US Army Corps of Engineers®

Fort Worth District

Design-Bid-Build

Request For Proposal

B90176 HANGAR DOOR EXPANSION (HADES)
Fort Hood, Texas

W9126G26RA087
June 2026
100% TOTAL SMALL BUSINESS SET-ASIDE

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COJV SWF AE-T FORT HOOD HANGAR DOOR EXPANSION
FORT WORTH, TX
2026

SEAL AND SIGNATURE	APPLICABLE SECTIONS
Weston McCann, PE (Olsson) Federal Senior Team Leader 	01 45 35 Division 03 Division 05
Derick Holmes, PE (Olsson) Federal Group Leader 	Division 32 Division 33

SEAL AND SIGNATURE	APPLICABLE SECTIONS
James Whitcomb, PE (Olsson) Federal Project Engineer 	Division 21 Division 28
Shannon Rasmussen, PE (Citrine) Sr. Mechanical Engineer MAY 28, 2026	Division 22

SEAL AND SIGNATURE	APPLICABLE SECTIONS
David Keatting, PE (Citrine) Sr. Electrical Engineer 28 MAY 2026	Division 26
Brian Bourn, AIA (Larson Design Group) | Federal Group Architect 	01 57 19 02 41 00 Division 07 Division 08 Division 09 Division 10

SOLICITATION, OFFER, AND AWARD

(Construction, Alteration, or Repair)

1. SOLICITATION NUMBER	2. TYPE OF SOLICITATION	3. DATE ISSUED	PAGE	OF	PAGES
W9126G26RA087	☐ SEALED BID (IFB) INVITATION FOR BID ☒ NEGOTIATED (RFP) REQUEST FOR PROPOSAL	17 JUN 2026	1		420

IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.

4. CONTRACT NUMBER	5. REQUISITION/PURCHASE REQUEST NUMBER	6. PROJECT NUMBER
		572918

7. ISSUED BY CODE W9126G

W076 ENDIST FT WORTH
KO CONTRACTING DIVISION, 819 TAYLOR ST BOX 17300
FORT WORTH, TX 76102-6124
UNITED STATES
CHRISTINE NORIEGA, EMAIL: CHRISTINE.NORIEGA@USACE.ARMY.MIL
TELEPHONE: (817) 886-1104

8. ADDRESS OFFER TO

W076 ENDIST FT WORTH
KO CONTRACTING DIVISION, 819 TAYLOR ST BOX 17300
FORT WORTH, TX 76102-6124
UNITED STATES

9. FOR INFORMATION CALL:	a. NAME	b. TELEPHONE NUMBER *(Include area code) (NO COLLECT CALLS)*
	CHRISTINE NORIEGA	(817) 886-1104

SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS *(Title, identifying number, date)*

PROJECT TITLE: B90176 HANGAR DOOR EXPANSION (HADES)
PROJECT LOCATION: FORT HOOD, TEXAS

P2# 572918

11. The contractor shall begin performance within 10 calendar days and complete it within 336 calendar days after receiving ☐ award, ☒ notice to proceed. This performance period is ☐ mandatory ☐ negotiable. ***(See*** FAR 52.211-10 ***).***

12a. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? *(If "YES", indicate within how many calendar days after award in Item 12b.)*	12b. CALENDAR DAYS
☒ YES ☐ NO	10

13. ADDITIONAL SOLICITATION REQUIREMENTS:

a. Sealed offers in original and 1 copies to perform the work required are due at the place specified in Item 8 by 02:00 PM ***(hour)*** local time 17 JUL 2026 (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

b. An offer guarantee ☒ is, ☐ is not required.

c. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

d. Offers providing less than 120 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER *(Must be fully completed by offeror)*

14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*

CODE FACILITY CODE

15. TELEPHONE NUMBER *(Include area code)*

16. REMITTANCE ADDRESS *(Include only if different than Item 14.)*

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirement stated in Item 13d. Failure to insert any number means the offeror accepts the minimum in Item 13d.)*

AMOUNTS ▶

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS
(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)

AMENDMENT NUMBER										
DATE										

20a. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*

20b. SIGNATURE

20c. OFFER DATE

AWARD *(To be completed by Government)*

21. ITEMS ACCEPTED:

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN *(4 copies unless otherwise specified)* ▶ ITEM

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO THE UNITED STATES CODE AT
☐ 10 U.S.C. 3204(a) ( ) ☐ 41 U.S.C. 3304(a) ( )

26. ADMINISTERED BY

27. PAYMENT WILL BE MADE BY

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

☐ 28. NEGOTIATED AGREEMENT *(Contractor is required to sign this document and return _____ copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.

