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SECTION 01 11 00

SUMMARY OF WORK

02/24, CHG 1: 05/25

PART 1 GENERAL

1.1 SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals: Submit the following items to the Contracting Officer (CO):

- Utility Outage Requests
- Landfill Permit
- Weld/Burn Permit
- Site Specific Accident Prevention Plan
- Quality Control Plan

1.2 WORK COVERED BY CONTRACT DOCUMENTS

1.2.1 Project Description

This Statement of Work (SOW) outlines the design and construction services required to renovate Secure Facility B1049 at Kirtland Air Force Base (KAFB). The primary objective of this project is to design and construct a new 25-foot by 25-foot enclosed storage space featuring a staircase-accessible mezzanine, lower-level equipment storage, and four opaque skylights. Prior to beginning new construction, the contractor must completely remove the existing Space Saver storage system and modify or relocate utilities as necessary.

To execute this project, the contractor shall provide the services of licensed design professionals across all required disciplines to produce the design analysis, cost estimates, schedules, drawings, and specifications. Additionally, the contractor is fully responsible for conducting field verifications and supplying all labor, tools, equipment, permits, and licenses necessary to complete the construction.

The items described above are not intended as the all-inclusive scope. For that, refer to the SoW that shall define the scope in detail.

1.2.2 LOCATION

The work is located at Kirtland AFB. Bldg, 1049 is adjacent to Bldg. 1025 and Randolph Ave, approximately as indicated. The exact location will be shown by the CO.

1.4 WORK RESCHEDULING

Normal duty hours for work shall be from 7:00 am to 4:00 pm, Monday through Friday. Requests for additional work shall require written approval from the CO 14 calendar days in advance of the proposed work period. All federal holidays are observed and are not considered duty days.

1.5 OCCUPANCY OF PREMISES

Bldg. 1049 will not be occupied during performance of work under this Contract. Bldg. 1025 will be occupied during the performance of the work. This will require close coordination between contractor and user.

Before work starts, arrange with the POC at Bldg. 1029 a sequence of procedure, means of access, space for storage of materials and equipment, excavation, marking of utilities, all within sufficient time required if work occurs on a Monday or after a Holiday. Verify existing utility locations to and from area of work.

Before the start of work the facility POC will photograph the entire site surrounding the building including the building elevations. Deliver a copy of the photographs to the CO, PM and CE inspections for the Government's records. For security reasons coordinate with the user where photographs are allowed to be taken.

1.6 EXISTING WORK

Protection of Existing Structures, Equipment, Utilities, and Improvements:

a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the CO. At the completion of operations, existing work shall be in a condition equal to or better than that which existed before new work started.

1.7 ONSITE PERMITS

All applicable permits and approvals required by USAF, County, City and State shall be obtained prior to construction start. This includes the following:

Apply for permits online in a timely way to avoid delaying the project. Apply to the Fire Department for weld and burn permits.

Burning of trash or rubbish is not permitted on the project site.

Requests for underground utility locates (Form AF Form 103-Digging Permit Request) shall be made in writing to the CO and PM at least 30 calendar days in advance of the time required. Each request shall state the system involved, a map of the area involved, approximate duration of outage, and the nature of work involved.

1.7.1 Utility Outage Requests and Utility Connection Requests

Schedule work to minimize outages and connections. For utility outages and connections required during the execution of work that affect existing systems, schedule outside the regular working hours or on weekends, as approved by the CO. Schedule utility outages and connections to minimize disruptions to the Government. No additional payment will be provided for utility outages and connections required to be performed outside the regular work hours.

Submit requests for utility outages and connections AF Form 103-Outage Request shall be made in writing to the CO and PM at least 30 calendar days in advance of the time required. In Each request shall state the system involved, a map of the area involved, approximate duration of outage, and the nature of work involved.

1.7.2 Borrow, Excavation, Welding, and Burning Permits

Burning of trash or rubbish is not permitted on the project site.

1.7.3 Free Zones

Free Zone will not include laydown yard. Laydown will be provided on-site by 377 MSG CENE, a storage lot located at Bldg. 1049 shall be utilized. Maintain the site in a neat and orderly condition.

Coordinate the construction staging area with the Facility Manager (FM), PM and CE to minimize the impact on the site and the building users. This impacts the prosecution of the work. Schedule demolition/abatement roll-offs and material/equipment delivery to minimize disruption of Bldg. 1049 operations. Deferring to mission requirements as identified by user.

1.8 LOCATION OF UNDERGROUND UTILITIES

Obtain digging permits prior to start of excavation and comply with installation requirements for locating and marking underground utilities. Verify existing utility locations indicated on contract drawings, within SECTION 01 11 00 area of work.

Identify and mark all other utilities by scanning the construction site with Ground Penetrating Radar (GPR), electromagnetic, or sonic equipment, and mark the surface of the ground [, pier deck] or paved surface where existing underground utilities [or utilities encased in pier structures] are discovered. Verify the elevations of existing piping, utilities, and any type of underground [or encased] obstruction not indicated, or specified to be removed, that is

indicated or discovered during scanning, in locations to be traversed by piping, ducts, and other work to be conducted or installed. Verify elevations before installing new work closer than nearest manhole or other structure at which an adjustment in grade can be made.

1.8.1 NOTIFICATION PRIOR TO DEMOLITION / EXCAVATION EXCAVATION/ Demolition

Notify the CO in accordance with project schedule and at least 14 calendar days prior to starting excavation or demolition work.

1.9 GOVERNMENT-FURNISHED MATERIAL AND EQUIPMENT

None

Delivery Schedule

Notify the CO in writing at least 14 calendar days in advance of the date on which the materials and equipment are required. Pick up materials and equipment no later than 30 calendar days after such date. When materials and equipment are not picked up by the 30th day, the Contractor will be charged for storage at the rate of $100.00 per [45 kg] [3 cubic meters] 100 [pounds] [cubic feet] per month or fraction thereof.] [Materials and equipment will be available on or after 364 calendar days after the award of contract.

1.9.1. Delivery Location

The materials and equipment [are located at N/A or are located within 25 miles of the jobsite or will be delivered to Kirtland AFB.

1.10 GOVERNMENT-INSTALLED WORK

None

SALVAGE MATERIAL AND EQUIPMENT

None

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

-End of Section-

SECTION 01 14 00

WORK RESTRICTIONS

11/22, CHG 5: 05/25

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.

AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE (AHRI)

ANSI/AHRI 210/240 (2008; Add 1 2011; Add 2 2012) Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7-16 (2017; Errata 2018; Supp 1 2018) Minimum Design Loads and Associated Criteria for Buildings and Other Structures

INTERNATIONAL CODE COUNCIL (ICC)

ICC IBC (2024) International Building Code

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (2026) National Electrical Code
NFPA 90A (2024) Standard for the Installation of Air Conditioning and Ventilating Systems
NFPA 101 (2024) Life Safety Code

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 3-301-01 (2023; with Change 4, 2025) Structural Engineering

1.2 SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals Transportation of personnel, materials, and equipment

- Purchase Orders
- List of Contact Personnel
- Personnel List

- Vehicle List
- Entry Approval for Employees

1.3 SPECIAL SCHEDULING REQUIREMENTS

a. The facility will remain in low scheduled operation during the entire construction period. The Contractor must conduct his operations to cause the least possible interference with normal operations of the activity.

b. Permission to interrupt any Activity such as roads, utility services, mechanical, and electrical services shall be requested in writing a minimum of 30 calendar days prior to the desired date of interruption.

1.4 CONTRACTOR ACCESS AND USE OF PREMISES

1.4.1 Activity Regulations

Ensure that Contractor personnel employed on the Activity become familiar with and obey Activity regulations including safety, fire, traffic, and security regulations. Keep within the limits of the work and avenues of ingress and egress. Wear proper personal protective equipment (PPE) in designated areas. Do not enter any restricted areas unless required to do so and until cleared for such entry. Ensure all Contractor's equipment, including delivery vehicles, are clearly identified with their company name.

1.4.2 Subcontractors and Personnel Contacts

Provide a list of contact personnel of the Contractor and subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct, and change the information contained in previous lists.

1.4.2.1. Additional Personnel Requirements

General construction and finish work of Bldg. 1049 must be performed by U.S. firms using U.S. citizens or U.S. persons. General construction includes construction activities such as building sitework, utilities, foundations, structure, and enclosure or shell, including doors, windows and façade work. Finish Work includes construction activities such as insulation, floor, partition, and ceiling systems; cabinet work; conveyor systems; specialties; building furnishings, fixtures, and equipment; and mechanical and electrical services and equipment including those specialized for fire protection, security, communication, control, energy conservation, safety, comfort, convenience, and similar purposes.

1.4.2.2. General Construction

General construction must be performed by U.S. firms using U.S. citizens. General construction includes construction activities such as building sitework, utilities, foundations, structure, and enclosure or shell, including doors, windows and façade work.

1.4.2.3. Finish Work

Finish Work includes construction activities such as insulation, floor, partition, and ceiling systems; cabinet work; conveyor systems; specialties; building furnishings, fixtures, equipment; and mechanical and electrical services and equipment including those specialized for fire protection, security, communication, control, energy conservation, safety, comfort, convenience, and similar purposes.

1.4.2.4. Electronic Security Systems Equipment

Electronic Security Systems equipment such as processing control units, workstations, field panels, sensors, high security locks, card readers, cable installation, and system programming, testing and training must be performed by U.S. citizens who have been subjected to a trustworthiness determination.

1.4.3 Installation Access

Submit for approval, at least 21 days prior to the desired date of entry, an original alphabetical list of all personnel who require entry into Government property to perform work on the project. Furnish this list on the attached Base Passes Master Log listing all people requiring access. Each person shall also be required to fill out and sign a Criminal Background Check Form and a Contractor SFMIS Pass Request; see attached blank forms. The original Background Check Form and SFMIS Pass Request must be provided to the government along with the Base Passes Master Log. (See Attachment A).

1.4.3.1 Defense Biometrics Identification System (DBIDS) Eligibility Requirements

Throughout the length of the contract, the Contractor employee must continue to meet background screen standards. Periodic background screenings are conducted to verify continued DBIDS participation and installation access privileges. DBIDS access privileges will be immediately suspended or revoked if at any time a contractor employee becomes ineligible.

An adjudication process may be initiated when a background screen failure results in disqualification from participation in the DBIDS, and Contractor employees do not agree with the reason for disqualification. The Government is the final authority.

1.4.3.2 DBIDS Notification Requirements

a. Immediately report instances of lost or stolen badges to the Contracting Officer (CO).

b. Immediately collect DBIDS credentials and notify the CO in writing under the following circumstances:

1) An employee has departed the company without having properly returned or surrendered their DBIDS credentials.

2) There is a reasonable basis to conclude that an employee, or former employee, might pose a risk, compromise, or threat to the safety or security of the Installation or anyone therein.

1.4.3.2.1 One-Day Passes

Personnel applying for One-Day passes at the Base Visitor Control Office (Truman Gate) are subject to daily mandatory vehicle inspection and will have limited access to the installation. The Government is not responsible for any cost or lost time associated with obtaining daily passes or added vehicle inspections incurred by non-participants in the DBIDS.

1.4.3.2.2 Employee List

The Contractor must provide to the Contracting Officer (CO), in writing, the names of two designated representatives authorized to request personnel, and vehicle passes for employees and subcontractor's employees prior to commencement of work under this contract.

1.4.3.3 Personnel Entry Approval

Failure to obtain entry approval will not affect the contract price or time of completion.

1.4.3.4 No Smoking Policy

Smoking is prohibited within and outside of all buildings on installation, except in designated smoking areas. This applies to existing buildings, buildings under construction and buildings under renovation. Discarding tobacco materials other than into designated tobacco receptables is considered littering and is subject to fines. The CO will identify designating smoking areas.

1.4.3.5 Working Hours

Regular working hours must consist of an 8-hour period established by the CO, between 0700 and 1600, Monday through Friday, excluding Government holidays. (A list of government holidays and family days will be provided at Notice to Proceed)

1.4.3.6 Work Outside Regular Hours

Work outside regular working hours requires CO approval. Make application 14 calendar days prior to such work to allow arrangements to be made by the Government for inspecting the work in progress, giving the specific dates, hours, location, type of work to be performed, contract number and project title. Based on the justification provided, the CO may approve work outside regular hours. During periods of darkness, the different parts of the work must be lit in a manner approved by the CO. Make utility cutovers after normal working hours or on Saturdays, Sundays, and Government holidays unless directed otherwise.

1.4.4 Exclusionary Period

No work shall be performed during any period defined in the pre-proposal conference, without prior written approval of the CO. This period has not been considered in computing the time allowed for the performance of this contract.

1.4.5 Occupied and Existing Building

The Contractor shall be working within and around an existing occupied building. Do not enter the building without prior approval of the CO.

The existing buildings and their contents must be always kept secure. Provide temporary closures as required to maintain security as directed by the CO.

Provide dust covers or protective enclosures to protect existing work that remains, and Government material located in the building during the construction period.

Relocate movable furniture away from the Contractor's working area as required to perform the work. Protect the furniture and replace furniture in its original location upon completion of the work. Leave attached equipment in place, and protect it against damage, or temporarily disconnect, relocate, protect, and reinstall it at the completion of the work.

The Government will remove Government property in the areas of the building scheduled to receive work. Do not use the facilities in the building.

1.4.6 Utility Cutovers and Interruptions

a. Make utility cutovers and interruptions after normal working hours or on Saturdays, Sundays, and Government holidays. Conform to procedures required in the paragraph "WORK OUTSIDE REGULAR HOURS."

b. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

c. Interruption to water, sanitary sewer, storm sewer, telephone service, electric service, air conditioning, heating, and fire alarm shall be considered utility cutovers pursuant to the paragraph entitled "WORK OUTSIDE REGULAR HOURS."

d. Operation of Station Utilities: The Contractor must not operate nor disturb the setting of control devices in the station utilities system, including water, sewer, electrical, and steam services. The Government will operate the control devices as required for normal conduct of the work. The Contractor must notify the CO giving reasonable advance notice when such operation is required.

1.4.7 Parking

Do not park on or block the marked fire lanes at any time. Do not park on established landscape, vegetation, or undisturbed topsoil except as approved by CO and Facility Manager. Contractor shall be responsible for any damage done due to vehicle parking.

1.4.8 Vehicle Searches

a. Vehicles are subject to search while entering, remaining in, or leaving KAFB.

b. Contractor Responsibility for Employees - The Contractor is responsible for employees under his employment. Ensure that employees are familiar with and obey station traffic, safety, and security regulations.

1.4.9 Photographs

Unofficial photography is prohibited. When operationally required, submit a written request containing specific justification and details to the CO and Facility Manager prior to release.

1.4.10 Identification Badges

In addition to the requirements specified in Section 01 30 00 ADMINISTRATIVE REQUIREMENTS, comply with the following:

a. Contractor badges are required to be always visible above the waist. Consult with the CO for detailed requirements.

1.5 PERSONNEL LIST

Submit an original list, at least 15 days prior to the desired date of entry, an original alphabetical list of personnel who require entry into Government property to perform work on the project. Furnish for each person the following information:

a. Full Name

b. Date and place of birth

c. Citizenship

d. Home address

e. Social Security Number

f. Current Pass expiration date

g. Naturalization or Alien Registration Number

h. Passport number, place of issue, and expiration date

1.6 VEHICLES

Vehicle List

Submit an original list of vehicles to be utilized at the work site with the following information for each vehicle:

i. Make

j. Year

k. Model

l. License number

m. Registered owner

1.7 VEHICLE PASSES

Submit requests for personnel and vehicle passes together. Include the Certificate of Insurance for Contractor and Subcontractor(s) and the Statement of Acknowledgement Form SF 1413 with the submittal. Passes will normally be issued within 21 days.

1.7.1 CONTROL

Maintain strict accountability over passes. Immediately report, to the source of issue, passes missing or lost and the circumstances. If the Contractor has another active contract or one commencing immediately, employees' names may be transferred from one contract to the other. Final payment will not be affected until employees are transferred to another contract or the records are cleared. Furnish a signed letter, countersigned by the source of issue, stating that passes have been turned in.

1.7.2 INSPECTION

Personnel, equipment and the facility are subject to inspection. Personnel are also subject to physical searches at random intervals.

1.8 SPECTRUM REQUIREMENTS

1.8.1 TWO WAY RADIOS

Two-way handheld radios (walkie talkies), or any radio frequency device, are strictly prohibited.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section –

ATTACHMENT A

KAFB Base Passes Master Log – Bldg. 1049 Renovation

Contract POP/Contract End Date:							
Prime - Company Name	First, Middle & Last Name of Individual Requesting Base Access	Date of Birth	M/F	DL or ID #	DL/ID Card State of Issue	Citizenship	Pass Complete/A'ddl Info Needed
Sub-Contractor #1							
Sub-Contractor #2							

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

11/20, CHG 5: 02/25

PART 1 GENERAL

1.1 SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

- Cost-Loaded AF 3064

1.2 PAYMENT SCHEDULE INSTRUCTIONS

Payments will not be made until the Schedule of Prices and completed AF 3064 have been submitted to and accepted by the Contracting Officer (CO). For design phase progress payment(s), the Schedule of Prices or Earned Value Report from the Cost Loaded CPM must include detailed design activities and general (summarized) approach for the construction phase(s) of the project. The Schedule of Prices or Earned Value Report must be fully developed with detailed construction line items as design progresses. The complete design and construction Schedule of Prices or Earned Value Report must be submitted and accepted prior to starting construction work.

1.3 CONTRACT COST BREAKDOWN

The Contractor must furnish within 30 days after the date of Notice to Proceed, and prior to the submission of its first partial payment estimate, a breakdown of its single job pay item or items which will be reviewed by the CO as to propriety of distribution of the total cost to the various accounts. Any unbalanced items as early payment items or other discrepancies will be revised by the CO to agree with a reasonable cost of the work included in the various items. This Contract cost breakdown will then be utilized as the basis for progress payments to the Contractor.

Add:

NOTE: For planning purposes, the contractor shall include a line item in the schedule of values and progress schedule of each task order for completion of punch-list items, site clean-up, demobilization and final construction (as-built) drawings. The amount of this line item shall be equal to 10% of each CLIN or $100,000, whichever is less. The Government will not pay final invoices for this amount until all punch-list, site clean-up with documented Government acceptance of site condition, and

demobilization activities are complete; final construction drawings are delivered; and final acceptance is made.

