It is highly recommend that this type of work be planned for off hours, weekends, or holidays to avoid shutdowns of operations due to these offensive odors. Odors during curing times for products shall also be considered.

IN ANY CONFLICT BETWEEN STANDARDS, THE STRICTER OF THE TWO SHALL APPLY. IF UNSURE CONTACT THE COR / ET VIA PROPER RFI PROTOCOLS FOR VERIFICATION THROUGH THE TYAD SAFETY OFFICE.

ON SITE WORK REQUIREMENTS

TOBYHANNA ARMY DEPOT ON-SITE CONTRACTOR WORKFORCE AND VISITOR RESTRICTIONS

1. NON-RESIDENT/NON-IMMIGRANT ALIENS

a. All non-resident/non-immigrant aliens must have approval prior to being permitted access to Tobyhanna Army Depot (TYAD). Such approval must be obtained by requesting access through the following: apply at the alien-resident's embassy; proceed to the U.S. Embassy; proceed to the Department of the Army; proceed to Army Materiel Command; proceed to U.S. Communications-Electronics Command; proceed to TYAD.

b. All non-resident/non-immigrant aliens granted access to TYAD are required to be escorted by Government personnel. One Government escort can accommodate a maximum of two non-resident/non-immigrant aliens.

c. Due to limited availability of Government personnel, contractors shall not be permitted to employ non-resident/non-immigrant aliens as part of the contractor's on-site workforce. Limited exceptions to this restriction may be considered on a case-by-case basis. Such exceptions shall only be considered where a specialized skill or trade is not otherwise available, and even under such circumstances would only be considered for very limited duration, e.g., a few hours/days. However, even if limited exception is considered, access may still be denied. Contractors whose personnel are either denied entry to TYAD or permitted limited entry to TYAD due to the security requirements pertaining to non-resident aliens/non-immigrants are not relieved of their obligation to provide the required contract performance and must do so at no additional cost to the Government. Any contractor failing to perform or that fails to perform in a timely manner under such circumstances may be terminated for default or other contractual remedies as appropriate.

d. Due to limited availability of Government personnel, visitors requiring escort may not be permitted access, or access may be limited to a certain time and duration.

2. FOR THE PURPOSE OF FORMAL ESCORTED SITE VISITS

Resident aliens (immigrants) in possession of a valid Form I-551, Alien Registration Receipt Card ("Green Card"), are not required to obtain approval as set forth in paragraph 1.a. above (but see paragraph 5, below). Such individuals must have proper identification in addition to a valid form I-551 in their physical possession at all times while at TYAD. Individuals lacking proper identification and valid form I-555 will be denied access to TYAD.

3. SECURITY SEARCHES, IN-PROCESSING, AND SECURITY SCREENING

All persons seeking entrance to TYAD must submit to and comply with all security standards and requirements in force at the time such persons are seeking entry. All visitors and contractors, regardless of resident status or citizenship, will be subject to vehicle search and intense in-processing by TYAD Security personnel prior to being granted access to TYAD. This security screening process may be time consuming and access may be delayed or denied.

Any Contractors who will be working on site, company representatives who will be visiting periodically, and any companies or contractors requesting or requiring TYAD badges for other business reasons must submit a completed TYAD form 648-C to their contract or depot point of contact. The completed form must be submitted at least five (5) workdays in advance of on-site performance for each employee intended for onsite performance or five (5) workdays in advance of visits or other business at the depot. Any contractor employee (s) already on site who have not been screened, will be subject to security screening. This requirement is inclusive of on-site supervisory or managerial personnel and sub-contractor personnel that the Contractor anticipates will be performing work or visiting on-site. This security screening does not relieve the contractor of any responsibilities to conduct thorough pre-employment background checks and drug screening. Contractor workers will not be granted access to the work site until security screening is completed and access is approved. Any contractor personnel on site who fail screening will not be permitted further access to TYAD.

4. SUBMISSION OF BIDS OR PROPOSALS

Bidders/offerors who hand carry bids or quotes do so at their own risk. Bidders/offerors are solely responsible for the timely submission of bids /proposals/quotations, any delays security measures notwithstanding.

5. CONTRACTOR ON-SITE WORKFORCE - ADDITIONAL SECURITY REQUIREMENTS

A. This section is in addition to the requirements above regarding non-resident aliens (non-immigrants) for on-site performance. Prior to the commencement of performance under the contract and within seven (7) workdays of contract award, the Contractor shall submit to the Chief, Security Division, Tobyhanna Army Depot, a roster of all contractor personnel, inclusive of on-site supervisory or managerial personnel and sub-contractor personnel, that the Contractor anticipates will be performing work on-site. The roster shall indicate which individuals are U.S. citizens and which are resident aliens (immigrants). The following documentation shall accompany the roster for each individual named on the roster as a resident alien (immigrant):

- a) A copy of a verifiable form of identification, such as a driver's license or a passport; and
- b) A copy of a valid Department of Justice Immigration and Naturalization Service Form I-551, Alien Registration Receipt Card ("Green Card").