☐ 29. AWARD *(Contractor is not required to sign this document.)* Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30a. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or print)*

31a. NAME OF CONTRACTING OFFICER *(Type or print)*

30b. SIGNATURE

30c. DATE

31b. UNITED STATES OF AMERICA

BY

31c. DATE

B90176 Hangar Door Expansion (HADES)
Fort Hood, TEXAS

CONTRACT LINE ITEM SCHEDULE

Item No.	Description	Quantity	Unit		Unit Price	Line Item Amount
BASE OFFER: All work required by the Contract.						
0001	All work for the B90176 Hangar Door Expansion (HADES)	1	JA	$	***	$ _____
		TOTAL BASE OFFER				$ _____
OPTIONS						
0002	Option 1: All work for epoxy flooring	1	JA	$	***	$ _____
		TOTAL ALL OPTIONS				$ _____
		TOTAL OFFER (BASE + OPTIONS)				$ _____

Contract Duration in Calendar Days
After the Notice to Proceed is received.*

_____ DAYS

*Note: Contract duration for all work shall NOT exceed the duration specified in Section 01 00 00.00 44 CONSTRUCTION SCHEDULE. See Note No. 7.

B90176 Hangar Door Expansion (HADES)
Fort Hood, TEXAS

CONTRACT LINE ITEM SCHEDULE

NOTES:

NOTE NO. 1. To better facilitate the receipt and proposal process, all modifications to proposals are to be submitted on copies of the latest Contract Line Item (CLIN) schedules as published in the solicitation or the latest amendment thereto. In lieu of indicating additions/deductions to line items, all Offerors should state their revised prices for each item.

NOTE NO. 2. Offerors must insert a price on all numbered items of the CLIN Schedule. Failure to do so may result in the offer being unacceptable.

NOTE NO. 3. Responders are advised that this requirement may be delayed, cancelled, or revised at any time during the solicitation, selection, evaluation, negotiation and/or final award process based on decisions related to DOD changes in force structure and disposition of the Armed Forces.

NOTE NO. 4. CONDITIONS GOVERNING EVALUATION OF OFFERS AND AWARD OF CONTRACTS: The Government may require the delivery of the numbered line items, identified in the schedule as option items, in the quantity and at the price stated in the schedule. Subject to the availability of funds, the Contracting Officer may exercise the option by written notice to the Contractor within the time indicated in Section 00 72 00.

NOTE NO. 5. The Army will procure this facility in accordance with the provisions set forth in this Invitation for Bid (IFB). When awarded, it will be a "Firm Fixed Price Contract."

NOTE NO. 6. Any proposal that is materially unbalanced may be rejected. An unbalanced proposal is one that is based on prices significantly less than the cost for some work and prices that are significantly overstated for other work and can also exist where only overpricing or underpricing exists.

NOTE NO. 7. The Offeror must propose a total integrated contract duration in number of calendar days after the Notice to Proceed (NTP) is received by the Contractor. The total number of proposed calendar days for contract completion, must not exceed the number of calendar days specified in Section 01 00 00.00 44 ***Construction Schedule***. The proposed duration shall become the required contract duration. Day number 1 is the day after the date of receipt of the NTP.

NOTE NO. 8. ABBREVIATIONS

For the purpose of this solicitation, the units of measure are represented as follows:

a. JA (Job)

NOTE NO. 9. Profit will not be paid on bonds or insurance.