1.4 CONTRACT MODIFICATIONS

Modification Proposals-Price Breakdown, and where actual ownership and operating costs of construction equipment cannot be determined from Contractor accounting records, equipment use rates shall be based upon the applicable provisions of the EP 1110-1-8.

1.5 CONTRACTOR'S INVOICE AND CONTRACT PERFORMANCE STATEMENT

1.5.1. Content of Invoice

Invoices not completed in accordance with contract requirements will be returned to the Contractor for correction of the deficiencies.

The requests for payment shall include the documents listed below.

a. The Contractor's invoice.

b. The Schedule of Pricing, showing in detail: the estimated cost, percentage of completion, and value of completed performance for each of the construction categories stated in this contract.

c. Updated AF 3065 and reports required by the contract.

d. Updated Critical Path Method (CPM) construction schedule.

e. Monthly exposure report.

f. Documentation declaring As-Builts are up to date.

g. Updated copy of submittal register (AF66).

h. Summary of waste pursuant to Section 01 74 19.

i. Other supporting documents as requested.

1.5.2. Submission of Invoices

If Wide Area Workflow Payment Instructions are included in the contract, provide the documents listed in paragraph CONTENT OF INVOICE in their entirety as attachments in Wide Area Workflow (WAWF) for each invoice submitted. The maximum size of each WAWF attachment is two megabytes, but there are no limits on the number of attachments. If a document cannot be attached to WAWF due to system or size restriction, provide it as instructed by the CO.

Monthly invoices and supporting forms for work performed through the anniversary award date of the Contract must be submitted to the CO within five calendar days of the date of invoice. For example, if Contract award date is the 7th of the month, the date of each monthly invoice must be the 7th, and the invoice must be submitted by the 12th of the month.

1.5.3. Final Invoice

a. A final invoice shall be accompanied by the Contractor's Final Release and all other documents required as listed in Section 01 78 00, Close Out Submittals, and other Sections as applicable.

b. Final invoice not accompanied by Contractor's Final Release will be considered incomplete and will be returned to the Contractor.

1.6. PAYMENTS TO THE CONTRACTOR

Payments will be made on submission of itemized requests by the Contractor which comply with the requirements of this section and will be subject to reduction for overpayments or increase for underpayments made on previous payments to the Contractor.

1.6.1. Obligations of Government Payments

The obligation of the Government to make payments required under the provisions of this contract will, at the discretion of the Contracting Officer, be subject to reductions and/or suspensions permitted, including the following:

a. Reasonable deductions due to defects in material or workmanship.

b. Claims which the Government may have against the Contractor under or in connection with this contract.

c. Unless otherwise adjusted, repayment to the Government upon demand for overpayments made to the Contractor; and

d. Failure to maintain accurate "Record Drawings" in accordance with "FAR 52.236.21".

1.6.2. Payment for Onsite and Offsite Materials

Progress payments may be made to the contractor for materials delivered on the site, for materials stored off construction sites, or materials that are in transit to the construction sites under the following conditions:

a. FAR 525.232-5(b) Payments Under Fixed Price Construction Contracts.

b. Materials delivered on the site but not installed, including completed preparatory work, and off-site materials to be considered for progress payment shall be high cost, long lead, special order, or specialty items, not susceptible to deterioration or physical damage in storage or in transit to the construction site. Examples of materials acceptable for payment consideration include, but are not limited to, structural steel,

non-magnetic steel, non-magnetic aggregate, equipment, machinery, large pipe and fittings, precast/prestressed concrete products, plastic lumber (e.g., fender piles/curbs), and high-voltage electrical cable. Materials not acceptable for payment include consumable materials such as nails, fasteners, conduits, gypsum board, glass, insulation, and wall coverings.

c. Materials to be considered for progress payment prior to installation must be specifically and separately identified in the Contractor's estimates of work submitted for the Contracting Officer's approval in accordance with [Schedule of Prices] [Earned Value Report] requirement of this Contract. Requests for progress payment consideration for such items must be supported by documents establishing their value and that the title requirements of the clause at FAR 52.232-5 Payments Under Fixed-Price Construction Contracts have been met.

d. Materials are adequately insured and protected from theft and exposure.

e. Provide a written consent from the surety company with each payment request for offsite materials.

f. Materials to be considered for progress payments prior to installation shall be stored in a location approved by the CO.

g. Materials in transit to the job site or storage site are not acceptable for payment.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used- End of Section –

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

11/20, CHG 5: 02/25

PART 1 GENERAL

1.1 SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

- View location map
- Progress and Completion Pictures
- Draft Waste Management Plan

SD-02 Samples Construction

- Color Boards

1.2 VIEW LOCATION MAP

Submit, prior to or with the first digital photograph submittals, a sketch or drawing indicating the required photographic locations. Update as required if the locations are moved.

1.3 PRE-EXISTING CONDITION PHOTOS

Photographically document site conditions prior to start of construction operations. The view location sketch shall also be provided as digital file. All file names shall include a date designator. Photographs shall be provided for unrestricted use by the Government.

1.4 PROGRESS AND COMPLETION PICTURES

Photographically document site conditions prior to start of construction operations. Provide monthly, and within one month of the completion of work, digital photographs, 1600x1200x24 bit true color minimum resolution in JPEG file format showing the sequence and progress of work. Take a minimum of 10 digital photographs each week throughout the entire project from a minimum of ten different viewpoints selected by the Contractor unless otherwise directed by the Contracting Officer (CO). Submit with the monthly invoice. Name each file to indicate its location on the view location sketch. Also provide the view location sketch on the CD or DVD as a digital file. Include a date designator in file names. Photographs provided are for unrestricted use by the Government.

1.5 COLOR BOARDS Construction

Submit five sets of color boards within 90 calendar days after Contract Award. Each set of boards must include samples of colors and finishes of interior surfaces, such as walls, floors, and ceilings. Present the samples on 8 by 10-1/2 inches boards (modules) with a maximum spread of 24 by 31-1/2 inches for foldouts. Design modules to fit in a standard loose-leaf, three-ring binder. Where special finishes such as architectural concrete, carpet, or prefinished textured metal panels are required, submit samples not less than 12 inches square with the board. If more space is needed, more than one board per set may be submitted. Certify that the color samples have been reviewed in detail, and that the color samples are in strict accordance with contract drawings and specifications, except as may be otherwise explicitly stated. Submitting color samples does not relieve the Contractor of the responsibility to submit samples required elsewhere herein.

1.6 MINIMUM INSURANCE REQUIREMENTS

Provide the minimum insurance coverage required by FAR 28.307-2 Liability, during the entire period of performance under this contract. Provide other insurance coverage as required by State of New Mexico.

1.7 SUPERVISION

1.7.1 Superintendent Qualifications

Provide project superintendent with a minimum of 10 years' experience in construction with at least 5 of those years as a superintendent on projects similar in size and complexity. The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification and safety compliance. The individual must be capable of interpreting a critical path schedule and construction drawings. The qualification requirements for the alternate superintendent are the same as for the project superintendent. The CO may request proof of the superintendent's qualifications at any point in the project if the performance of the superintendent is in question.

Superintendent may not hold all three positions. Shouldn't hold QC either, because then he is verifying his own work.

The superintendent is permitted to also serve as the Quality Control (QC) Manager as established in Section 01 45 00 QUALITY CONTROL; the superintendent must have qualifications in accordance with that section.

1.7.2 Minimum Communication Requirements

Have at least one qualified superintendent, or competent alternate, capable of reading, writing, and conversing fluently in the English language, on the jobsite always during the performance

of Contract work. In addition, if a QC representative is required on the Contract, then that individual must also have fluent English communication skills.

1.7.3 Duties

The project superintendent is primarily responsible for managing subcontractors and coordinating day-to-day production and schedule adherence to the project. The superintendent is required to attend Red Zone meetings, partnering meetings, and quality control meetings. The superintendent or qualified alternative must always be on-site during the performance of this contract until the work is completed and accepted.

1.7.4 Non-Compliance Actions

The Project Superintendent is subject to removal by the CO for non-compliance with requirements specified in the contract and for failure to manage the project to ensure timely completion. Furthermore, the CO may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders is acceptable as the subject of claim for extension of time for excess costs or damages by the Contractor.

1.8 PRECONSTRUCTION CONFERENCE

After award of the contract but prior to commencement of any work at the site, meet with the CO to discuss and develop a mutual understanding relative to the administration of the value engineering and safety program, shop drawings, and other submittals, scheduling programming, prosecution of the work, safety, base-access, outage requests, hot work permits, schedule requirements, quality control, government acceptance, final inspections, and contract close-out. Major subcontractors who will engage in the work shall also attend and meet clear expectations of the "Interim DD Form 1354" Submittal. Contractors must present and discuss their basic approach to scheduling the construction work and any required phasing.

1.8.1 Attendees

Contractor attendees must include the Project Manager, Superintendent, Site Safety and Health Officer (SSHO), Quality Control Manager and major subcontractors.

1.9 ELECTRONIC MAIL (E-MAIL) ADDRESS

Establish and maintain electronic mail (e-mail) capability along with the capability to open various electronic attachments in Microsoft Office, Adobe Acrobat, and other similar formats. Within 10 days after contract award, the Contractor shall provide the CO a single (only one) e-mail address for electronic communications from the CO related to this contract including, but not limited to contract documents, invoice information, request for proposals, and other correspondence. The CO may also use email to notify the Contractor of base access conditions

when emergency conditions warrant, such as hurricanes, terrorist threats, etc. Multiple email addresses will not be allowed.

It is the Contractor's responsibility to make timely distribution of all CO initiated e-mail with its own organization including field office(s). Promptly notify the CO, in writing, of any changes to this email address.

1.10 DESIGN PRESENTATION/DEVELOPMENT (DP/D)

The Contractor must lead discussions to develop an understanding of the design that the accepted technical proposal represents with the Government users and maintainers of the facility. Develop Demolition, site and floor plans and details to conduct working sessions with the Government meeting attendees. The purpose of the DP/D Meeting is to confirm the appropriateness of the facility design and develop acceptable alternatives if changes are needed. The Contractor must anticipate that Government Facility Users represented at the DP/D Meeting will provide additional functional information. Incorporate functional design changes into the roof design as required to meet the needs of the Users. At the end of the DP/D Meeting the Contractor must provide either assurance that the updated design can be built within the budget or identify potential cost modification items and establish a follow-on DP/D Meeting to finalize a design that will include trade-offs to bring the project within the budget. The following Contractor key personnel must attend the Design Presentation: Project Manager, Project Scheduler, Cost Estimator, Lead Designer of Record, Design Staff responsible for each architectural/engineering discipline when facility design is discussed, Major Subcontractors, and DQC.

1.11 FACILITY TURNOVER PLANNING MEETINGS (Red Zone Meeting)

Meet with the Government to identify strategies to ensure the project is carried out to expeditious closure and turnover to the Client. Start planning the turnover process at the Pre-Construction Conference meeting with a discussion of the Red Zone process and convene at regularly scheduled RZ Meeting beginning at approximately 80 percent of project completion.

Include the following in the facility Turnover effort:

1.11.1 Red Zone Checklist

a. Contracting Officer's Technical Representative (COR) will provide the Contractor with a copy of the Red Zone Checklist template.

b. Prior to 80 percent completion, modify the Red Zone Checklist template by adding or deleting critical activities applicable to the project and assign planned completion dates for each activity. Submit the modified Red Zone Checklist to the Contracting Officer. The CO may request additional activities be added to the Red Zone Checklist at any time as necessary.

1.11.2 Meetings

a. Conduct regular Red Zone updates following the Red Zone beginning at approximately 80 percent project completion, or 60 days prior to substantial completion, whichever comes first.

b. The CO will establish the frequency of the updates, which is expected to increase as the project completion draws nearer. At the beginning, Red Zone updates may be every two weeks then increase to weekly towards the final month of the project.

c. Using the Red Zone Checklist as a Plan of Action and Milestones (POAM) and basis for discussion, reviewing upcoming critical activities and strategies to ensure work is completed on time.

d. During the Red Zone Meeting discuss with the COR any upcoming activities that require Government involvement.

e. Maintain the Red Zone Checklist by documenting the actual completion dates as work is completed and update the Red Zone Checklist with revised planned completion dates as necessary to match progress. Distribute copies of the current Red Zone Checklist to attendees at each weekly or bi-weekly update.

1.12 MOBILIZATION

Contractor shall mobilize to the jobsite within 90 calendar days after contract award 10 calendar days of final site or building design approval. Mobilization is defined as having equipment AND having a physical presence of at least one person from the contractor's team on the jobsite.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section –

SECTION 01 32 16.00 20

SMALL PROJECT CONSTRUCTION PROGRESS SCHEDULES

08/20

PART 1 GENERAL

1.1 SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

- Baseline Construction Schedule; G Cost-Loaded Construction Schedule (AF3064)
- Baseline Design Schedule; G Critical Path Method (CPM) Construction Schedule (MS Project or equivalent)

SD-07 Certificates

- Monthly updates

1.2 PRE-CONSTRUCTION SCHEDULE REQUIREMENT

Prior to the start of work, prepare and submit to the Contracting Officer (CO) for acceptance a construction schedule in the form of an AF3064.

Acceptance of an error-free AF3064 and updates is a condition precedent to processing the Contractor's pay request.

In addition to the AF3064, prepare and submit to the CO for acceptance of a construction schedule in the form of a Critical Path Method Schedule. Acceptance of an error-free CPM Schedule and updates is a condition precedent to processing the Contractor's pay request.

1.3 SCHEDULE FORMAT

1.3.1 AF3064

The AF3064 show submittals, government review periods, Material/ equipment delivery, utility outages, material lead times, on-site construction, inspection, testing, and closeout activities. Follow the directions as printed on AF3064.

1.3.1.1 Critical Path Method (CPM) Construction Schedule

The CPM schedule shall show the above, breaking the construction period into activities to include durations, float time, predecessors, successors, and construction logic to establish a

Critical Path for the project. CPM schedule may be presented as a Gantt Chart. Major milestones on this schedule are to coincide with those shown on AF3064.

1.3.1.2 Anticipated Weather Lost Workdays

Use the National Oceanic and Atmospheric Administration's (NOAA) Summary of Monthly Normals report to obtain the historical average number of days each month with precipitation, using a nominal 30-year, greater than 0.10 inch precipitation amount parameter, as indicated on the Station Report for the NOAA location closest to the project site as the basis for establishing a "Weather Calendar" showing the number of anticipated non-workdays for each month due to adverse weather, in addition to Saturdays, Sundays and all Federal Holidays as non-work days.

Assign the Weather Calendar to any activity that could be impacted by adverse weather. The CO will issue a modification in accordance with the contract clauses, giving the Contractor a time extension for the difference of days between the anticipated and actual adverse weather delay if the number of actual adverse weather delay days exceeds the number of days anticipated for the month in which the delay occurs, and the adverse weather delayed activities are critical to contract completion. A lost workday due to weather conditions is defined as a day on which the Contractor cannot work at least 50 percent of the day on the impacted activity. Impacts resulting from adverse weather must be documented in Narrative Report for the month that it occurred.

Make changes to Construction Schedule to reflect as-built conditions where work occurred where originally anticipated as non-workdays, and where work did not occur (lost workday).

1.3.1.2 Activity Identification

a. Identify Government, Construction Quality Management (CQM), Construction activities planned for the project and other activities that could impact project completion if delayed.

b. Identify administrative type activity/milestones including pre-construction submittal and permit requirements prior to demolition or construction stage.

c. Create separate activities for each Phase, Area, Floor Level, and Location the activity is occurring.

d. Do not use construction category activity to represent non-work type reference (Such as, Serial Letter or Request for Information).

1.3.1.3. Schedule Submittals and Procedures

Submit Schedules and updates in hard copy and on electronic media that is acceptable to the CO.

1.4 SCHEDULE MONTHLY UPDATES

Update the Construction Schedule at monthly intervals or when the schedule has been revised. Keep the updated schedule current, reflecting actual activity progress and plan for completing the remaining work. Submit copies of purchase orders and confirmation of delivery dates as directed by the CO.

a. Narrative Report: Identify and justify the following:

   1) Progress made in each area of the project.

   2) Longest Path: Include printed copy on 11 by 17-inch paper, landscape setting.

   3) Date/time constraint(s), other than those required by the contract.

   4) Listing of changes made between the previous schedule and current updated schedule including added or removed activities, original and remaining durations for activities that have not started, logic (sequence, constraint, lag/lead), milestones, planned sequence of operations, longest path, calendars or calendar assignments, and cost loading.

   5) Any decrease in previously reported activity Earned Amount.

   6) Pending items and status thereof, including permits, changes orders, and time extensions.

   7) Status of Contract Completion Date and interim milestones.

   8) Current and anticipated delays (describe cause of delay and corrective actions(s) and mitigation measures to minimize).

   9) Description of current and future schedule problem areas.

For each entry in the narrative report, cite the respective Activity ID and Activity Name, the date and reason for the change, and description of the change.

1.5 3-WEEK LOOK AHEAD SCHEDULE

Prepare and issue a 3-Week Look Ahead schedule to provide a more detailed day-to-day plan of upcoming work identified on the Construction Schedule. Additionally, include upcoming outages, closures, preparatory meetings, and initial meetings. Identify critical path activities on the Three-Week Look Ahead Schedule. The detail work plans are to be bar chart type schedules, maintained separately from the Construction Schedule on an electronic spreadsheet program and printed on 8-1/2 by 11-inch sheets as directed by the CO. Activities must not exceed 5 working days in duration and have sufficient level of detail to assign crews, tools and equipment required to complete the work. Deliver three hard copies and one electronic file of

the 3-Week Look Ahead Schedule to the CO no later than 8 a.m. each Monday, and review during the weekly CQC Coordination or Production Meeting.

1.6 CORRESPONDENCE AND TEST REPORTS

Correspondence (e.g., letters, Requests for Information (RFIs), e-mails, meeting minute items, Production and QC Daily Reports, material delivery tickets, photographs, etc.) must reference Schedule activities that are being addressed. Test reports (e.g., concrete, soil compaction, weld, pressure) must reference schedule activities that are being addressed.

1.7. ADDITIONAL SCHEDULING REQUIREMENTS

Any references to additional scheduling requirements, including systems to be inspected, tested and commissioned, that are located throughout the remainder of the Contract Documents, are subject to all requirements of this section.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section –

SECTION 01 33 00

SUBMITTAL PROCEDURES

08/18, CHG 4: 02/21

PART 1 GENERAL

1.1 SUMMARY

The Contracting Officer (CO) may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Submittals shall not be combined, when possible, except in cases of like systems or materials.