Contractors who fail to identify any and all resident aliens (immigrants) who will be used for on-site performance and who will seek access to Tobyhanna Army Depot as a worker for or through the contractor, inclusive of managerial and subcontractor personnel, may be subject to civil and criminal penalties and sanctions as well as contract remedies

B. Within five (5) workdays of the submission of the roster, documentation, and TYAD form 648-C, the Government will have completed the security check and the Contractor shall be notified whether all listed personnel will be permitted to work on-site. However, actual access to Tobyhanna Army Depot by the roster personnel will remain contingent upon such resident alien (immigrant) individuals presenting two (2) forms of identification as they process into the Depot through the Security building: a valid Form I-551, Alien Registration Receipt Card ("Green Card") in addition to at least one other verifiable form of identification

C. The roster that the Contractor submits is amendable. However, up to five (5) workdays will be required to perform a security check on any personnel added to the roster. The Contractor is urged to include contingency or "back-up" personnel in the original roster in order to avoid delays due to roster amendment

D. Contractors whose personnel are denied entry to TYAD due to the security requirements are not relieved of their obligation to provide the required

contract performance and must do so at no additional cost to the Government. Any contractor failing to perform or that fails to perform in a timely manner under such circumstances may be terminated for default or be subject to other contractual remedies as appropriate.

CONTRACTOR VEHICLES, TRAILERS AND EQUIPMENT

All contractor owned, rented or leased vehicles, trailers and/or equipment for use on site, shall be identified with the contractor's company name, job site description, point of contact and phone number where the contractor can be reached 24 hours a day. The contractor shall ensure all referenced items are to be checked for proper operation, leaks, etc. prior to delivery to Tobyhanna Army Depot. The contractor shall coordinate with the Contracting Officer's Representative or assigned Government point of contact prior to leaving any of the referenced items unattended at the site.

Section K - Representations, Certifications and Other Statements of Offerors

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (DEC 2022)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 237110.

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

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

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

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

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

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

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

() Paragraph (d) applies.

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

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

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

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

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

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

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

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

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

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

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

(B) Exceed the simplified acquisition threshold; and

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

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

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

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

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

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

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

(xii) 52.219-1, Small Business Program Representations (Basic, Alternates I, and II). This provision applies to solicitations when the contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied part 19 in accordance with 19.000(b)(1)(ii).

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

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

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

(xiii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied part 19 in accordance with 19.000(b)(1)(ii).

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

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

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

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

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

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

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

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

(A) If the acquisition value is less than \$50,000, the basic provision applies.

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

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

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

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

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

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

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

[Contracting Officer check as appropriate.]

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

(ii) 52.204-20, Predecessor of Offeror.

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

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

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

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

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

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

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

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

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

(End of provision)

52.223-22 PUBLIC DISCLOSURE OF GREENHOUSE GAS EMISSIONS AND REDUCTION GOALS-- REPRESENTATION (DEC 2016)

(a) This representation shall be completed if the Offeror received \$7.5 million or more in Federal contract awards in the prior Federal fiscal year. The representation is optional if the Offeror received less than \$7.5 million in Federal contract awards in the prior Federal fiscal year.

(b) Representation. [Offeror is to check applicable blocks in paragraphs (b)(1) and (2).]

(1) The Offeror (itself or through its immediate owner or highest-level owner) [____] does, [____] does not publicly disclose greenhouse gas emissions, i.e., make available on a publicly accessible Web site the results of a greenhouse gas inventory, performed in accordance with an accounting standard with publicly available and consistently applied criteria, such as the Greenhouse Gas Protocol Corporate Standard.

(2) The Offeror (itself or through its immediate owner or highest-level owner) [____] does, [____] does not publicly disclose a quantitative greenhouse gas emissions reduction goal, i.e., make available on a publicly available Web site a target to reduce absolute emissions or emissions intensity by a specific quantity or percentage.

(3) A publicly accessible Web site includes the Offeror's own Web site or a recognized, third-party greenhouse gas emissions reporting program.

(c) If the Offeror checked ``does" in paragraphs (b)(1) or (b)(2) of this provision, respectively, the Offeror shall provide the publicly accessible Web site(s) where greenhouse gas emissions and/or reduction goals are reported:

____ .

(End of provision)

52.225-25 PROHIBITION ON CONTRACTING WITH ENTITIES ENGAGING IN CERTAIN ACTIVITIES OR TRANSACTIONS RELATING TO IRAN--REPRESENTATION AND CERTIFICATIONS. (JUN 2020)

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

Person--

(1) Means--

(i) A natural person;

(ii) A corporation, business association, partnership, society, trust, financial institution, insurer, underwriter, guarantor, and any other business organization, any other nongovernmental entity, organization, or group, and any governmental entity operating as a business enterprise; and

(iii) Any successor to any entity described in paragraph (1)(ii) of this definition; and

(2) Does not include a government or governmental entity that is not operating as a business enterprise.

Sensitive technology--

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically--

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

(b) The offeror shall email questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(c) Except as provided in paragraph (d) of this provision or if a waiver has been granted in accordance with Federal Acquisition Regulation (FAR) 25.703-4, by submission of its offer, the offeror—

(1) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(2) Certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act. These sanctioned activities are in the areas of development of the petroleum resources of Iran, production of refined petroleum products in Iran, sale and provision of refined petroleum products to Iran, and contributing to Iran's ability to acquire or develop certain weapons or technologies; and

(3) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds the threshold at FAR 25.703-2(a)(2) with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at <https://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx>).

(d) Exception for trade agreements. The representation requirement of paragraph (c)(1) and the certification requirements of paragraphs (c)(2) and (c)(3) of this provision do not apply if—

(1) This solicitation includes a trade agreements notice or certification (e.g., 52.225-4, 52.225-6, 52.225-12, 52.225-24, or comparable agency provision); and

(2) The offeror has certified that all the offered products to be supplied are designated country end products or designated country construction material.

(End of provision)

Section L - Instructions, Conditions and Notices to Bidders

CLAUSES INCORPORATED BY REFERENCE

52.222-5 Construction Wage Rate Requirements--Secondary Site of the MAY 2014
Work