END OF CLIN SCHEDULE

Section 00 21 00 - Instructions

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.204-7	System for Award Management-Registration. (Deviation 2026-O0038)	2026-02		

System for Award Management-Registration (Feb 2026) (Deviation 2026-O0038)

The Offeror shall have an active Federal Government contracts registration in the System for Award Management (SAM) when submitting an offer or quotation in response to this solicitation and at the time of award. As part of the SAM registration process, the Government collects information, as described in paragraphs (b) through (d) of this provision, that is necessary to identify the Offeror and for the Offeror to be awarded Federal Government contracts. To register in SAM, go to https://www.sam.gov. Allow for processing time when registering in SAM. If the Offeror is not registered in SAM, it should register immediately after receiving this solicitation.

(a) Definitions. As used in this provision-

Commercial and Government Entity (CAGE) code has the meaning provided in the clause at the Federal Acquisition Regulation (FAR) 52.204-13, System for Award Management-Maintenance, of this solicitation.

Electronic Funds Transfer (EFT) indicator means a bank account identifier to establish additional System for Award Management records for identifying alternative EFT accounts (see part 32) for the same entity.

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

Immediate owner means an entity, other than the offeror, that has direct control of the offeror. Indicators of control include, but are not limited to, one or more of the following: ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees. There may be more than one immediate owner (e.g., joint ventures).

Predecessor means an entity whose assets were acquired by the offeror or another entity (most often through merger or acquisition) and whose affairs are now carried out by the offeror or the other entity under a new name.

Taxpayer identification number means the number required by the Internal Revenue Service (IRS) to be used by the offeror to report income tax and other returns. It may be either a Social Security Number or an Employer Identification Number.

Unique entity identifier (UEI) has the meaning provided in the clause at FAR 52.204-13, System for Award Management-Maintenance, of this solicitation.

(b) Identifiers. The Offeror shall obtain and provide the following identifying information:

(1) Unique entity identifier (UEI).

(i) The Offeror shall obtain a UEI to register in SAM. The Government will independently validate the existence and uniqueness of the Offeror before assigning a UEI to the Offeror. Go to https://www.sam.gov for instructions on obtaining a UEI.

(ii) The Offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "Unique Entity Identifier" followed by the UEI that identifies the Offeror's name and address exactly as stated in the offer. The Offeror shall also enter its EFT indicator, if applicable.

(iii) The Contracting Officer will use the UEI to verify that the Offeror has an active Federal Government contracts registration in SAM.

(2) Taxpayer identification number (TIN).

(i) The Offeror shall provide its TIN or related information to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d); reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M; and implementing regulations issued by the IRS. The Offeror shall consent for TIN validation; and

(3) Commercial and Government Entity (CAGE) code.

(i) The Offeror shall provide a CAGE code and legal business name (Do not use a "doing business as" name) for-

(A) Itself;

(B) Its immediate owner(s), if any;

(C) Its highest-level owner, if any; and

(D) Any predecessor(s), or predecessor of an Offeror's predecessor, that held a Federal contract or grant within the last three years.

(ii) If the Offeror is in the United States or its outlying areas and does not already have a CAGE code assigned, the DLA CAGE Branch will assign a CAGE code to the Offeror as a part of the SAM registration process. For information on obtaining a CAGE code go to https://cage.dla.mil/.

(iii) The Offeror shall get from any immediate and/or highest-level owner(s) their respective CAGE code(s) to provide the code(s) as part of the registration (FAR 52.204-7(b)(3)(i)).

(iv) If the Offeror is located outside of the United States or its outlying areas, and does not already have a CAGE code assigned, the Offeror may obtain a CAGE code as indicated in the following table.

If the Offeror is…	Then…
Located in a country that is a member of the North Atlantic Treaty Organization (NATO) or a sponsored nation	Contact the appropriate National Codification Bureau (https://www.nato.int/structur/ac/135/about/contacts)
Located in a country that is not a member of NATO or a sponsored nation	Contact the NATO Support and Procurement Agency (NSPA) (https://eportal.nspa.nato.int/AC135Public/scage/CageList.aspx)

(c) Representations and certifications.