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

1.1.1. Project Type

The Contractor's Quality Control (CQC) System Manager is to check and approve all items before 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.

The Contractor and the Designer of Record (DOR), if applicable, are to check and approve all items before 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.

1.1.2. Submission of Submittals

Schedule and provide submittals requiring Government approval before acquiring 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.

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 start of construction (work on site):

- Certificates of insurance
- Surety bonds
- List of Subcontractors AF3064
- Project-Specific AF66 Schedule of Prices
- List of Proposed Products
- Submittal Register
- Accident Prevention Plan
- Work Plan
- Quality Control (QC) plan
- Waste Management Plan
- Preliminary AF1354
- Preconstruction Submittals as listed in other Sections

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

- 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 material, product, or system identical to the material, product or system to be provided has been tested in accord with specified requirements. Unless specified in another section, Testing must have been within three years of date of contract award for the project.
- Report 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 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 purpose of which is to further quality of 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 signed by an authorized official of a testing laboratory or agency and must 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 provided by the manufacturer, or the system provider, including manufacturer's help and product line documentation necessary to maintain and install equipment, for operating and maintenance use by facility personnel.
- Data required by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.
- Data is 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 Principal Validation (GPV) or Third-Party Certification (TPC).
- Special requirements are necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements are necessary to properly close out a major phase of construction on a multi-phase contract.
- Interim "DD Form 1354" with cost breakout for all assets 30 days prior to facility turnover. Provide an intermediate Interim DD Form 1354 at 60% of construction completion.

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on-site and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment,

and systems incorporated or to be incorporated in such construction. In exception, excludes work to produce SD-01 submittals.

1.3 SUBMITTALS

1.3.1 Submittal Schedule

Submit the following in accordance with this section:

- Project-Specific AF66

1.3.2 Electronic Submittals

Submittals will be provided electronically, except for material samples required for SD-04 Samples items, with an AF IMT 3000, 20030901 V1 in a file format that can be edited by reviewers.

Name the electronic submittal file specifically according to its contents and coordinate the file naming convention with the CO. Electronic files must be of sufficient quality so that all information is legible. Use PDF as an electronic format, unless otherwise specified or directed by the CO. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is searchable and can be copied. If documents are scanned, optical character resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature or a scan of a signature.

1.4 PREPARATION

1.4.1 Identifying Submittals

The Contractor's must prepare, review and stamp submittals, including those provided by a subcontractor, before submittal to the Government.

Identify submittals, except sample installations and sample panels, with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form. Mark each copy of each submittal identically, with the following:

a. Project title and location

b. Construction contract number and Project MHMV number

c. Dates of the drawings and revisions

d. Name, address, and telephone number of Subcontractor, supplier, manufacturer, and any other Subcontractor associated with the submittal.

e. Section number of the specification by which submittal is required

f. Submittal description (SD) number of each component of submittal

g. For a resubmission, add alphabetic suffix on submittal description, for example, submittal 18 would become 18A, to indicate resubmission

h. Product identification and location in project.

1.5 INFORMATIONAL ONLY SUBMITTALS

Provide information-only submittals to the CO a minimum of 14 calendar days prior to the Preparatory Meeting for the associated Definable Feature of Work (DFOW). Approval of the CO is not required on information only submittals. The CO will mark "receipt acknowledged" on submitting information and will return only the transmittal cover sheet to the Contractor. Normally, submittals for information only will not be returned. However, the Government reserves the right to return unsatisfactory submittals and require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the CO 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.

1.6 SUMITTAL MAANGEMENT

Prepare and maintain a submittal register, as the work progresses. Provide a submittal register showing items of equipment and materials for which submittals are required by the specifications. This list may not be all-inclusive, and additional submittals may be required.

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

1.7 VARIATIONS

Variations from contract requirements require CO approval pursuant to contract Clause FAR 52.236-21 Specifications and Drawings for Construction and will be considered where advantageous to the Government.

1.7.1 Considering Variations

Discussion of variations with the CO before submission [of a variation submittal] will help ensure that functional and quality requirements are met and minimize rejections and resubmittals. For variations that include design changes or some material or product substitutions, the Government may require an evaluation and analysis by a licensed professional engineer hired by the contractor.

Specifically point out variations from contract requirements in variation submittal. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.7.2 Proposing Variations

When proposing variation, deliver a submittal clearly marked as a "VARIATION" to the CO, with documentation illustrating the nature and features of the variation including any necessary technical submittals and why the variation is desirable and beneficial to Government. 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.

The CO will indicate approval or disapproval of the variation request; and if not approved as submitted, will indicate the Government's reasons, therefore. Any work done before such approval is received is performed at the Contractor's risk.

Specifically point out variations from contract requirements in a variation submittal. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

1.7.3 Warranting That Variations Are Compatible

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

1.7.4 Review Schedule Extension

In addition to the normal submittal review period, a period of 14 calendar working days will be allowed for the Government to consider submittals with variations.

1.8 SCHEDULING

Schedule and submit concurrently product data and shop drawings covering component items forming a system or items that are interrelated. Submit pertinent certifications at the same time. No delay damages or time extensions will be allowed for time lost in late submittals.

a. Coordinate scheduling, sequencing, preparing, and processing of submittals with performance of work so that work will not be delayed by submittal processing. The Contractor is responsible for additional time required for Government reviews resulting from required resubmittals. The review period for each resubmittal is the same as for the initial submittal.

b. Submittals required by the contract documents are listed on the submittal register. If a submittal is listed in the submittal register but does not pertain to the contract work,

the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but those have been omitted from the register or marked "N/A".

c. Resubmit the submittal register and annotate it monthly with actual submission and approval dates. When all items on the register have been fully approved, no further resubmittal is required.

d. Except as specified otherwise, allow review period, beginning with receipt by approving authority, with at least 15 days for CO review and approval of submittals. Period of review for submittals with CO approval begins when Government receives submittal from Contractor.

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

1.9 GOVERNMENT APPROVING AUTHORITY

When approving authority is the CO, the Government will:

a. Note date on which submittal was received from Contractor.

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 listed on AF3000 and with markings appropriate for action indicated.

Upon completion of review of submittal, stamp, and date approved submittals. Two (2) copies of the approved submittal will be retained by the CO, and one (1) copy of the submittal will be returned to the Contractor. 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.

1.9.1. Review Notations

Submittals will be returned to the Contractor with the following notations:

a. Submittals marked "approved" or "accepted" authorize proceeding with the work covered.

b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize proceeding with the work covered provided that the Contractor takes no exception to the corrections.

c. Submittals marked "not approved," "disapproved," or "revise and resubmit" indicate incomplete submittal or noncompliance with the contract requirements or design

concept. Resubmit with appropriate changes. Do not proceed with work for this item until the resubmittal is approved.

d. Submittals marked "not reviewed" indicate that the submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.

e. Submittals marked with "receipt acknowledged" indicate that submittals have been received by the Government. This applies only to "information-only submittals" as previously defined.

1.10 DISAPPROVED SUBMITTALS

Make corrections required by the CO. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications, give notice to the CO as required under the FAR clause titled CHANGES. The Contractor is responsible for the dimensions and design of connection details and the construction of work. Failure to point out variations may cause the Government to require rejection and removal of such work at the Contractor's expense.

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

1.11 APPROVED SUBMITTALS

The CO’s approval or acceptance of submittals is not to be construed as a complete check and indicates only that the general method of construction, materials, detailing, and other information are satisfactory.

Approval or acceptance by the Government for a submittal does not relieve the Contractor of the responsibility for meeting the contract requirements or for any error that may exist, because under the Quality Control (QC) requirements of this contract, the Contractor is responsible for ensuring information contained within each submittal accurately conforms with the requirements of the contract documents.

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

1.12 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not to be construed to change or modify any contract requirements. Before submitting samples, the Contractor will 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 that may be damaged in testing, will be returned to the Contractor, at its expense, upon completion of the contract. Unapproved samples will also be returned to the Contractor at its expense, if 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 of 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 CO for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

1.13 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. No payment for materials incorporated in the work will be made if all 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 submitted to contain errors or deviations from the Solicitation or Accepted Proposal.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

05/24, CHG 1: 05/25

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are both national regulations and standards incorporated by reference.

- 29 CFR 1910 OSHA General Industry Standards
- 29 CFR 1926 OSHA Construction Standards
- 29 CFR 1926.500 Fall Protection
- ASSP Z359.1 (2024) The Fall Protection Code
- ASSP Z359.2 (2023) Minimum Requirements for a Comprehensive Managed Fall Protection Program
- ASSP Z359.3 (2020) Safety Requirements for Lanyards and Positioning Lanyards
- ASSP A10.22 (2007, R2017) Safety Requirements for Rope-Guided and Non-Guided Workers' Hoists
- ASSP A10.34 (2021) Protection of Public on or Adjacent to Construction Sites
- IEEE C2 (2023) National Electrical Safety Code
- NFPA Standards (National Fire Protection Association)
- NFPA 70 (2026) National Electrical Code

It is the responsibility of the contractor to familiarize themselves with and perform all work in accordance with all applicable regulations as well as all non-regulatory standards which are incorporated by reference through Federal, State and local regulations.

1.2 DEFINITIONS

1.2.1 Competent Person (CP)

The CP is a person designated in writing, who, through training, knowledge and experience, can identify, evaluating, and addressing existing and predictable hazards in the working environment or working conditions that are dangerous to personnel, and who has authorization to take prompt corrective measures with regards to such hazards.

1.2.2 Competent Person, Confined Space

The CP, Confined Space, is a person meeting the competent person requirements as defined EM 385-1-1 Appendix Q, with thorough knowledge of OSHA's Confined Space Standard, 29 CFR 1910.146, and designated in writing to be responsible for the immediate supervision, implementation and monitoring of the confined space program, who through training, knowledge and experience in confined space entry is capable of identifying, evaluating and addressing existing and potential confined space hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

1.2.3 Competent Person, Cranes and Rigging

The CP, Cranes and Rigging, as defined in EM 385-1-1 Appendix Q, is a person meeting the competent person, who has been designated in writing to be responsible for the immediate supervision, implementation and monitoring of the Crane and Rigging Program, who through training, knowledge and experience in crane and rigging is capable of identifying, evaluating and addressing existing and potential hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

1.2.4 Competent Person, Excavation/Trenching

A CP, Excavation/Trenching, is a person meeting the competent person requirements as defined in EM 385-1-1 Appendix Q and 29 CFR 1926, who has been designated in writing to be responsible for the immediate supervision, implementation and monitoring of the excavation/trenching program, who through training, knowledge and experience in excavation/trenching is capable of identifying, evaluating and addressing existing and potential hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

1.2.5 Competent Person, Fall Protection

The CP, Fall Protection, is a person meeting the competent person requirements as defined in EM 385-1-1 Appendix Q and in accordance with ASSP Z359.0 , who has been designated in writing by the employer to be responsible for immediate supervising, implementing and monitoring of the fall protection program, who through training, knowledge and experience in fall protection and rescue systems and equipment, is capable of identifying, evaluating and addressing existing and potential fall hazards and, who has the authority to take prompt corrective measures with regard to such hazards.

1.2.6 Competent Person, Scaffolding

The CP, scaffolding is a person meeting the competent person requirements in EM 385-1-1 Appendix Q and designates in writing by the employer to be responsible for the immediate supervising, implementing and monitoring of the scaffolding program. The CP for Scaffolding has enough training, knowledge and experience in scaffolding to correctly identify, evaluate and address existing and potential hazards and has the authority to take prompt corrective

measures with regard to these hazards. CP qualifications must be documented including experience on the specific scaffolding systems/types being used, assessment of the base material that the scaffold will be erected upon, load calculations for materials and personnel, and erection and dismantling. The CP for scaffolding must have a documented minimum of 8-hours of scaffold training to include training on the specific type of scaffold being used (e.g. mast-climbing, adjustable, tubular frame), in accordance with EM 385-1-1 Section 22.B.02.

1.2.7 Competent Person (CP) Trainer

A competent trainer as defined in EM 385-1-1 Appendix Q, who is qualified in the training material presented, and who possesses a working knowledge of applicable technical regulations, standards, equipment and systems related to the subject matter on which they are training Competent Persons. A competent trainer must be familiar with the typical hazards and the equipment used in the industry they are instructing. The training provided by the competent person-trainer must be appropriate to that specific industry. The competent person trainer must evaluate the knowledge and skills of the competent persons as part of the training process.

1.2.8 High Risk Activities

High Risk Activities are activities that involve work at heights, crane and rigging, excavations and trenching, scaffolding, electrical work, and confined space entry.

1.2.9 High Visibility Accident

A High Visibility Accident is any mishap which may generate publicity or high visibility.

1.2.10 Load Handling Equipment (LHE)

LHE is a term used to describe cranes, hoists and all other hoisting equipment (hoisting equipment means equipment, including crane, derricks, hoists and power operated equipment used with rigging to raise, lower or horizontally move a load).

1.2.11 Medical Treatment

Medical Treatment is treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even when provided by a physician or registered personnel.

1.2.12 Near Miss

A Near Miss is a mishap resulting in no personal injury and zero property damage, but given a shift in time or position, damage or injury may have occurred (e.g., a worker falls off a scaffold and is not injured; a crane swings around to move the load and narrowly misses a parked vehicle).

1.2.13 Operating Envelop

The Operating Envelope is the area surrounding any crane or load handling equipment. Inside this "envelope" is the crane, the operator, riggers and crane walkers, other personnel involved in the operation, rigging gear between the hook, the load, the crane's supporting structure (i.e. ground or rail), the load's rigging path, the lift and rigging procedure.

1.2.14 Qualified Person (QP}

The QP is a person designated in writing, who, by possession of a recognized degree, certificate, or professional standing, or extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems related to the subject matter, the work, or the project.

1.2.15. Qualified Person, Fall Protection (QP for FP)

A QP for FP is a person meeting the definition requirements of EM 385-1-1 Appendix Q, and ASSP Z359.2 standard, having a recognized degree or professional certificate and with extensive knowledge, training and experience in the fall protection and rescue field who is capable of designing, analyzing, and evaluating and specifying fall protection and rescue systems.

1.2.16. Recordable Injuries or Illnesses

Recordable Injuries or Illnesses are any work-related injury or illness that results in:

a. Death, regardless of the time between the injury and death, or the length of the illness.

b. Days away from work (any time lost after day of injury/illness onset).

c. Restricted work.

d. Transfer to another job.

e. Medical treatment beyond first aid

f. Loss of consciousness; or

g. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (a) through (f) above

1.2.17. Government Property and Equipment

Interpret property and equipment specified in EM 385-1-1 as Government property and equipment.

1.2.18. Load Handling Equipment (LHE) Accident or Load Handling Equipment Mishap

A LHE accident occurs when any one or more of the eight elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; or collision, including unplanned contact between the load,

crane, or other objects. A drop load, derailment, two-blocking, overload and collision are considered accidents, even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, or roll over).

1.3 SUBMITTALS

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

SD-01 Preconstruction Submittals

- Site-Specific Safety Plan (SSSP)
- Hazardous Materials Plan
- Fall Prevention Plan
- Critical Lift Plan

SD-06 Test Reports

- Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."
- Accident Reports

SD-07 Certificates

- Burn Permits (hot work permits) are issued by the KAFB Fire Department)
- Confined Space Entry Permit
- Crane Operators/Riggers
- License Certificates

Submit one copy of each permit/certificate attached to each Daily Report.

1.4 MONTHLY EXPOSURE REPORTS

Provide a Monthly Exposure Report and attach to the monthly billing request. This report is a compilation of employee hours worked each month for all site workers, both Prime and subcontractor. Failure to submit the report may result in retention of up to 10 percent of the voucher.

1.5 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this Contract, comply with the most recent edition of EM 385-1-1, and the following federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements

of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.5.1 Personnel Qualifications

1.5.1.1 Site Safety and Health Officer (SSHO)

Provide an SSHO that meets the requirements of EM 385-1-1 Section 1. The SSHO must ensure that the requirements of 29 CFR 1926.16 are met for the project. Provide a Safety oversight team that includes a minimum of one person at each project site to function as the Site Safety and Health Officer (SSHO). The SSHO or an equally qualified Alternate SSHO must always be at the work site to implement and administer the Contractor's safety program and Government-accepted Accident Prevention Plan. The SSHO and Alternate SSHO must have the required training, experience, and qualifications in accordance with EM 385-1-1 Section 01.A.17, and all associated sub-paragraphs.

If the SSHO is off-site for a period longer than 24 hours, an equally- qualified alternate SSHO must be provided and must fulfill the same roles and responsibilities as the primary SSHO. When the SSHO is temporarily (up to 24 hours) off-site, a Designated Representative (DR), as identified in the Activity Hazard Analysis (AHA) may be used in lieu of an Alternate SSHO and must always be on the project site when work is being performed. Note that the DR is a collateral duty safety position, with safety duties in addition to their full-time occupation.

Personnel Duties the SSHO must:

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily production report.
b. Conduct mishap investigations and complete required accident reports. Report mishaps and near misses.
c. Use and maintain OSHA's Form 300 to log work-related injuries and illnesses occurring on the project site for Prime Contractors and subcontractors and make available to the Contracting Officer upon request. Post and maintain the Form 300A on the site Safety Bulletin Board.
d. Maintain applicable safety reference material on the job site.
e. Attend the pre-construction meeting conference, pre-work meetings including preparatory meetings, and periodic in-progress meetings.
f. Review the APP and AHAs for compliance with EM 385-1-1, and approve, sign, implement and enforce them.
g. Establish a Safety and Occupational Health (SOH) Deficiency Tracking System that lists and monitors outstanding deficiencies until resolution.

h. Ensure subcontractor compliance with safety and health requirements.
i. Maintain a list of hazardous chemicals on site and their material Safety Data Sheets (SDS).
j. Maintain a weekly list of high hazard activities involving energy, equipment, excavation, entry into confined space, and elevation, and be prepared to discuss details during QC Meetings.
k. Provide and keep a record of site safety orientation and indoctrination for Contractor employees, subcontractor employees, and site visitors.

Superintendent, QC Manager, and SSHO are subject to dismissal if the above or any other required duties are not being effectively carried out. If either the Superintendent, QC Manager, or SSHO are dismissed, project work will be stopped and will not be allowed to resume until a suitable replacement is approved and the above duties are again being effectively carried out.

1.5.1.2. Additional Site Safety and Health Officer (SSHO) Requirements and Duties

The SSHO may also serve as the Quality Control Manager. The SSHO may not serve as the Superintendent.