(1) The following FAR solicitation provisions contain entity-level representations and certifications that the Offeror shall submit as part of their Federal Government contracts registration in SAM:

Provision Title Date
52.204-5 Women-Owned Business (Other Than Small Business) Oct 2014
52.209-2 Prohibition on Contracting with Inverted Domestic Corporations-Representation Nov 2015
52.209-5 Certification Regarding Responsibility Matters Aug 2020
52.209-11 Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law Feb 2016
52.219-1 Small Business Program Representations Feb 2024
52.219-1 Alt I Small Business Program Representations, with its Alternate I Feb 2024
52.219-1 Alt II Small Business Program Representations, with its Alternate II Mar 2023
52.226-2 Historically Black College or University and Minority Institution Representation Oct 2014
(2) By submitting its offer, the Offeror verifies that, as of the date of its offer, its representations and certifications posted electronically in SAM for the provisions listed in paragraph (c)(1) of this provision are current, accurate, and complete. The Offeror's representations and certifications in SAM are hereby incorporated by reference into its offer.

(d) Other information. The Offeror shall provide more information on its business operations and type that is necessary to be considered for award of certain contracts and financial information necessary to receive payment under contracts.

(End of provision)

52.211-14 Notice of Priority Rating for National Defense, Emergency Preparedness, and Energy Program Use. 2008-04

Notice of Priority Rating for National Defense, Emergency Preparedness, and Energy Program Use (Apr 2008)

Any contract awarded as a result of this solicitation will be **DO-C2** rated order; DO rated order certified for national defense, emergency preparedness, and energy program use under the Defense Priorities and Allocations System (DPAS) (15 CFR700), and the Contractor will be required to follow all of the requirements of this regulation.

(End of provision)

52.215-1	Instructions to Offerors-Competitive Acquisition. (Deviation 2026-O0038)	2026-02

Instructions to Offerors-Competitive Acquisition (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

In writing, writing, or written means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

Proposal modification is a change made to a proposal before the request for proposal closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision is a change to material elements of a proposal made after the request for proposal closing date, at the request of or as allowed by a Contracting Officer, as the result of negotiations.

Time, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) Amendments to requests for proposals. If this request for proposal (RFP) is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this RFP by the date and time specified in the amendment(s).

(c) Submission, modification, revision, and withdrawal of proposals.

(1)

(i) Proposals and modifications to proposals shall be-

(A) Submitted using the method and the format specified in the RFP;

(B) Addressed to the office specified in the RFP; and

(C) Showing the time and date specified for receipt, the RFP number, and the name and address of the offeror.

(ii) Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i)(B) and (C) of this provision.

(2) The first page of the proposal must show-

(i) The RFP number;

(ii) The name, address, and telephone number of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the RFP and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone number (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this RFP; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3)

(i) Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the Government office designated in the RFP by the time specified in the RFP. If no time is specified in the RFP, the time for receipt is 4:30 p.m., local time, for the designated

Government office on the date that proposal or revision is due.

(ii)

(A) Any proposal, modification, or revision received at the Government office designated in the RFP after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and-

(1) If it was transmitted through an electronic commerce method authorized by the RFP, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the RFP, and urgent Government requirements preclude amendment of the RFP, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the RFP on the first work day on which normal Government processes resume.

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral RFPs may be withdrawn orally. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the RFP, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this RFP in English, unless otherwise permitted by the RFP, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the RFP.

(6) Offerors may submit modifications to their proposals at any time before the RFP closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) Offer expiration date. Proposals in response to this RFP will be valid for the number of days specified on the RFP cover sheet (unless a different period is proposed by the offeror).

(e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall-

(1) Mark the title page with the following legend:

Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award.

(1) The Government intends to award a contract or contracts resulting from this RFP to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the RFP.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without negotiations with offerors (except clarifications as described in FAR 15.202(b)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct negotiations if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly evaluated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(8) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(9) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further

action by either party.

(10) If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(i) The agency's evaluation of the significant weaknesses or deficiencies in the debriefed offeror's offer.

(ii) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.

(iii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(iv) A summary of the rationale for award.

(v) For acquisitions of commercial products, the make and model of the product to be delivered by the successful offeror.

(vi) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the RFP, applicable regulations, and other applicable authorities were followed by the agency.