1.5.1.3. Competent Person Qualifications

Provide Competent Persons in accordance with EM 385-1-1, Appendix Q and herein. Competent Persons for high-risk activities include confined space, cranes and rigging, excavation/trenching, fall protection, and electrical work. The CP for these activities must be designated in writing and meet the requirements for the specific activity (i.e. competent person, fall protection).

The Competent Person identified in the Contractor's Safety and Health Program and accepted Accident Prevention Plan must always be on-site when the work that presents the hazards associated with their professional expertise is being performed. Provide the credentials of the Competent Persons(s) to the Contracting Officer for information in consultation with the Safety Office.

1.5.1.4. Qualified Trainer Requirements

Individuals qualified to instruct the 40 hour contract safety awareness course, or portions thereof, must meet the definition of a Competent Person Trainer, and, at a minimum, possess a working knowledge of the following subject areas: EM 385-1-1, Electrical Standards, Lockout/Tagout, Fall Protection, Confined Space Entry for Construction; Excavation, Trenching and Soil Mechanics, and Scaffolds in accordance with 29 CFR 1926.450, Subpart L.

Instructors are required to:

a. Prepare class presentations that cover construction-related safety requirements and include topics covered in the NAVFAC Construction Safety Hazard Awareness Course for Contractors.

b. Ensure that all attendees attend all sessions by using a class roster signed daily by each attendee. Maintain copies of the roster for at least five years. This is a certification class and must be attended 100 percent. In cases of emergency where an attendee cannot make it to a session, the attendee can make it up in another class session for the same subject.

c. Update training course materials whenever an update of the EM 385-1-1 becomes available.

d. Provide a written exam of at least 50 questions. Students are required to answer 80 percent correctly to pass.

e. Request, review and incorporate student feedback into a continuous course improvement program.

1.5.2 Meetings

1.5.2.1 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference.

b. Discuss the details of the scope of the work and the contractor- submitted Site-Specific Safety Plan (SSSP). SSSP will include incorporated plans, programs, procedures and specific actions and requirements that may be encountered during the performance of the contract.

c. Deficiencies in the submitted SSSP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work is not permitted to begin until an SSSP is established that is acceptable to the CO.

1.5.2.2 Safety Meetings

Conduct and document work site/tailgate safety meetings at least once per week. Attach minutes showing contract title, presenter, signatures of attendees and a list of topics discussed to the contractor's daily report.

1.5.2.3 Pre-Outage Coordination Meeting

Contractors are required to apply for utility outages at least 14 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Special requirements for electrical outage requests are

contained elsewhere in this specification section. Once approved, and prior to beginning work on the utility system requiring shut down, attend a pre-outage coordination meeting with the Contracting Officer to review the scope of work and the lock-out/tag-out procedures for worker protection.

1.6. SITE SPECIFIC SAFETY PLAN (SSSP)

Contractor shall submit and maintain a Site-Specific Safety Plan which shall describe the methods that will be utilized in addressing/mitigating hazards that are expected to be encountered during the work phase. The SSSP shall interface with the contractor's overall Safety & Health Program. The government considers the prime contractor to be the "controlling authority" for all work site safety and health concerns regarding their subcontractor. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for non-compliance, coordinating the work to prevent on craft from interfering with or creating hazardous working conditions for other crafts and inspecting subcontractor operations to ensure that hazard prevention responsibilities are being carried out.

Submit the SSSP to the CO 14 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted SSSP.

Once accepted by the CO, the SSSP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted SSSP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the CO within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary actions to restore and maintain safe working conditions to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34,) and the environment.

Copies of the accepted plan will be maintained at the CO's office and at the job site.

Continuously review and amend the SSSP, as necessary and provide the CO with the amended SSSP, throughout the life of the contract. Incorporate unusual or high-hazard activities not identified in the original SSSP as they are discovered.

1.6.1 29 CFR 1926 & 1910 Contents

In addition to the Site Safety Plan requirements the following is required:

a. Qualifications of competent and of qualified persons. As a minimum, designate and submit qualifications of competent persons for each of the following major areas:

excavation; scaffolding; fall protection; cranes, health hazard recognition, and evaluation and control of chemical, physical and biological agents.

b. Crane Critical Lift Plan:
Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. Submit 15 calendar days prior to on-site work and include the requirements of the applicable national, state and local standards.

1. For lifts of personnel, In addition to the requirements of EM 385-1-1, Section 16.H.02, for lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1400 and EM 385-1-1, Section 16.T.

c. Fall Protection and Prevention Plan (FPPP):

The program documentation shall be site specific and address all fall hazards in the workplace and during different phases of construction. Address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 6 feet. A qualified person for fall protection shall prepare and sign the FPPP. Include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, rescue procedures, training requirements, and monitoring methods. Revise the Fall Protection and Prevention Program documentation as necessary reflecting any changes during construction due to changes in personnel, equipment, systems or work habits. Keep and maintain the accepted Fall Protection and Prevention Program documentation at the job site for the duration of the project. Include the Fall Protection and Prevention Program documentation in the Site-Specific Safety Plan.

d. Rescue and Evacuation Plan:

The contractor is to review and comply with the Kirtland Air Force Base (KAFB) Fire Department, Rescue and Evacuation Plan.

e. Lead Compliance Plan:

Identify the safety and health aspects of lead work, prepared in accordance with national, state and local requirements.

f. Site Demolition Plan:

Identify the safety and health aspects prepared in accordance with national, state, and local requirements.

1.7. DISPLAY OF SAFETY INFORMATION

1.7.1. Safety Bulletin Board

Prior to commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the CO, that is accessible and includes all mandatory information for employee and visitor review, may be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, Section 01.A.07. Additional items required to be posted include:

a. Burn (Hot Work) Permit

b. Confined Space Entry Permit

c. List of Emergency Contact Numbers

1.7.2. Safety and Occupational Health (SOH) Deficiency Tracking System

Establish a SOH deficiency tracking system that lists and monitors the status of SOH deficiencies in chronological order. Use the tracking system to evaluate the effectiveness of the APP. A monthly evaluation of the data must be discussed in the QC or SOH meeting with everyone on the project. The list must be posted on the project bulletin board and updated daily, and provide the following information:

a. Date deficiency identified.

b. Description of deficiency.

c. Name of person responsible for correcting deficiency.

d. Projected resolution date.

e. Date resolved.

1.8. SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in paragraph REFERENCES. Maintain applicable equipment manufacturer's manuals.

1.9 EMERGENCY MEDICAL TREATMENT

Contractors must arrange for their own emergency medical treatment in accordance with EM 385-1-1. Government has no responsibility to provide emergency medical treatment.

1.10. NOTIFICATIONS AND REPORTS

1.10.1 Mishap Notification

Notify the Contracting Officer as soon as practical, but no more than twenty-four hours, after any mishaps, including recordable accidents, incidents, and near misses, as defined in EM 385-

1-1 Appendix Q, any report of injury, illness, or any property damage in accordance with NASA NPR 8621.1. For LHE or rigging mishaps, notify the Contracting Officer as soon as practical but not more than four hours after mishap. The Contractor is responsible for obtaining appropriate medical and emergency assistance and for notifying fire, law enforcement, and regulatory agencies. Immediate reporting is required for electrical mishaps, to include Arc Flash; shock; uncontrolled release of hazardous energy (including electrical and non-electrical); load handling equipment or rigging; fall from height (any level other than same surface); and underwater diving. These mishaps must be investigated in depth to identify all causes and to recommend hazard control measures.

Within notification include Contractor name; Contract title; type of Contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (for example, type of construction equipment used and PPE used). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted. Assist and cooperate fully with the Government's investigation(s) of any mishap.

1.10.2 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses, property damage, and near misses as defined in EM 385-1-1, to establish the root cause(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

b. Near Misses: Near miss reports are considered positive and proactive Contractor safety management actions.

c. Conduct an accident investigation for any incident which results in damage to contractors or government property. Contractor will complete their own accident/incident form and will forward a completed copy of the report to the contracting officer within 48 hours.

1.10.2.1 Accident Notification

Notify the CO as soon as practical, but not later than four (4) hours, after any accident which results in injury (as described in 1.9.1a above) or damage to property (as described in 1.9.1b above).

Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.10.3 Certificate of Compliance

Provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). State within the certificate that the crane and rigging

gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR 1926. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. Also certify that all of its crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices).

1.10.4 Burn (Hot Work) Permit

Submit and obtain a written Burn Permit prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, from the KAFB Fire Department. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A BURN PERMIT IS ISSUED. The Contractor will provide an ABC rated extinguisher for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 1 Hour after completion of the task or as specified on the hot work permit.

1.10.5. Confined Space Entry Requirements

Confined space entry must comply with Section 34 of EM 385-1-1, OSHA 29 CFR 1926, OSHA 29 CFR 1910, OSHA 29 CFR 1910.146, and OSHA Directive CPL 2.100. Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedure: Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. Comply with EM 385-1-1, Section 34 for entry procedures. Hazards pertaining to the space must be reviewed with each employee during review of the AHA.

b. Forced Air Ventilation: Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its action level. Continuous atmosphere monitoring with audible alarm for toxic gas detection may be warranted.

1.11. FACILITY OCCUPANCY CLOSURE

Streets, walks, and other facilities occupied and used by the Government shall not be closed or obstructed without written permission from the Contracting Officer.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

Comply with Federal, State, and local regulations, and other related submittals and activity fire and safety regulations. The most stringent standard prevails.

PPE is governed in all areas by the nature of the work the employee is performing. Always use personal hearing protection in designated noise hazardous areas or when performing noise hazardous tasks. Safety glasses must be worn or carried/available on each person. Mandatory PPE includes:

a. Hard Hat

b. Long Pants

c. Appropriate Safety Shoes

d. Appropriate Class Reflective Vests

3.1.1 Worksite Communication

Employees working alone in a remote location or away from other workers must be provided an effective means of emergency communications (i.e., cellular phones, two-way radios, land-line telephones or other acceptable means). The selected communication must be readily available (easily within the immediate reach) of the employee and must be tested prior to the start of work to verify that it effectively operates in the area/environment. Develop an employee check-in/check-out communication procedure to ensure employee safety.

3.1.2 Hazardous Material Use

Each hazardous material must receive approval from the CO or their designated representative prior to being brought onto the job site or prior to any other use in connection with this Contract. Allow a minimum of 10 working days for processing of the request for use of hazardous material.

3.1.3 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this Contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint, and hexavalent chromium, are prohibited. The CO, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. Low mercury lamps used within fluorescent lighting fixtures are allowed as an exception without further CO approval. Notify the Radiation Safety Officer (RSO) prior to excepting items of radioactive material and devices being brought on base.

3.1.4 Unforeseen Hazardous Material

Contract documents identify materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e. 29 CFR Part 1910.1000). If material(s) that may be hazardous to human health upon disturbance are encountered during construction operations, stop that portion of work and notify the CO immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to FAR 52.243-4 Changes and FAR 52.236-2 Differing Site Conditions.

3.2 UTILITY OUTAGE REQUIREMENTS

Apply for utility outages at least 14 calendar days in advance. At a minimum, the written request must include the location of the outage, utilities being affected, duration of outage, any necessary sketches, and a description of the means to fulfill energy isolation requirements in accordance with EM 385-1-1, Section 11.A.02 (Isolation). Some examples of energy isolation devices and procedures are highlighted in EM 385-1-1, Section 12.D. In accordance with EM 385-1-1, Section 12.A.01, where outages involve Government or Utility personnel, coordinate with the Government on all activities involving the control of hazardous energy.

These activities include, but are not limited to, a review of HECP and HEC procedures, as well as applicable Activity Hazard Analyses (AHAs). In accordance with EM 385-1-1, Section 11.A.02 and NFPA 70E, work on energized electrical circuits must not be performed without prior Government authorization. Government permission is considered through the permit process and submission of a detailed AHA. Energized work permits are considered only when de-energizing introduces additional or increased hazard or when de-energizing is infeasible.

3.3 OUTAGE COORDINATION MEETING

After the utility outage request is approved and prior to beginning work on the utility system requiring shutdown, conduct a pre-outage coordination meeting in accordance with EM 385-1-1, Section 12.A. This meeting must include the Prime Contractor, the Prime and subcontractors performing the work, the CO, and the Installation representative. All parties must fully coordinate HEC activities with one another. During the coordination meeting, all parties must discuss and coordinate on the scope of work, HEC procedures (specifically, the lock-out/tag-out procedures for worker and utility protection), the AHA, assurance of trade personnel qualifications, identification of competent persons, and compliance with HECP training in accordance with EM 385-1-1, Section 12.C. Clarify when personal protective equipment is required during switching operations, inspection, and verification.

3.4 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Provide and operate a Hazardous Energy Control Program (HECP) in accordance with EM 385-1-1 Section 12, 29 CFR 1910.333, 29 CFR 1915.89, ASSP A10.44, NFPA 70E, and paragraph HAZARDOUS ENERGY CONTROL PROGRAM (HECP).

3.4.1 Safety Preparatory Inspection Coordination Meeting with the Government or Utility

For electrical distribution equipment that is to be operated by Government or Utility personnel, the Prime Contractor and the subcontractor performing the work must attend the safety preparatory inspection coordination meeting, which will also be attended by the Contracting Officer's Representative, and required by EM 385-1-1, Section 12.A.02. The meeting will take place immediately preceding the start of work and following the completion of the outage coordination meeting. Both the safety preparatory inspection coordination meeting and the outage coordination meeting must occur prior to conducting the outage and commencing with lockout/tagout procedures.

3.4.2 Lockout/Tagout Isolation

Where the Government or Utility performs equipment isolation and lockout/tagout, the Contractor must place their own locks and tags on each energy-isolating device and proceed in accordance with the HECP. Before any work begins, both the Contractor and the Government or Utility must perform energy isolation verification testing while wearing required PPE detailed in the Contractor's AHA and required by EM 385-1-1, Sections 05.I and 11.B. Install personal protective grounds, with tags, to eliminate the potential for induced voltage in accordance with EM 385-1-1, Section 12.E.06.

3.4.3 Lockout/Tagout Removal

Upon completion of work, conduct lockout/tagout removal procedure in accordance with the HECP. In accordance with EM 385-1-1, Section 12.E.08, each lock and tag must be removed from each energy isolating device by the authorized individual or systems operator who applied the device. Provide formal notification to the Government (by completing the Government form if provided by Contracting Officer's Representative), confirming that steps of de-energization and lockout/tagout removal procedure have been conducted and certified through inspection and verification. Government or Utility locks and tags used to support the Contractor's work will not be removed until the authorized Government employee receives the formal notification.

3.5 FALL PROTECTION PROGRAM

Establish a fall protection program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify roles and responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures in accordance with ASSP Z359.2 and EM 385-1-1, Sections 21.A and 21.D.

3.5.1 Training

Institute a fall protection training program. As part of the Fall Protection Program, provide training for each employee who might be exposed to fall hazards and using personal fall protection equipment. Provide training by a competent person for fall protection in accordance with EM 385-1-1, Section 21.C. Document training and practical application of the competent person in accordance with EM 385-1-1, Section 21.C.04 and ASSP Z359.2 in the AHA.

3.5.2 FALL PROTECTION EQUIPMENT AND SYSTEMS

Enforce use of personal fall protection equipment and systems designated (to include fall arrest, restraint, and positioning) for each specific work activity in the Site-Specific Fall Protection and Prevention Plan and AHA always when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Section 21.

Provide personal fall protection equipment, systems, subsystems, and components that comply with EM 385-1-1 Section 21.I, 29 CFR 1926.500 Subpart M, ASSP Z359.0, ASSP Z359.1, ASSP Z359.2, ASSP Z359.3, ASSP Z359.4, ASSP Z359.6, ASSP Z359.7, ASSP Z359.11, ASSP Z359.12, ASSP Z359.13, ASSP Z359.14, ASSP Z359.15, ASSP Z359.16 and ASSP Z359.18.

3.5.2.1 Additional Personal Fall Protection Measures

In addition to the required fall protection systems, other protective measures such as safety skiffs, personal floatation devices, and life rings, are required when working above or next to water in accordance with EM 385-1-1, Sections 21.O through 21.O.06. Personal fall protection systems and equipment are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall protection systems are required when operating other equipment such as scissor lifts. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, travel, or while performing work.

3.5.2.2 Personal Fall Protection Equipment

Only full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. The use of body belts is not acceptable. Harnesses must have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Snap hooks and carabineers must be self-closing and self-locking, capable of being opened only by at least two consecutive deliberate actions and have a minimum gate strength of 1633 kg 3,600 lbs. in all directions. Use webbing, straps, and ropes made of synthetic fiber. The maximum free fall distance when using fall arrest equipment must not exceed 1.8 m 6 feet, unless the proper energy absorbing lanyard is used. Always take into consideration the total fall distance and any swinging of the worker (pendulum-like motion), that can occur during a fall, when attaching a person to a fall arrest system. Equip all full body harnesses with Suspension Trauma Preventers

such as stirrups, relief steps, or similar to provide short-term relief from the effects of orthostatic intolerance in accordance with EM 385-1-1, Section 21.I.06.

3.5.3 Fall Protection for Roofing Work

Implement fall protection controls based on the type of roof being constructed and work being performed. Evaluate the roof area to be accessed for its structural integrity including weight-bearing capabilities for the projected loading.

a. Low Sloped Roofs:

    1) For work within 1.8 m 6 feet from unprotected edge of a roof having a slope less than or equal to 4:12 (vertical to horizontal), protect personnel from falling by the use of conventional fall protection systems (personal fall arrest/restraint systems, guardrails, or safety nets) in accordance with EM 385-1-1, Section 21 and 29 CFR 1926.500. A safety monitoring system is not adequate fall protection and is not authorized.

    2) For work greater than 1.8 m 6 feet from the unprotected roof edge, addition to the use of conventional fall protection systems the use of a warning line system is also permitted, in accordance with 29 CFR 1926.500 and EM 385-1-1, Section 21.L.

b. Steep-Sloped Roofs: Work on a roof having a slope greater than 4:12 (vertical to horizontal) requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also applies to residential or housing type construction.

3.5.4 Horizontal Lifelines (HLL)

Provide HLL in accordance with EM 385-1-1, Section 21.I.08.d.2. Commercially manufactured horizontal lifelines (HLL) must be designed, installed, certified and used under the supervision of a qualified person, for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500). The competent person for fall protection may (if deemed appropriate by the qualified person) supervise the assembly, disassembly, use and inspection of the HLL system under the direction of the qualified person. Locally manufactured HLLs are not acceptable unless they are custom designed for limited or site-specific applications by a Registered Professional Engineer who is qualified in designing HLL systems.

3.5.5 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1, Section 21.F.01 and 29 CFR 1926 Subpart M.

3.6 WORK PLATFORMS

3.6.1 Scaffolding

Provide employees with safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Comply with the following requirements:

a. Scaffold platforms greater than 20 feet in height must be accessed by using a scaffold stair system.

b. Ladders commonly provided by scaffold system manufacturers are prohibited for accessing scaffold platforms greater than 20 feet maximum in height.

c. An adequate gate is required.

d. Employees performing scaffold erection and dismantling must be qualified.

e. Scaffold must be capable of supporting at least four times the maximum intended load and provide appropriate fall protection as delineated in the accepted fall protection and prevention plan.

f. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward.

g. Special care must be given to ensure scaffold systems are not overloaded.

h. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material are prohibited. The first tie-in must be at the height equal to 4 times the width of the smallest dimension of the scaffold base.

i. Scaffolding other than suspended types must bear on base plates upon wood mudsills 2 in x 10 in x 8 in minimum) or other adequate firm foundation.

j. Scaffold or work platform erectors must have fall protection during the erection and dismantling of scaffolding or work platforms that are more than 6 feet.

k. Delineate fall protection requirements when working above 6 feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

3.6.2 Elevated Aerial Work Platforms (AMPs)

Workers must be anchored to the basket or bucket in accordance with manufacturer's specifications and instructions (anchoring to the boom may only be used when allowed by the manufacturer and permitted by the CP). Lanyards used must be sufficiently short to prohibit workers from climbing out of basket. The climbing of rails is prohibited. Lanyards with built-in shock absorbers are acceptable. Self-retracting devices are not acceptable. Tying off to an adjacent pole or structure is not permitted unless a safe device for 100 percent tie-off is used for the transfer.

Use of AWPs must be operated, inspected, and maintained as specified in the operating manual for the equipment and delineated in the AHA. Operators of AWPs must be designated as qualified operators by the Prime Contractor. Maintain proof of qualifications on site for review and include in the AHA.

3.7 EQUIPMENT

3.7.1 Material Handling Equipment (MHE)

a. Material handling equipment such as forklifts must not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions. Material handling equipment fitted with personnel work platform attachments are prohibited from traveling or positioning while personnel are working on the platform.

b. The use of hooks on equipment for lifting material must be in accordance with manufacturer's printed instructions. Material Handling Equipment Operators must be trained in accordance with OSHA 29 CFR 1910, Subpart N.

c. Operators of forklifts or power industrial trucks must be licensed in accordance with OSHA.

3.7.2 Load Handling Equipment (LHE)

The following requirements apply. In exception, these requirements do not apply to commercial truck mounted and articulating boom cranes used solely to deliver material and supplies (not prefabricated components, structural steel, or components of a systems-engineered metal building) where the lift consists of moving materials and supplies from a truck or trailer to the ground; to cranes installed on mechanics trucks that are used solely in the repair of shore-based equipment; to crane that enter the activity but are not used for lifting; nor to other machines not used to lift loads suspended by rigging equipment. However, LHE accidents occurring during such operations must be reported.

a. Notify the CO 15 working days in advance of any LHE entering the activity, in accordance with EM 385-1-1, Section 16.A.02, so that necessary quality assurance spot checks can be coordinated. Contractor's operator must remain with the crane during the spot check. Rigging gear must be in accordance with OSHA, ASME B30.9 Standards safety standards.

b. Comply with the LHE manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.

c. Comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes, ASME B30.8 for floating cranes and floating derricks, ASME B30.9 for slings, ASME B30.20 for below the hook lifting devices and ASME B30.26 for rigging hardware.

d. When operating in the vicinity of overhead transmission lines, operators and riggers must be alert to this special hazard and follow the requirements of EM 385-1-1 Section 11, and ASME B30.5 or ASME B30.22 as applicable.

e. Do not use crane suspended personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane. Additionally, submit a specific AHA for this work to the CO. Ensure the activity and AHA are thoroughly reviewed by all personnel involved.

f. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.

g. All employees must keep clear of loads about to be lifted and of suspended loads, except for employees required to handle the load.

h. Use cribbing when performing lifts on outriggers.

i. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

j. A physical barricade must be positioned to prevent personnel access where accessible areas of the LHE's rotating superstructure poses a risk of striking, pinching or crushing personnel.

k. Maintain inspection records in accordance with EM 385-1-1, Section 16.D, including shift, monthly, and annual inspections, the signature of the person performing the inspection, and the serial number or other identifier of the LHE that was inspected. Records must be available for review by the CO.

l. Maintain written reports of operational and load testing in accordance with EM 385-1-1, Section 16.F, listing the load test procedures used along with any repairs or alterations performed on the LHE. Reports must be available for review by the CO.

m. Certify that all LHE operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

n. Take steps to ensure that wind speed does not contribute to loss of control of the load during lifting operations. At wind speeds greater than 9 m/s 20 mph, the operator, rigger and lift supervisor must cease all crane operations, evaluate conditions and determine if the lift may proceed. Base the determination to proceed or not on wind

calculations per the manufacturer and a reduction in LHE rated capacity if applicable. Include this maximum wind speed determination as part of the activity hazard analysis plan for that operation.

o. Follow FAA guidelines when required based on project location.

3.7.3 Machinery and Mechanized Equipment

a. Proof of qualifications for operator must be kept on the project site for review.

b. Manufactured specifications or owner's manual for the equipment must be on-site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM 385-1-1. Incorporate such additional safety precautions or requirements into the AHAs.

3.7.4 Use of Explosives

Explosives must not be used or brought to the project site without prior written approval from the CO. Such approval does not relieve the Contractor of responsibility for injury to persons or for damage to property due to blasting operations.

Storage of explosives, when permitted on Government property, must only be directed and in approved storage facilities. These facilities must be kept always locked except for inspection, delivery, and withdrawal of explosives.

3.8 EXCAVATION

Soil classification must be performed by a competent person in accordance with 29 CFR 1926 and EM 385-1-1.

3.8.1 Utility Locations

Physically verify underground utility locations, including utility depth, by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within one meter 3 feet of the underground system

3.8.2 Utilities Within and Under Concrete, Bituminous Asphalt, and Other Impervious Surfaces

Utilities located within and under concrete slabs or pier structures, bridges, parking areas, and the like, are extremely difficult to identify. Whenever Contract work involves chipping, saw cutting, or core drilling through concrete, bituminous asphalt or other impervious surfaces, the existing utility location must be coordinated with station utility departments in addition to location and depth verification by a third party, independent, private locating company. The third party, independent, private locating company must locate utility depth by use of Ground Penetrating Radar (GPR), X-ray, bore scope, or ultrasound prior to the start of demolition and construction. Outages to isolate utility systems must be used in circumstances where utilities

are unable to be positively identified. The use of historical drawings does not alleviate the Contractor from meeting this requirement.

3.9 ELECTRICAL

3.9.1 Conduct of Electrical Work

As delineated in EM 385-1-1, electrical work is to be conducted in a

de-energized state unless there is no alternative method for accomplishing

the work. In those cases, obtain an energized work permit from the CO. The energized work permit application must be accompanied by the AHA and a summary of why the equipment/circuit needs to be worked energized. Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Attach temporary grounds in accordance with ASTM F855 and IEEE 1048. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator is allowed in the space during the actual operation. Plan so that work near energized parts is fully minimized possible. Use of electrical outages clear of any energized electrical sources is the preferred method.

When working in energized substations, only qualified electrical workers are permitted to enter. When work requires work near energized circuits as defined by NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves and electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA. Ensure that each employee is familiar with and complies with these procedures and 29 CFR 1910.147.

3.9.2 Qualifications

Electrical work must be performed by QP with verifiable credentials who are familiar with applicable code requirements. Verifiable credentials consist of State, National and Local Certifications or Licenses that a Master or Journeyman Electrician may hold, depending on work being performed, and must be identified in the appropriate AHA. Journeyman/Apprentice ratio must be in accordance with State, Local requirements applicable to where work is being performed.

3.9.3 Arc Flash

Conduct a hazard analysis/arc flash hazard analysis whenever work on or near energized parts greater than 50 volts is necessary, in accordance with NFPA 70E.

All personnel entering the identified Arc flash protection boundary must be QPs and properly trained in NFPA 70E requirements and procedures. Unless permitted by NFPA 70E, no

Unqualified Person is permitted to approach nearer than the Limited Approach Boundary of energized conductors and circuit parts. Training must be administered by an electrically qualified source and documented.

3.9.4 Grounding

Ground electrical circuits, equipment and enclosures in accordance with NFPA 70 and IEEE C2 to provide a permanent, continuous and effective path to ground unless otherwise noted by EM 385-1-1.

Check grounding circuits to ensure that the circuit between the ground and a grounded power conductor has a resistance low enough to permit sufficient current flow to allow the fuse or circuit breaker to interrupt the current.

3.9.5 Testing

Temporary electrical distribution systems and devices must be inspected, tested and found acceptable for Ground-Fault Circuit Interrupter (GFCI) protection, polarity, ground continuity, and ground resistance before initial use, before use after modification and at least monthly. Monthly inspections and tests must be maintained for each temporary electrical distribution system and signed by the electrical CP or QP.

-- End of Section –

SECTION 01 35 40.00 20

ENVIRONMENTAL MANAGEMENT

02/10

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.

- ISO 14001 Environmental Management Systems
- 40 CFR Protection of the Environment
- Title 20 New Mexico Administrative Code, Environmental Protection
- NPDES National Pollutant Discharge Elimination System
- Construction Industry Compliance Assistance Center (www.cicacenter.org)
- KAFB EMS Policy Letter (Appendix A)
- Hazardous Material Requirements (Appendix B)

1.2 DEFINITIONS

Definitions pertaining to sustainable development are as defined in ASTM E 2114 and as specified.

a. "Biobased content" is calculated as the weight of the biobased material divided by the total weight of the product and is expressed as a percentage by weight.

b. "Biobased materials" include fuels, chemicals, building materials, electric power or heat produced from biomass as defined by the Biomass R&D Act. Minimum biobased content shall be as defined in the U.S. Farm Bill.

c. "Chain-of-custody" is a process whereby a product or material is maintained under physical possession or control during its entire life cycle.

d. "Pollution and environmental damage" are caused by the presence of chemical, physical, or biological elements or agents. Human health or welfare is adversely affected; ecological balances are unfavorably altered; the utility of the environment for aesthetic, cultural, or historical purposes degrades.

1.3 PRECONSTRUCTION MEETING

A representative from the Environmental Department will attend the Preconstruction Meeting to discuss site-specific issues and guidelines for KAFB.

1.4 SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

HPSB V.1 – Recycled Content - Submit documentation indicating percentage of post-industrial and post-consumer recycled content per unit of product.

HPSB V.5 – Waste and Materials Management, divert 50% from Disposal – Submit documentation (e.g. delivery tickets, receipts, etc.) indicating materials that were re-used, recycled, or salvaged; thus, being diverted from the landfill.

SD-07 Certificates

Environmental Regulatory Requirements

For Government's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with environmental regulations bearing on performance of the work.

Safety Data Sheets

Submit CONTRACTOR HAZARDOUS MATERIAL WORKSHEET (See Appendix B) along with Safety Data Sheets for all hazardous materials, regardless of quantity, to be stored on site during the project. List maximum quantities that could potentially be present.

SD-11 Closeout Submittals

Per FAR 52.223-9, upon completion of this contract, the Contractor shall:

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to the Contracting Officer complete in accordance with agency procedures.

1.5 CONTRACTOR'S ENVIRONMENTAL MANAGER

Designate an on-site Environmental Manager responsible for overseeing the environmental goals for the project and implementing procedures for environmental protection. This role may be filled by the Project Superintendent, Project Manager, or other qualified person.

1.5.1 DUTIES

The Environmental Manager shall be responsible for the following:

a. Compliance with applicable federal, state, and local environmental regulations, including maintaining required documentation.

b. Implementation of the Waste Management Plan.

c. Implementation of the Environmental Protection Plan, if applicable.

d. Environmental training for Contractor personnel in accordance with their position requirements.

e. Monitoring and documentation of environmental procedures.

1.5.2 QUALIFICATIONS

Minimum 5 years construction experience on projects of similar size and scope; familiarity with environmental regulations applicable to construction operations.

1.6 ENVIRONMENTAL REGULATORY REQUIREMENTS

NOTE: The following is a list of resources to assist the Contractor with regulatory compliance.

1. Storm water permits

   Water Program: http://www.epa.gov/npdes/stormwater

2. RCRA hazardous and non-hazardous solid waste requirements

   Refer to EPA's Office of Solid Waste and Emergency Response: http://www.epa.gov/epaoswer/osw/laws-reg.htm

3. Oil spill requirements for construction activities

   Refer to EPA Oil Program web site: http://www.epa.gov/oilspill/

4. Hazardous substances (Superfund Liability) requirements for construction activities

   Refer to EPA's Superfund website: http://www.epa.gov/superfund/index.htm

5. Polychlorinated Biphenyl (PCB) waste requirements

   Refer to EPA's Polychlorinated Biphenyl (PCB) Homepage: http://www.epa.gov/pcb/

6. Air quality requirements for construction activities

   Refer to EPA'S Air Program Mobile Sources Page: http://www.epa.gov/ebtpages/airmobilesources.html

7. Asbestos requirements for construction activities

   Refer to EPA's Asbestos Management and Regulatory Requirements Website: http://www.epa.gov/fedsite/cd/asbestos.html

8. National Environmental Policy Act (NEPA) requirements for construction activities

9. State Office/Department of Environmental Quality

   Local Office/Department of Environmental Quality

10. The Construction Industry Compliance Assistance Center: an EPA-sponsored tool providing information on state and federal requirements; http://www.cicacenter.org/index.cfm

11. The National Environmental Compliance Assistance Clearinghouse: http://cfpub.epa.gov/clearinghouse/
12. The Associated General Contractors of America (AGC): provides tools to assist with compliance; http://www.agc.org/

The Contractor shall be responsible for checking applicable regulations via the Construction Industry Compliance Assistance Center (www.cicacenter.org). This site gives accurate guidance pertaining to knowing federal, state, and local regulatory requirements. Comply with all applicable regulations and maintain records of permits, licenses, certificates, and other environmental regulatory requirement correspondences.

1.7 ENVIRONMENTAL DEMONSTRATION AND TRAINING

Contractor shall provide environmental training for workers performing work on the project site.

1.7.1 TRAINING PROGRAM

Develop a training program for all site workers that includes the following topics:

a. Overview of environmental and sustainability issues related to the building industry.
b. Overview of environmental and sustainability issues related to the project.
c. Compliance with applicable federal, state, and local environmental regulations.
d. Review of site-specific procedures and management plans implemented during construction, including the Waste Management Plan, and procedures for noise and acoustics management.

1.7.1.1 SCHEDULING

Provide instruction at mutually agreeable time[s].

PART 2 - PRODUCTS

2.1 ENVIRONMENTALLY PREFERABLE PRODUCTS

Consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, and disposal of products, and provide products and materials with the least effect on the environment, determined by LCA analysis, released toxins, and other methods.

2.1.1 PROHIBITED MATERIALS

The use of the following materials is prohibited:

a. Products containing asbestos.
b. Products containing Urea Formaldehyde.
c. Products containing Polychlorinated Biphenyls.

d. Products containing Chlorinated Fluorocarbons.

e. Solder or flux containing more than 0.2 percent lead and domestic water pipe or pipe fittings containing more than 8 percent lead.

f. Paint containing more than 0.06 percent Lead.

2.1.2 PACKAGING

Where Contractor has the option to provide one of the listed products or equal, preference shall be given to products with minimal packaging and easily recyclable packaging, and to manufacturers with policies that take back product packaging.

2.1.2.1 INDUSTRIAL PAPERBOARD

Minimum 45 percent post-consumer recycled content in accordance with ASTM D 5663.

2.1.2.2 CARRIER BOARD

Minimum 10 percent recycled content with a minimum of 10 percent post-consumer recycled content in accordance with ASTM D 5663.

2.1.2.3 BROWN PAPERS

Minimum 40 percent recycled content with a minimum of 20 percent post-consumer recycled content in accordance with ASTM D 5663.

2.1.3 SUBSTITUTIONS

Notify the CO when Contractor is aware of materials, equipment, or products that meet the aesthetic and programmatic intent of Contract Documents, but which are more environmentally responsible than materials, equipment, or products specified or indicated in the Contract Documents. Submit the following for initial review by the CO:

a. Product data include manufacturer's name, address, and phone number.

b. Description of environmental advantages of proposed substitution over specified product.

PART 3 - EXECUTION

3.1 PROTECTION OF NATURAL RESOURCES

Comply with applicable regulations and these specifications. Preserve the natural resources within the project boundaries and outside the limits of permanent work performed under this Contract in their existing condition or restore to an equivalent or improved condition as approved by the Contracting Officer.

3.1.1 GENERAL DISTURBANCE

Confine demolition and construction activities to maximum 40 feet beyond the building perimeter, 5 feet beyond solid paving, and 25 feet beyond pervious paving. Remove debris, rubbish, and other waste materials resulting from demolition and construction operations from site. Transport materials with appropriate vehicles and dispose of them off site to areas that are approved for disposal by governing authorities having jurisdiction. Avoid spillage by covering and securing loads when hauling on or adjacent to public streets or highways. Remove spillage and sweep, wash, or otherwise clean project site, streets, or highways. Burning is prohibited.

3.1.2 WATER RESOURCES

Comply with requirements of the NPDES and the applicable State Pollutant Discharge Elimination System (SPDES). Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water. Store and service construction equipment at areas designated for collection of oil waste. Prevent ponding of stagnant water conducive to mosquito breeding habitat. Prevent run-off from site during demolition and construction operations.

3.1.3 LAND RESOURCES

Prior to construction, identify land resources to be preserved within the work area. Do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without permission from the Contracting Officer. Coordinate protection practices with work specified in Division 2.

3.1.3.1 ERODIBLE SOILS

Plan and conduct earthwork to minimize the duration of exposure of unprotected soils, except where the constructed feature obscures borrow areas, quarries, and waste material areas. Clear areas in reasonably sized increments only as needed to use the areas developed. Form earthwork to final grade as shown. Immediately protect side slopes and back slopes upon completion of rough grading.

3.1.3.2 EROSION AND SEDIMENTATION CONTROL DEVICES

Construct or install temporary and permanent erosion and sedimentation control features as required.

3.1.3.3 TREE AND PLANT PROTECTION

Protect as specified in Division 2 EXISTING CONDITIONS and as specified. Prior to start of construction, tag each tree and plant scheduled to remain. In the event of damage to tree or plant, the Government may, at the Contracting Officer's discretion, deduct the indicated value of the damaged tree or plant from the Contract Sum.

3.1.4 AIR RESOURCES

a. Prevent creation of dust, air pollution, and odors.

b. Sequence construction to avoid unnecessary disturbance to site.

c. Use mulch, water sprinkling, temporary enclosures, and other appropriate methods as needed to limit dust and dirt rising and scattering in air. Do not use water when it may create hazardous or other adverse conditions such as flooding and pollution.

d. Store volatile liquids, including fuels and solvents, in closed containers. Do not store with materials that have a high capacity to absorb VOC emissions or in occupied spaces.

e. Properly maintain equipment to reduce gaseous pollutant emissions.

3.1.5 FISH AND WILDLIFE RESOURCES

Manage and control construction activities to minimize interference with and damage to fish and wildlife. Do not disturb fish and wildlife. Do not alter water flows or otherwise significantly disturb the native habitat related to the project and critical to the survival of fish and wildlife, except as indicated or specified.

3.1.6 HAZARDOUS MATERIALS AND HAZARDOUS WASTE

a. A list of all hazardous materials and quantities to be used at the site during the project shall be submitted to the Contracting Officer. Safety Data Sheets must be maintained on site of all hazardous materials used. Petroleum, petroleum products, oils, and lubricants stored in quantities of over 55 gallons must have secondary containment in accordance with the Base Spill Prevention Control and Countermeasures Plan, available upon request from KAFB Inspector or other Civil Engineering Representative.

b. If a hazardous material spill cannot be safely controlled by on-site personnel, the Contractor must call 853-9111 immediately. If the spill is due to Contractor error or negligence, the Contractor will be responsible for any cost incurred in controlling and remediating the spill.

c. All hazardous and regulated waste produced on the job site must be appropriately containerized, transported, and disposed of off-base at a permitted facility. Hazardous waste manifests may only be signed by designated Government personnel. Contractor is to notify Civil Engineering Construction Inspector a minimum of 48 hours prior to removal of waste, in order to facilitate the availability of the proper personnel. Additional guidance can be found in the Base Hazardous Waste Management Plan, available upon request from KAFB Inspector or other Civil Engineering Representative.

3.1.7 ENVIRONMENTAL MANAGEMENT SYSTEM

Kirtland AFB maintains an ISO 14001-structured environmental management system (EMS). The EMS requires that the Kirtland AFB environmental policy statement be communicated to all persons working for or on behalf of the organization. A copy of this policy is attached to this specification as Appendix A.

-- End of Section --

SECTION 01 45 00

QUALITY CONTROL

08/25

PART 1 GENERAL

1.1. REFERENCES

ASTM C1077 (2025a) Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation

1.2. SUBMITTALS

The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

QC Plan: Submit a QC plan within 21 calendar days after receipt of Notice of Award.

1.3. QC PROGRAM REQUIREMENTS

Establish and maintain a QC program as described in this section. The QC program consists of a QC Manager, a QC plan, a Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review and approval, testing, and QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with the requirements of this contract. The QC program must cover on-site and off-site work and must be keyed to the work sequence. No work or testing may be performed unless the QC Manager is on the work site.

1.3.1. Preliminary Work Authorized Prior to Acceptance

The only work that is authorized to proceed prior to the acceptance of the QC plan is mobilization of storage and office trailers, temporary utilities, and surveying.

1.3.2. Acceptance

Acceptance of the QC plan is required prior to the start of construction. The Government reserves the right to request changes in the QC plan and operations as necessary, including removal of personnel, to ensure the specified quality of work. The Contracting Officer (CO)

reserves the right to interview any member of the QC organization at any time to verify the submitted qualifications.

1.3.3. Notification of Changes

Notify the Government, in writing, of any proposed change, including changes in the QC organization personnel, a minimum of seven calendar days prior to a proposed change. Proposed changes must be subject to the acceptance by the CO.

1.4. QC ORGANIZATION

1.4.1. QC Manager

1.4.1.1. Duties

Provide a QC Manager at the work site to implement and manage the QC program. In addition to implementing and managing the QC program, the QC Manager may perform the duties of project superintendent. The QC Manager is required to conduct the QC meetings, perform submittal review and approval, thus ensuring testing is performed and provide QC certifications and documentation required in this contract.

The QC Manager is required to conduct the QC meetings, perform submittal review and approval, thus ensuring testing is performed and provide QC certifications and documentation required in this contract. The QC Manager is responsible for managing and coordinating the three phases of control and documentation performed by others.

1.4.1.2. Qualifications

An individual with a minimum of five (5) years combined experience as a superintendent, inspector, QC Manager, project manager, or construction manager on similar size and type construction contracts which include the major trades that are part of this contract. The individual must be familiar with the requirements of the EM 385-1-1 and have experience in the areas of hazard identification and safety compliance.

1.4.1.3. Construction Quality management Training

1.4.2. Alternate QC Manager Duties and Qualifications

Designate an alternate for the QC Manager to serve in the event of the designated QC Manager's absence. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year. The qualification requirements for the Alternate QC Manager must be the same as for the QC Manager.

1.5. QC PLAN

1.5.1. Requirements

Provide for acceptance by the Government, a QC plan submitted in a three-ring binder that covers both on-site and off-site work and includes the following with a table of content listing the major sections identified with tabs.

a. QC ORGANIZATION: A chart showing the QC organizational structure and its relationship to the production side of the organization.

b. NAMES AND QUALIFICATIONS: In resume format, for each person in the QC organization. Include the CQM for Contractors course certification required by the paragraph entitled "Construction Quality Management Training".

c. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONAL: Of each person in the QC organization.

d. OUTSIDE ORGANIZATIONS: A listing of outside organizations such as architectural and consulting engineering firms that will be employed by the Contractor and a description of the services these firms will provide.

e. APPOINTMENT LETTERS: Letters signed by an officer of the firm appointing the QC Manager and Alternate QC Manager and stating that they are responsible for managing and implementing the QC program as described in this contract. Including in this letter the QC Manager's authority to direct the removal and replacement of non-conforming work.

f. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving, and managing submittals. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval.

g. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraphs "Accredited Laboratories" or "Testing Laboratory Requirements", as applicable.

h. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test.

i. PROCEDURES TO COMPLETE REWORK ITEMS: to identify, record, track, and complete rework items.

j. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task, which is separate and distinct from other tasks, has the same control requirements and work crews. The list must be cross-referenced to the Contractor's Construction Schedule and

the specification sections. For projects requiring a Progress Chart, the list of definable features of work must include but not be limited to all items of work on the schedule. For projects requiring a Network Analysis Schedule, the list of definable features of work must include but not be limited to all critical path activities.

k. PROCEDURES FOR PERFORMING THREE PHASES OF CONTROL: For each DFOW provide Preparatory and Initial Phase Checklists. Each list must include a breakdown of quality checks that will be used when performing the quality control functions, inspections, and tests required by the contract documents. The preparatory and initial phases must be conducted with a view towards obtaining quality construction by planning and identifying potential problems.

1.6 COORDINATION AND MUTUAL UNDERSTANDING MEETING

During the pre-construction conference meeting and prior to the start of construction, discuss the QC program required by this contract. The purpose of this meeting is to develop a mutual understanding of the QC details, including documentation, administration for on-site and off-site work, and the coordination of the Contractor's management, production, and the QC personnel. At the meeting, the Contractor will be required to explain how three phases of control will be implemented for each DFOW. Contractor's personnel required to attend must include the QC Manager, project manager, and superintendent. Minutes of the meeting will be prepared by the QC Manager and signed by both the Contractor and the Contracting Officer. The Contractor must provide a copy of the signed minutes to all attendees. Repeat the coordination and mutual understanding meeting when a new QC Manager is appointed.

1.7 QC MEETINGS

After the start of construction, the QC Manager shall conduct QC meetings once every week at the work site with the superintendent and the foreman responsible for the ongoing and upcoming work. The QC Manager shall prepare the minutes of the meeting and provide a copy to the Contracting Officer within two working days after the meeting. As a minimum, the following shall be accomplished at each meeting:

a. Review the minutes of the previous meeting.

b. Review the schedule and the status of work and rework.

c. Review the status of submittals.

d. Review the work to be accomplished in the next two weeks and documentation required.

e. Resolve QC and production problems (RFIs, etc.)

f. Address items that may require revising the QC plan; and

g. Review Accident Prevention Plan (APP).

1.8 THREE PHASES OF CONTROL

The three phases of control must adequately cover both on-site and off-site work and must include the following for each DFOW.

1.8.1 Preparatory Phase

Notify the CO at least two workdays in advance of each preparatory phase. Conduct the preparatory phase with the superintendent and the foreman responsible for the definable feature of work. Document the results of the preparatory phase actions in the daily CQC Report and in the QC checklist. Perform the following prior to beginning work on each definable feature of work:

a. Review each paragraph of the applicable specification sections.

b. Review the contract drawings.

c. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required.

d. Review the testing plan and ensure that provisions have been made to provide the required QC testing

e. Examine the work area to ensure that the required preliminary work has been completed

f. Examine the required materials, equipment, and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data.

g. Review the APP and appropriate Activity Hazard Analysis (AHA) to ensure that applicable safety requirements are met, and that required Safety Data Sheets (SDS) are submitted, and h.

h. Discuss specific controls used and the construction methods and the approach that will be used to provide quality construction by planning and identifying potential problems for each DFOW.

1.8.2 Initial Phase

Notify the CO at least two workdays in advance of each initial phase. Conduct the Initial Phase with the foreman responsible for that DFOW. Observe the initial segment of the work to ensure that it complies with contract requirements. Document the results of the Initial Phase in the daily CQC Report and in the QC checklist. Perform the following for each DFOW:

a. Establish the quality of workmanship required

b. Resolve conflicts

c. Ensure that testing is performed by the approved laboratory; and

d. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.

1.8.3 Follow-Up Phase

Perform the following for on-going work daily, or more frequently as necessary, until the completion of each DFOW and document in the daily CQC Report and in the QC checklist:

a. Ensure the work follows contract requirements

b. Maintain the quality of workmanship required

c. Ensure that testing is performed by the approved laboratory

d. Ensure that rework items are being corrected; and

e. Assure manufacturers' representatives have performed necessary inspections, if required.

1.9 SUBMITTAL REVIEW AND APPROVAL

Procedures for submission, review, and approval of submittals are described in Section 01 33 00 SUBMITTAL PROCEDURES.

1.10 TESTING

Except as stated otherwise in the specification sections, perform sampling and testing required under this contract.

1.10.1 Accreditation Requirements

Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation. The laboratory's scope of accreditation must include the appropriate ASTM standards (i.e., E 329, C 1077, D 3666, D 3740, A 880, E 543) listed in the technical sections of the specifications. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA. The policy applies to the specific laboratory performing the actual testing, not just the "Corporate Office."

1.10.2 Test Results

Cite applicable Contract requirements, tests or analytical procedures used. Provide actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. If the item fails to conform, notify the CO immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT

CONFORM" to the specification requirements, whichever is applicable. Test results shall be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the CO.

1.11 QC CERTIFICATIONS

1.11.1 Contractor Quality Control Report Certification

Each QC Report shall contain the following statement: "On behalf of the Contractor, I certify that this report is complete and correct, and equipment and material used, and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report."

1.11.2 Invoice Certification

Furnish a certificate to the CO with each payment request signed by the QC Manager, attesting that as-built drawings are current and attesting that the work for which payment is requested, including stored material, follows contract requirements.

1.11.3 Completion Certification

Upon completion of work under this contract, the QC Manager shall furnish a certificate to the Contracting Officer attesting that "the work has been completed, inspected, tested and is in compliance with the contract."

1.12 COMPLETION INSPECTIONS

1.12.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established by a completion time stated in the Contract clause "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the QC Manager must conduct an inspection of the work and develop a punch list of items which do not conform to the approved drawings and specifications. Include in the punch list any remaining items of the "Rework Items List", which were not corrected prior to the Punch-Out inspection. The punch list must include the estimated date by which the deficiencies will be corrected. A copy of the punch list must be provided to the CO. The QC Manager or staff must make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor must notify the Government that the facility is ready for the Government "Pre-Final Inspection".

1.12.2 Pre-Final Inspection

The Government and QC manager will perform this inspection to verify that the facility is complete and ready to be occupied. A Government pre-final punch list may be developed as a result of this inspection. The QC Manager shall ensure that all items on this list are corrected prior to notifying the Government that a "Final" inspection with the customer can be

scheduled. Any items noted on the "Pre-Final" inspection shall be corrected in a timely manner and shall be accomplished before the contract completion date for the work or any increment thereof if the project is divided into increments by separate completion dates.

1.12.3 Final Acceptance Inspection

The QC Manager, the superintendent, or other Contractor management personnel and the CO will attend this inspection. Additional Government personnel may be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based on the results of the "Pre-Final Inspection". Notice shall be given to the CO at least 7 days prior to the final inspection. The notice shall state that all specific items previously identified to the Contractor as being unacceptable will be complete by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the CO to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause "Inspection of Construction".

1.13 DOCUMENTATION

Maintain current and complete records of QC program operations and activities. Reports are required for each day's work is performed. Account for each calendar day throughout the life of the contract. Every space on the form must be filled in. Use N/A if nothing can be reported in one of the spaces. The superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. The reporting of work must be identified by terminology consistent with the construction schedule. In the "remarks" section in this report which will contain pertinent information including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given, and corrective actions taken, delays encountered and a record of visitors to the work site. For each remark given, identify the Schedule Activity No. that is associated with the remark.

1.13.1 QUALITY CONTROL VALIDATION

Establish and maintain the following in a three-ring binder. The binder shall be divided and tabbed as shown below. The binder shall be readily available to the Government's Quality Assurance Team during all business hours.

a. All completed Preparatory and Initial Phase Checklists, arranged by specification section.

b. All milestone inspections, arranged by Activity/Event Number.

c. A current up-to-date copy of the Testing and Plan Log with supporting field test reports, arranged by specification section.

d. Copies of all contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.

e. A current up-to-date copy of the Rework Items List.

f. Maintain up-to-date copies of all punch lists issued by the QC Staff on the Contractor and Sub-Contractors and all punch lists issued by the Government.

1.10.2. AS-BUILT DRAWINGS

The QC Manager is required to review the as-built drawings, required by Section 01 78 00 CLOSEOUT SUBMITTALS, are kept current daily and marked to show deviations, which have been made from the Contract drawings. Ensure each deviation has been identified with the appropriate modifying documentation, e.g. PC number, modification number, RFI number, etc. The QC Manager must initial each deviation or revision. Upon completion of work, the QC Manager must submit a certificate attesting to the accuracy of the as-built drawings prior to submission to the Contracting Officer.

1.11. NOTIFICATION ON NON-COMPLIANCE

The CO will notify the Contractor of any detected non-compliance with the foregoing requirements. The Contractor shall take immediate corrective action. If the contractor fails or refuses to correct the non-compliant work, the CO will issue a noncompliance notice. If the Contractor fails or refuses to comply promptly, the CO may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall make no part of the time lost due to such stop orders the subject of claim for extension of time, for excess costs, or damages.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

SECTION 01 50 00

TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

11/20, CHG 3: 08/24

PART 1 GENERAL

1.1 SUMMARY

Requirements of this Section apply to, and are a component of, each section of the specifications.

1.2 REFERENCES

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

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C511	(2017; R 2021) Reduced-Pressure Principal Backflow Prevention Assembly

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 241	(2022; ERTA 22-1) Standard for Safeguarding Construction, Alteration, and Demolition Operations
NFPA 70	(2026) National Electrical Code

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD	(2023) Manual on Uniform Traffic Control Devices

1.3 SUBMITTALS

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

SD-01 Preconstruction Submittals

Construction Site Plan
Traffic Control Plan
Haul Road Plan

SD-03 Product Data

Backflow Preventers

SD-06 Test Reports

Backflow Preventer Tests

SD-07 Certificates

Backflow Tester Certification
Backflow Preventers Certificate

1.4 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations and dimensions of temporary facilities (including equipment and material storage and staging areas, haul routes, and routes of ingress/egress to the fenced area. Identify any areas to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of fences, trailers, trash and recycling dumpsters, temporary sanitary facilities, and worker parking areas.

1.5. BACKFLOW PREVENTERS CERTIFICATE

Prior to testing, submit to the Contracting Officer (CO)certification issued by the State or local regulatory agency attesting that the backflow tester has successfully completed a certification course sponsored by the regulatory agency. Tester must not be affiliated with a company participating in other phases of this Contract.

1.6. DOD CONDITION OF READINESS (COR)

DOD will set the Condition of Readiness (COR) based on the weather forecast for sustained winds 50 knots (93 km/hr58 mph) or greater. Contact the CO for the current COR setting.

Monitor weather conditions a minimum of twice a day and take appropriate actions according to the approved Emergency Plan in the accepted Accident Prevention Plan, EM 385-1-1 Section 01 Emergency Planning and the instructions below.

Unless otherwise directed by the CO, comply with:

a. Condition FOUR (Sustained winds of 93 km/hr. 58 mph or greater expected within 72 hours): Normal daily jobsite cleanup and good housekeeping practices. Collect and store in piles or containers scrap lumber, waste material, and rubbish for removal and disposal at the close of each workday. Maintain the construction site including storage areas, free of accumulation of debris. Stack form lumber in neat piles less than one m 3.3 feet high. Remove all debris, trash, or objects that could become missile hazards. Review requirements pertaining to "Condition THREE" and continue action as necessary to attain "Condition FOUR" readiness. Contact Contracting Officer for weather and COR updates and completion of required actions.

b. Condition THREE (Sustained winds of 93 km/hr. 58 mph or greater expected within 48 hours): Maintain "Condition FOUR" requirements and commence securing operations

necessary for "Condition ONE" which cannot be completed within 18 hours. Cease all routine activities which might interfere with securing operations. Commence securing and stow all gear and portable equipment. Prepare for securing buildings. Reinforce or remove formwork and scaffolding. Secure machinery, tools, equipment, materials, or remove them from the jobsite. Expend every effort to clear all missile hazards and loose equipment from general base areas. Contact Contracting Officer for weather and COR updates and completion of required actions. Review requirements pertaining to "Condition TWO" and continue action as necessary to attain "Condition THREE" readiness.

c. Condition TWO (Sustained winds of 93 km/hr. 58 mph or greater expected within 24 hours): Secure the jobsite and leave Government premises.

d. Condition ONE. (Sustained winds of 93 km/hr. 58 mph or greater expected within 12 hours): Contractor access to the jobsite and Government premises is prohibited.

1.7 CYBERSECURITY DURING CONSTRUCTION

1.7.1 Contractor Computer Equipment

Contractor owned computers may be used for construction. When used, contractor computers must meet the following requirements:

1.7.1.1 Operating System

The operating system must be an operating system currently supported by the manufacturer of the operating system. The operating system must be current on security patches and operating system manufacturer required updates.

1.7.1.2 Anti-Malware Software

The computer must run anti-malware software from a reputable software manufacturer. Anti-malware software must be a version currently supported by the software manufacturer, must be current on all patches and updates, and must use the latest definitions file. All computers used on this project must be scanned using the software installed at least once per day.

1.7.1.3 Passwords and Passphrases

The passwords and passphrases for all computers must be changed from their default values. Passwords must be a minimum of eight characters with a minimum of one uppercase letter, one lowercase letter, one number and one special character.

1.7.1.4 Contractor Computer Cybersecurity Compliance Statements

Provide a single submittal containing completed Contractor Computer Cybersecurity Compliance Statements for each company using contractor-owned computers. Contractor Computer Cybersecurity Compliance Statements must use the template published at

http://www.wbdg.org/ffc/dod/unifiedfacilities- guide-specifications-ufgs/forms-graphics-tables. Each Statement must be signed by a cybersecurity representative for the relevant company.

1.7.2 Temporary IP Networks

Temporary contractor-installed IP networks shall not be used during construction.

PART 2 PRODUCTS

2.1. TEMPORARY SIGNAGE

2.1.1. Bulletin Board

Prior to the commencement of work activities, provide a clear weatherproof covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the Contract, Wage Rate Information poster, Safety and Health Information as required by EM 385-1-1 Section 01 and other information approved by the CO. Coordinate requirements herein with 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Locate the bulletin board at the project site in a conspicuous place easily accessible to all employees, and in location as approved by the Contracting Officer.

2.1.2. Project Identification Signs

The requirements for the signs, their content, and location are as indicated and as specified in Section 01 58 00 PROJECT IDENTIFICATION]. Erect signs within 15 days after receiving receipt of the notice to proceed. Correct the data required by the safety sign daily, with light colored metallic or non-metallic numerals.

2.1.3. Warning Signs

Post temporary signs, tags, and labels to give workers and the public adequate warning and caution of construction hazards according to the EM 385-1-1 Section 04. Attach signs to the perimeter fencing every 150 feet warning the public of the presence of construction hazards. Signs must require unauthorized persons to keep out of the construction site. Correct the data required by safety signs daily. Post signs at all points of entry designating the construction site as a hard hat area.

2.2. TEMPORARY TRAFFIC CONTROL

2.2.1. Haul Roads

Construct access and haul roads necessary for proper prosecution of the work under this Contract in accordance with EM 385-1-1 Section 04. Construct suitable grades and widths; avoid sharp curves, blind corners, and dangerous cross traffic. Submit haul road plan for approval. Provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, must be adequate to

always ensure safe operation. Location, grade, width, and alignment of construction and haul roads are subject to approval by the CO. Lighting must be adequate to ensure full and clear visibility for full width of haul road and work areas during any night work operations.

2.2.2. Barricades

Erect and maintain temporary barricades to limit public access to hazardous areas. Providing barricades whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities, or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Securely place barricades in clearly visible locations with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

2.3. FENCING

Provide fencing along the construction site and all open excavations and tunnels to control access by unauthorized personnel. Safety fencing must be highly visible to be seen by pedestrians and vehicular traffic. All fencing must meet the requirements of EM 385-1-1. Remove the fence upon completion and acceptance of the work.

2.3.1. Polyethylene Mesh Safety Fencing

Temporary safety fencing must be a high visibility orange colored, high density polyethylene grid, a minimum of 48 inches high and maximum mesh size of 2 inches. Fencing must extend from the grade to a minimum of 48 inches above the grade and be tightly secured to T-posts spaced as necessary to maintain a rigid and taut fence. Fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection.

2.3.2. Chain Link Panel Fencing

Temporary panel fencing must be galvanized steel chain link panels 6 feet high. Multiple fencing panels may be linked together at the bases to form long spans as needed. Each panel base must be weighted down using sandbags or other suitable materials for the fencing to withstand anticipated winds while remaining upright. Fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection.

2.4. TEMPORTY WIRING

Provide temporary wiring in accordance with NFPA 241 and NFPA 70, Article 305-6(b), Assured Equipment Grounding Conductor Program. Include frequent inspection of all equipment and apparatus.

2.5. BACKFLOW PREVENTERS

Certificate of Full Approval from FCCCHR List, University of Southern California, attesting that the design, size and make of each backflow preventer has satisfactorily passed the complete sequence of performance testing and evaluation for the respective level of approval. Certificate of Provisional Approval is not acceptable.

Reduced pressure principal type conforming to the applicable requirements AWWA C511. Provide backflow preventers complete with 150 pound flanged, bronze or brass mounted gate valve and strainer, 304 stainless steel or bronze, internal parts.

PART 3 EXECUTION

3.1. EMPLOYEE PARKING

Construction Contract employees must park privately owned vehicles in an area designated by the CO. Employee parking must not interfere with existing and established parking requirements of the Government installation.

3.2. AVAILABILITY AND USE OF UTILITY SERVICES

3.2.1. Temporary Utilities

Provide temporary utilities required for construction. Materials may be new or used, must be adequate for the required usage, not create unsafe conditions, and not violate applicable codes and standards.

3.2.2. Sanitation

Provide and maintain within the construction area minimum field-type sanitary facilities in accordance with EM 385-1-1 Section 02. Locate the facilities behind the construction fence or out of the public view. Clean units and empty waste at least once a week or more frequently into a municipal, district, or station sanitary sewage system, or remove waste to a commercial facility. Obtain approval from the system owner prior to discharge into a municipal, district, or commercial sanitary sewer system. Penalties or fines associated with improper discharge will be the responsibility of the Contractor. Coordinate with the CO and follow station regulations and procedures when discharging into the station sanitary sewer system. Always maintain these conveniences. Include provisions for pest control and elimination of odors. Government toilet facilities will not be available to Contractor's personnel.

3.2.3. Fire Protection

Provide temporary fire protection equipment for the protection of personnel and property during construction. Remove debris and flammable materials daily to minimize potential hazards.

3.3. RESTRICTED ACCESS AREAS

The Government will monitor work in restrictive areas. Notify CO at least 14 calendar days prior to starting work in these areas.

3.4. TRAFFIC PROVISIONS

3.4.1. Maintenance of Traffic

a. Conduct operations in a manner that will not close a thoroughfare or interfere with traffic on railways or highways except with written permission of the CO at least 15 calendar days prior to the proposed modification date and provide a Traffic Control Plan for Government approval detailing the proposed controls to traffic movement for approval. The plan must be in accordance with State and local regulations and the MUTCD, Part VI. Make all notifications and obtain all permits required for modification to traffic movements outside Station's jurisdiction. Contractor may move oversized and slow-moving vehicles to the worksite provided requirements of the highway authority have been met.

b. Conduct work so as to minimize obstruction of traffic and maintain traffic on at least half of the roadway width at all times. Obtain approval from the CO prior to starting any activity that will obstruct traffic.

c. Provide, erect, and maintain, at Contractor's expense, lights, barriers, signals, passageways, detours, and other items, that may be required by the Life Safety Signage, overhead protection authority having jurisdiction.

d. Provide cones, signs, barricades, lights, or other traffic control devices and personnel required to control traffic. Do not use foil-backed material for temporary pavement marking because of its potential to conduct electricity during accidents involving downed power lines.

3.4.2. Protection of Traffic

Maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the C. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by the State and local authorities having jurisdiction. Provide self-illuminated (lighted) barricades during hours of darkness. Brightly colored (orange) vests are required for all personnel working in roadways. Protect the traveling public from damage to person and property. Minimize the interference with public traffic on roads selected for hauling material to and from the site. Investigate the adequacy of existing roads and their allowable load limit. Contractor is responsible for the repair of damage to roads caused by construction operations.

3.4.3. Dust Control

Dust control methods and procedures must be approved by the CO. Coordinate dust control methods with 01 35 40 00 20 ENVIRONMENTAL MANAGEMENT.

3.5. CONTRACTOR'S TEMPORARY FACILITIES

Contractor-owned or -leased trailers must be identified. Temporary facilities must meet requirements as identified in EM 385-1-1 Section 04.

Contractor is responsible for security of their property. Provide adequate outside security lighting at the temporary facilities. Trailers must be anchored to resist high winds and meet applicable state or local standards for anchoring mobile trailers. Coordinate anchoring with EM 385-1-1 Section 04. The Contract Clause entitled "FAR 52.236-10, Operations and Storage Areas" and the following apply:

3.5.1. Administrative Field Offices

Provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

3.5.2. Storage Area

Construct a temporary 6-foot-high chain link fence around trailers and materials. Include plastic strip inserts, colored brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Do not place or store trailers, materials, or equipment outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the CO away from the vicinity of the construction site but within the installation boundaries. Trailers, equipment, or materials must not be open to public view except for those items which are in support of ongoing work on the current day. Do not stockpile materials outside the fence in preparation for the next day's work. Park mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment within the fenced area at the end of each workday.

Keep fencing in a state of good repair and proper alignment. If the Contractor elects to traverse grassed or unpaved areas which are not established roadways with construction equipment or other vehicles, cover the grassed or unpaved areas with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation must be at the Contractor's discretion. Mow and maintain grass located within the boundaries of the construction site for the duration of the project. Grass and vegetation along fences, structures, under trailers, and in areas not accessible to mowers must be edged or trimmed neatly.

3.5.3. Supplemental Storage Area

Upon Contractor's request, the CO may designate, if available, another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in proximity of the construction site but will be within the installation boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor is responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

3.5.4. Appearance of Trailers

a. Trailers must be roadworthy and comply with all appropriate state and local vehicle requirements. Trailers which are rusted, have peeling paint or are otherwise in need of repair will not be allowed on Installation property. Trailers must present a clean and neat exterior appearance and be in a state of good repair.

b. Maintain the temporary facilities. Failure to do so will be sufficient reason to require their removal at the Contractor's expense.

3.5.5. Safety Systems

Protect the integrity of any installed safety systems or personnel safety devices. If entrance into systems serving safety devices is required, the Contractor must obtain prior approval from the CO. If it is temporarily necessary to remove or disable personnel safety devices in order to accomplish contract requirements, provide alternative means of protection prior to removing or disabling any permanently installed safety devices or equipment and obtain approval from the CO.

3.5.6. Weather Protection of Temporary Facilities and Stored Materials

Take necessary precautions to ensure that roof openings and other critical openings in the building are monitored carefully. Take immediate actions required to seal off such openings when rain or other detrimental weather is imminent, and at the end of each workday. Ensure that the openings are completely sealed off to protect materials and equipment in the building from damage.

3.5.7. Maintenance of Storage Area

Keep fencing in a state of good repair and proper alignment. Grassed or unpaved areas, which are not established roadways, will be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways, should the Contractor elect to traverse them with construction equipment or other vehicles. Provide gravel gradation as required by approved SWPPP. Mow and maintain grass located within the boundaries of the construction site for the duration of the project.

3.5.8. Security Provisions

The Contractor will be responsible for the security of its own equipment, materials, vehicles, and project site.

3.6. CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily, or as required per approved SWPPP. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. Store within the fenced area described above or at the supplemental storage area any materials resulting from demolition activities which are salvageable. Neatly stack stored materials not in trailers, whether new or salvaged.

3.7. RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletin board, signs, barricades, haul roads, and any other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence that will become the property of the Contractor. Restore to the original or better condition, areas used by the Contractor for the storage of equipment or material, or other use. Gravel used to traverse grassed areas must be removed and the area restored to its original condition, including topsoil and seeding as necessary.

-- End of Section --

SECTION 01 74 19

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT
02/19, CHG 3: 11/21

PART 1 - GENERAL

1.1 REFERENCES

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

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

40 CFR 273	Standards for Universal Waste Management
49 CFR 173	Shippers - General Requirements for Shipments and Packaging's
49 CFR 178	Specifications for Packaging's

1.2 DEFINITIONS

1.2.1 Co-mingle

The practice of placing unrelated materials together in a single container, usually for benefits of convenience and speed.

1.2.2 Construction Waste

Waste generated by construction activities, such as scrap materials, damaged or spoiled materials, temporary and expendable construction materials, and other waste generated by the workforce during construction activities.

1.2.3 Demolition Debris/Waste

Waste generated from demolition activities, including minor incidental demolition waste materials generated because of Intentional dismantling of all or portions of a building, to include clearing of building contents that have been destroyed or damaged.

1.2.4 Disposal

Depositing waste in a solid waste disposal facility, usually a managed landfill or incinerator, regulated in the US under the Resource Conservation and Recovery Act (RCRA).

1.2.5 Diversion

The practice of diverting waste from disposal in a landfill or incinerator, by means of eliminating or minimizing waste, or reuse of materials.

1.2.6 Final Construction Waste Diversion Report

A written assertion by a material recovery facility operator identifying constituent materials diverted from disposal, usually including summary tabulations of materials, weight in short ton.

1.2.7 Recycling

The series of activities, including collection, separation, and processing, by which products or other materials are diverted from the solid waste stream for use in the form of raw materials in the manufacture of new products sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials, other than fuel.

1.2.8 Reuse

Usable, salable items derived from buildings undergoing demolition or deconstruction, parts from vehicles, machinery, other equipment, or other components.

1.2.9 Salvage

Usable, salable items derived from buildings undergoing demolition or deconstruction, parts from vehicles, machinery, other equipment, or other components.

1.2.10 Source Separation

The practice of administering and implementing a management strategy to identify and segregate unrelated waste at the first opportunity.

1.3 CONSTRUCTION WASTE (INCLUDES DEMOLITION DEBRIS/WASTE)

Divert a minimum of 60 percent by weight of the project construction waste and demolition debris/waste from the landfill or incinerator. Follow applicable industry standards in the management of waste. Apply sound environmental principles in the management of waste.

a. Practice efficient waste management when sizing, cutting, and installing products and materials.

b. Use all reasonable means to divert construction waste and demolition debris/waste from landfills and incinerators and to facilitate the recycling or reuse of excess construction materials.

1.4 CONSTRUCTION WASTE MANAGEMENT

Implement a Solid Waste Management Program for the project. Take a pro-active, responsible role in the management of construction waste, recycling process, disposal of demolition debris/waste, and require all subcontractors, vendors, and suppliers to participate in the Construction Waste Management Program. Establish a process for clear tracking, and documentation of construction waste and demolition debris/waste.

1.4.1 Implementation of Construction Waste Management Program

Develop and document how the Construction Waste Management Program will be implemented in a Construction Waste Management Plan. Submit a Construction Waste Management Plan to the Contracting Officer (CO) for approval. Construction waste and demolition debris/waste materials include un-used construction materials not incorporated in the final work, as well as demolition debris/waste materials from demolition activities or deconstruction activities. In the management of waste, consider the availability of viable markets, the condition of materials, the ability to provide material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates.

1.4.2 Oversight

The Quality Control Manager, as specified in Section 01 45 00.00 10 QUALITY CONTROL, is responsible for overseeing and documenting results from executing the Construction Waste Management Plan for the project.

1.4.3 Special Programs

Implement special programs involving rebates or similar incentives related to recycling construction waste and demolition debris/waste materials. Retain revenue or savings from salvaged or recycling, unless otherwise directed. Ensure firms and facilities used for recycling, reuse, and disposal are permitted for the intended use to the extent required by federal, state, and local regulations.

1.4.4 Special Instructions

Provide on-site instruction of appropriate separation, handling, recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the projects. Designation of single source separating, or commingling will be clearly marked on the containers.

1.4.5 Waste Streams

Delineate waste streams and characterization, including estimated material types and quantities of waste, in the Construction Waste Management Plan. Manage all waste streams associated with the project. Typical waste streams are listed below. Include additional waste steam not listed:

a. Land Clearing Debris

b. Asphalt

c. Masonry and CMU

d. Concrete

e. Metals (Includes, but are not limited to, banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized, stainless steel, aluminum, copper, zinc, bronze.)

f. Wood (nails and staples allowed)

g. Glass

h. Paper

i. Plastics (PET, HDPE, PVC, LDPE, PP, PS, Other)

j. Gypsum

k. Non-hazardous paint and paint cans

l. Carpet

m. Ceiling Tiles

n. Insulation

o. Beverage Containers

1.5 SUBMITTALS

SD-01 Preconstruction Submittals

Solid Waste Management Plan

SD-06 Test Reports

Progress Documentation: Document solid waste disposal and diversion

SD-11 Closeout Submittals

Final Construction Waste Diversion Report

1.6 MEETINGS

Conduct Construction Waste Management meetings. After award of the Contract and prior to commencement of work, schedule and conduct a meeting with the CO to discuss the proposed Construction Waste Management Plan and to develop a mutual understanding relative to the

management of the Construction Waste Management Program and how waste diversion requirements will be met. The requirements of this meeting may be fulfilled during the coordination and mutual Understanding meeting outlined in Section 01 45 00.10 20

QUALITY CONTROL. At a minimum, discuss and document waste management goals at following meetings:

a. Preconstruction meeting.

b. Regular site meetings.

c. Work safety meeting (if applicable).

1.7 SOLID WASTE MANAGEMENT PLAN

Submit Solid Waste Management Plan within 15 calendar days after contract award. Revise and resubmit Construction Waste Management Plan as necessary, for construction to begin. Execute demolition or deconstruction activities in accordance with Section 02 41 00 DEMOLITION. Manage demolition debris/waste or deconstruction materials in accordance with the approved construction waste management plan.

An approved Construction Waste Management Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting project cumulative waste diversion requirement. Ensure all subcontractors receive a copy of the approved Construction Waste Management Plan. The plan demonstrates how to meet the project waste diversion requirement. Also, include the following in the plan:

a. Identify the names of individuals responsible for waste management and waste management tracking, along with roles and responsibilities on the project.

b. Actions that will be taken to reduce solid waste generation, including coordination with subcontractors to ensure awareness and participation.

c. Description of the regular meetings to be held to address waste management.

d. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas on site and equipment to be used for processing, sorting, and temporary storage of materials.

e. Name of landfill and incinerator to be used.

f. Identification of local and regional re-use programs, including non-profit organizations such as schools, local housing agencies, and organizations that accept used materials such as material exchange networks and resale stores. Include the name, location, phone number for each re-use facility identified, and provide a copy of the permit or license for each facility.

g. List of specific materials, by type and quantity, that will be salvaged for resale, salvaged, and reused on the current project, salvaged and stored for reuse on a future project, or recycled. Identify the recycling facilities by name, address, and phone number.

h. Identification of materials that cannot be recycled or reused with an explanation or justification, to be approved by the CO.

i. Description of how materials identified in item (g) above will be protected from contamination.

j. Description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site).

k. Copy of training plan for subcontractors and other services to prevent contamination by co-mingling materials identified for diversion and waste materials.

1.7.1 Progress Documentation: Document solid waste disposal and diversion

The Contractor shall submit with each Application for Progress Payment a Summary of Waste generated by the Project. Failure to submit this information shall render the Application for Payment incomplete and shall delay Progress Payment. The Summary shall be submitted on a form approved by the Owner and shall contain the following information:

a. The amount (in tons) of material landfilled from the Project and the identity of the landfill. Attach manifests, weight tickets, receipts, and invoices, or other documentation that will validate the amounts listed.

b. For each material recycled, reused, or salvaged from the Project, the amount (in tons), the date removed from the jobsite, and the receiving party. Attach manifests, weight tickets, receipts, and invoices, or other documentation that will validate the amounts listed.

1.8 RECORDS

1.8.1 General

Maintain records to document the types and quantities of waste generated and diverted through re-use, recycling and sale to third parties, through disposal to a landfill or incinerator facility. Provide explanations for materials not recycled, reused, or sold. Collect and retain manifests, weight tickets, sales receipts, and invoices specifically identifying diverted project waste materials or disposed materials.

1.8.2 Accumulated

Maintain a running record of materials generated and diverted from landfill disposal, including accumulated diversion rates for the project. Make records available to the Contracting Officer during construction or incidental demolition activities. Provide a copy of the diversion records to the Contracting Officer upon completion of the construction, incidental demolitions or minor deconstruction activities.

1.9 FINAL SOLID WASTE DIVERSION REPORT

A Final Solid Waste Diversion Report is required at the end of the project. Provide Final Construction Waste Diversion Report 60 days prior to the Beneficial Occupancy Date (BOD).

PART 2 – PRODUCTS

NOT USED.

PART 3 – EXECUTION

3.1. Solid Waste Management

a. Develop and implement a Waste Management Plan as specified herein.

b. Implementation.

1. Manager: The Contractor shall designate a specific party (or parties) responsible for instructing workers in recycling and overseeing and documenting results of the Final Waste Management Plan for the Project.

2. Instruction: The Contractor or his designated waste manager shall provide on-site instruction regarding appropriate separation, handling, and recycling, salvage, reuse, and/or return methods to be used by all involved parties at the appropriate stages of the Project.

3. Separation facilities: As appropriate during each stage of the Project, the Contractor shall lay out and label a specific area(s) to facilitate separation of materials for potential recycling, salvage, reuse, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked to avoid contamination of materials.

4. Hazardous waste: Hazardous waste shall be separated and disposed of IAW federal, state, and local regulations. Coordinate with Section 01 35 40.00 20.

c. Maximize recycling and reuse of materials. The following is a partial list of resources that may be useful in developing the Waste Management Plan. This list is provided for

Contractor's information only. For more information, contact the New Mexico Environment Department and/or the New Mexico Recycling Coalition.

1. Recycling Haulers and Markets. An extensive list of New Mexico haulers and markets for recyclable materials is available on-line at the following URL: http://www.recyclenewmexico.com/Construction_Recycling.htm. This list is provided for information only and may not be comprehensive; other haulers and markets may also be available.

2. Sample Solid Waste and Recycling Plan. A sample plan is available on-line at the following URL: http://www.recyclenewmexico.com/pdf/APPENDIX_D_SAMPLE_Recycling_Management_Plan.pdf. This plan is provided for information only and may not be comprehensive for a given project. Contractor is to adapt this plan to this project.

--End of Section--

SECTION 01 78 00

CLOSEOUT SUBMITTALS

05/19, CHG 1: 08/21

PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM E1971	(2024) Standard Guide for Stewardship for the Cleaning of Commercial and Institutional Buildings

GREEN SEAL (GS)

GS-37	(2017) Cleaning Products for Industrial and Institutional Use

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 1-300-08	(2023) Criteria for Transfer and Acceptance of DoD Real Property

1.2 DEFINITONS

1.2.1. As-Built Drawings

As-built drawings are the marked-up drawings, maintained by the Contractor on-site, that depict actual conditions and deviations from the Contract Documents. These deviations and additions may result from coordination required by but not limited to contract modifications; official responses to submitted Requests for Information (RFI's); direction from the Contracting Officer (CO); design that is the responsibility of the Contractor, and differing site conditions. Maintain the as-builts throughout construction as red-lined hard copies on site and / or red-lined PDF files. These files serve as the basis for the creation of the record drawings.

1.2.2. Record Drawings

The record drawings are the final compilation of actual conditions reflected in the as-built drawings.

1.3. SOURCE DRAWING FILES

Request the full set of electronic drawings, in the source format, for Record Drawing preparation, after award and at least 30 days prior to required use.

1.3.1. Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as convenience in the preparation of construction drawings and data for the referenced project. Any other use or reuse is at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim and fully waives 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 CAD drawing files are not construction documents. Differences may exist between the CAD files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic CAD files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. If 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 [drawings and] data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

1.4 SUBMITTALS

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

SD-03 Product Data

- Warranty Management Plan
- Warranty Tags
- Final Cleaning
- Spare Parts Data

SD-08 Manufacturer's Instructions

- Posted Instructions

SD-10 Operation and Maintenance Data

- Operation and Maintenance Manuals

SD-11 Closeout Submittals

- As-Built Drawings
- Record Drawings
- Record Model
- As-Built Record of Equipment and Materials
- Warranted Equipment and Material
- Final Approved Shop Drawings
- Construction Contract Specifications
- Interim Form DD1354
- High Performance and Sustainable Building (HPSB) Checklist
- List of Installed Building Equipment Items for DD Form 1345

1.5 SPARE PARTS DATA

a. Submit two copies of the Spare Parts Data list. Indicate manufacturer's name, part number, and stock level required for test and balance, pre-commissioning, maintenance, and repair activities. List those items that may be standard to the normal maintenance of the system.

1.6 WARRANTY MANAGEMENT

1.6.1 Warranty Management Plan

Develop a warranty management plan which contains information relevant to FAR 52.246-21 Warranty of Construction. At least 30 days before the planned pre-warranty conference, submit one set of the warranty management plan. Include within the warranty management plan all required actions and documents to ensure that the Government receives all warranties to which it is entitled. The plan narrative must contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below must include due date and whether item has been submitted or was accomplished. Submit warranty information, made available during the construction phase, to the CO for approval prior to each monthly pay estimate. Assemble approved information in a binder and turn it over to the Government upon acceptance of the work. The construction warranty period must begin on the date of project acceptance and continue for the full product warranty period. Conduct a joint 10-month warranty inspection, measured from time of acceptance, with the Contractor, CO and the Customer Representative. The warranty management plan must include, but is not limited to, the following:

a. Roles and responsibilities of personnel associated with the warranty process, including points of contact and telephone numbers within the organizations of the Contractors, subcontractors, manufacturers, or suppliers involved.

b. For each warranty, the name, address, telephone number, and e-mail of each of the guarantor's representatives nearest to the project location.

c. A list and status of delivery of Certificates of Warranty for extended warranty items, including roofs, HVAC balancing, pumps, motors, transformers, and for commissioned systems, such as fire protection and alarm systems, sprinkler systems, and lightning protection systems.

d. As-Built Record of Equipment and Materials list for each warranted equipment, item, feature of construction or system indicating:

(1) Name of item.

(2) Model and serial numbers.

(3) Location where installed.

(4) Name and phone numbers of manufacturers or suppliers.

(5) Names, addresses and telephone numbers of sources of spare parts.

(6) Warranties and terms of warranty. Include one-year overall warranty of construction, including the starting date of warranty of construction. Items which have warranties longer than one year must be indicated with separate warranty expiration dates.

(7) Cross-reference for warranty certificates as applicable.

(8) Starting point and duration of warranty period.

(9) Summary of maintenance procedures required to continue the warranty in force.

(10) Cross-reference to specific pertinent Operation and Maintenance manuals.

(11) Organization, names, and phone numbers of persons to call for warranty service.

(12) Typical response time and repair time expected for various warranted equipment.

e. The plans for attendance at the 4-and 9-month post-construction warranty inspections conducted by the Government.

f. Procedure and status of tagging of equipment covered by warranties longer than one year.

g. Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty or safety reasons.

1.6.2 Performance Bond

The Performance Bond must remain effective throughout the construction and warranty period.

a. In the event the Contractor fails to commence and diligently pursue any construction warranty work required, the CO will have the work performed by others, and after completion of the work, will charge the remaining construction warranty funds of expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.

b. In the event sufficient funds are not available to cover the construction warranty work performed by the Government at the Contractor's expense, the CO will have the right to recoup expenses from the bonding company.

c. Following oral or written notification of required construction warranty repair work, respond in a timely manner. Written verification will follow oral instructions. Failure to respond will be cause for the CO to proceed against the Contractor.

1.6.3 Pre-Warranty Conference

Prior to contract completion, and at a time designated by the CO, meet with the CO to develop a mutual understanding with respect to the requirements of this section. At this meeting, establish and review communication procedures for Contractor notification of construction warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the CO for the execution of the construction warranty In connection with these requirements and at the time of the Contractor's quality control completion inspection, furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue construction warranty work action on behalf of the Contractor. This point of contact must be located within the local service area of the warranted construction, be continuously available, and be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of its responsibilities in connection with other portions of this provision.

1.6.4 Contractor’s Response to Construction Warranty Service Requirements

Following oral or written notification by the CO, respond to construction warranty service requirements within 6 hours of notification, and confirm a schedule, acceptable to the CO, to perform required work. If the Contractor does not perform the construction warranty within the agreed-upon timeframe specified, the Government will perform the work and back charge the construction warranty payment. Submit a report on any warranty item that has been

repaired during the warranty period. Include within the report the cause of the problem, date reported, corrective action taken, and when the repair was completed.

1.6.5 Warranty Tags

At the time of installation, tag each warranted item with a durable, oil and water-resistant tag approved by the Contracting Officer. Attach each tag with a copper wire and spray with a silicone waterproof coating. Also, submit two record copies of the warranty tags showing the layout and design. The date of acceptance and the QC signature must remain blank until the project is accepted for beneficial occupancy. Show the following information on the tag.

a. Type of product/material
b. Model number
c. Serial number
d. Contract number
e. Warranty period from/to
f. Inspector's signature
g. Construction Contractor
h. Address
i. Telephone number
j. Warranty contact
k. Address
l. Telephone number
m. SECTION 01 78 00 Page 14
n. Warranty response time
o. priority code
p. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.

PART 2 PRODUCTS

2.1. Record Drawings

Drawings showing final as-built conditions of the project, consisting of two legible, red-lined, full-size drawing sets.

a. The location and dimensions of any changes within the building structure.

b. Changes in details of design or additional information obtained from shop drawings specified to be prepared and/or furnished by the Contractor; including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

c. Changes or modifications which result from the final inspection.

d. Where contract drawings or specifications present options, show only the option selected for construction on the final as-built documents.

e. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarm, fire sprinkler, and irrigation systems.

f. Modifications and compliance with the following procedures.

(1) Follow directions in the modification for posting descriptive changes.

(2) Place a Modification Delta at the location of each deletion.

(3) For new details or sections which are added to a drawing, place a Modification Delta by the detail or section title.

(4) For minor changes, place a Modification Delta by the area changed on the drawing (each location).

(5) For major changes to a drawing, place a Modification Delta by the title of the affected plan, section, or detail at each location.

(6) For changes to schedules or drawings, place a Modification Delta either by the schedule heading or by the change in the schedule.

2.2. DRAWING PREPARATION

Clearly mark the record drawings as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract set into agreement with approved working as built prints and adding such additional drawings as may be necessary. This working as-built marked prints must be neat, legible, and accurate. These drawings are part of the permanent records of this project and must be returned to the CO after approval by the Government. Any drawings damaged or lost by the Contractor must be satisfactorily replaced by the Contractor at no expense to the Government.

2.3. MANUALLY PREPARED DRAWINGS

Employ only personnel proficient in the preparation of manually prepared drawings to modify the original contract drawing or prepare additional new drawings. Additions and corrections to

the contract drawings must be neat, clean and legible, and shall be done to the same level of detail. The CO will review record drawings for accuracy and conformance to the above specified drafting standards. Corrections, changes, additions, and deletions required must meet these standards.

a. When final revisions have been completed, Letter or stamp each drawing with the words "RECORD DRAWINGS / AS-BUILT CONDITIONS" followed by the name of the Contractor in letters at least 5 mm (3/16 inch) high. Mark original contract drawings either "Record" drawings denoting no revisions on the sheet or "Revised Record" denoting one or more revisions. Date all original contract drawings in the revision block.

b. Within 14 calendar days of project completion, prepare the final record drawings and submit two sets of these drawings for Government review and approval. The Government will promptly return one set of prints annotated with any necessary corrections within 7 days of receipt of drawings. Revise the drawings accordingly at no additional cost and submit one set to the Government within 14 days. Paper prints and reproducible drawings will become the property of the Government upon final approval. Failure to submit final record drawings and marked prints, as required herein, will be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final record drawings must be accomplished before final payment is made to the Contractor.

2.4. PAYMENT

No separate payment will be made for record drawings required under this contract, and all costs accrued in connection with such drawings are considered a subsidiary obligation of the Contractor.

2.5. CONSTRUCTION CONTRACT SPECIFICATIONS

Furnish final record (as-built) construction contract specifications, including modifications thereto, 14 days after transfer of the completed facility.

2.6. REAL PROPERTY EQUIPMENT

Furnish a list of installed equipment furnished under this contract. Include all information usually listed on manufacturer's name plate. In the "EQUIPMENT-IN-PLACE LIST" include, as applicable, the following for each piece of equipment installed: description of item, location (by room number, if applicable), model number, serial number, capacity, name and address of manufacturer, name and address of equipment supplier, condition, spare parts list, manufacturer's catalog, and warranty. Furnish the final list 14 days after transfer of the completed facility.

2.7. PREVENTATIVE MAINTENANCE

Submit Preventative Maintenance, Condition Monitoring (Predictive Testing) and Inspection schedules with instructions that state when systems should be retested.

a. Define the anticipated length of each test, test apparatus, number of personnel identified by responsibility, and a testing validation procedure permitting the record operation capability requirements within the schedule. Provide a signoff blank for the Contractor and CO for each test feature. Include a remarks column for the testing validation procedure referencing operating limits of time, pressure, temperature, volume, voltage, current, alignment, calibration, adjustments, cleaning, or special system notes. Delineate procedures for preventative maintenance, inspection, adjustment, lubrication, and cleaning necessary to minimize corrective maintenance and repair.

b. Repair requirements must inform operators how to check out, troubleshoot, repair, and replace components of the system. Include electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting of the system after acceptance.

c. Include one copy of the above schedules with each Operation and Maintenance Manual.

2.8. OPERATION AND MAINTENANCE MANUALS

2.8.1. Configuration

Operation and Maintenance Manuals must be consistent with the manufacturer's standard brochures, schematics, printed instructions, general operating procedures, and safety precautions. Bind information in manual format and grouped by technical sections. Test data must be legible and of good quality. Pages for vendor data must be bound in 3-ring, loose-leaf binders. Organize data by separate index and tabbed sheets, in a loose-leaf binder. On multi-site projects, provide a separate binder for each building. Binder must lie flat with printed sheets that are easy to read. Caution and warning indications must be clearly labeled. Provide four (4) complete sets of Operation and Maintenance Manuals.

2.8.2. TRAINING AND INSTRUCTION

Perform classroom and field instruction in the operation and maintenance of systems equipment where required by the technical provisions. These services must be directed by the Contractor, using the manufacturer's factory-trained personnel or qualified representatives. CO will be given 7 calendar days written notice of scheduled instructional services. Instructional materials belonging to the manufacturer or vendor, such as lists, static exhibits, and visual aids, must be made available to the CO.

2.9. CLEANUP

Provide final cleaning in accordance with ASTM E1971 and submit two copies of the list of completed final clean up items. Leave premises "broom clean." Use only nonhazardous cleaning materials, including natural cleaning materials, in the final cleanup. Clean interior and exterior glass surfaces exposed to view; remove temporary labels, stains, and foreign substances; polish transparent and glossy surfaces; vacuum carpeted and soft surfaces. Clean equipment and fixtures to a sanitary condition. Clean or replace filters of operating equipment. Clean debris from roofs, gutters, downspouts, and drainage systems. Sweep paved areas and rake clean landscaped areas. Remove waste and surplus materials, rubbish, and construction facilities from the site. Recycle, salvage, and return construction and demolition waste from project in accordance with the Waste Management Plan. Promptly and legally transport and dispose of any trash. Do not burn, bury, or otherwise dispose of trash on the project site.

2.10. EXTRAORDINARY CLEANUP REQUIREMENTS

The following cleanup requirements apply: N/A

2.11. REAL PROPERTY RECORD

Refer to UFC 1-300-08 for instruction on completing the DD Form 1354. Contact the CO for any project specific information necessary to complete the DD Form 1354.

2.11.1. Interim DD FORM 1354

Near the completion of Project, but a minimum of 60 days prior to final acceptance of the work, complete, update draft DD FORM 1354, and submit an accounting of all installed property with Interim Form DD1354. "Transfer and Acceptance of Military Real Property." Include any additional assets/improvements/alterations from the Draft DD Form 1354. For information purposes, a blank DD Form 1354 (fill-able) in ADOBE (PDF) may be obtained at the following web site:

http://www.dtic.mil/whs/directives/infomgt/forms/eforms/dd1354.pdf

www.esd.whs.mil/Portals/54/Documents/DD/forms/dd/dd1354.pdf

2.11.2. Completed DD FORM 1354

Submit the completed List of Checklist for Installed Building Equipment items for Form DD FORM 1354. Attach this list to the updated DD FORM 1354.

PART 3 EXECUTION

Not Used

-- End of Section --