(vii) For DoD contracts in excess of $10 million but not in excess of $100 million with a small business or nontraditional defense contractor (10 U.S.C. 3014), an option for the contractor to request disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(viii) For award of a DoD contract in excess of $100 million, disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(End of provision)

52.215-1	Instructions to Offerors-Competitive Acquisition.	2026-02	Alternate I	2026-02

(Deviation 2026-O0038)
(Alternate I)

Alternate I-(Feb 2026) (Deviation 2026-O0038). As prescribed in 15.110(a)(1), substitute the following paragraph (f)(4) for paragraph (f)(4) of the provision:

(f)(4) The Government intends to evaluate proposals and award a contract after conducting negotiations with offerors whose proposals have been determined to be within the competitive range. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals. Therefore, the offeror's initial proposal should contain the offeror's best terms from a price and technical standpoint.

52.215-16 Facilities Capital Cost of Money. 2003-06

Facilities Capital Cost of Money (June 2003)

(a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in FAR 31.205-10(b) are met. One of the allowability criteria requires the prospective Contractor to propose facilities capital cost of money in its offer.

(b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

(End of provision)

52.215-22	Limitations on Pass-Through Charges-Identification of Subcontract Effort. (Deviation 2026-O0038)	2026-02

Limitations on Pass-Through Charges-Identification of Subcontract Effort (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. Added value, excessive pass-through charge, subcontract, and subcontractor, as used in this provision, are defined in the clause of this request for proposals entitled "Limitations on Pass-Through Charges" (FAR 52.215-23).

(b) General. The offeror's proposal shall exclude excessive pass-through charges.

(c) Performance of work by the Contractor or a subcontractor.

(1) The offeror shall identify in its proposal the total cost of the work to be performed by the offeror, and the total cost of the work to be performed by each subcontractor, under the contract, task order, or delivery order.

(2) If the offeror intends to subcontract more than 70 percent of the total cost of work to be performed under the contract, task order, or delivery order, the offeror shall identify in its proposal-

(i) The amount of the offeror's indirect costs and profit/fee applicable to the work to be performed by the subcontractor(s); and

(ii) A description of the added value provided by the offeror as related to the work to be performed by the subcontractor(s).

(3) If any subcontractor proposed under the contract, task order, or delivery order intends to subcontract to a lower-tier subcontractor more than 70 percent of the total cost of work to be performed under its subcontract, the offeror shall identify in its proposal-

(i) The amount of the subcontractor's indirect costs and profit/fee applicable to the work to be performed by the lower-tier subcontractor(s); and

(ii) A description of the added value provided by the subcontractor as related to the work to be performed by the lower-tier subcontractor(s).

(End of provision)

52.216-1	Type of Contract. (Deviation 2026-O0038)	2026-02

Type of Contract (Feb 2026) (Deviation 2026-O0038)

The Government contemplates award of a **Firm-Fixed-Price (F-F-P)** contract resulting from this solicitation.

(End of provision)

52.222-5	Construction Wage Rate Requirements-Secondary Site of the Work. (Deviation 2026-O0038)	2026-02

Construction Wage Rate Requirements-Secondary Site of the Work (Feb 2026) (Deviation 2026-O0038)

(a)

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

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

(b)

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

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

(End of provision)

52.225-10	Notice of Buy American Requirement-Construction Materials.	2014-05

Notice of Buy American Requirement-Construction Materials (May 2014)

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

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

(c) Evaluation of offers.

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

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

(d) Alternate offers.

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

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

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

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

(ii) May be accepted if revised during negotiations.

(End of provision)

52.228-1 Bid Guarantee. 1996-09

Bid Guarantee (Sept 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, *e.g.,* bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds-

(1) To unsuccessful bidders as soon as practicable after the opening of bids; and

(2) To the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be **20%** of the bid price or **$3,000,000.00,** whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of clause)

52.232-28 Invitation to Propose Performance-Based Payments. 2000-03

Invitation to Propose Performance-Based Payments (Mar 2000)

(a) The Government invites the offeror to propose terms under which the Government will make performance-based contract financing payments during contract performance. The Government

will consider performance-based payment financing terms proposed by the offeror in the evaluation of the offeror's proposal. The Contracting Officer will incorporate the financing terms of the successful offeror and the FARclause, Performance-Based Payments, at FAR 52.232-32, in any resulting contract.

(b) In the event of any conflict between the terms proposed by the offeror and the terms in the clause at FAR 52.232-32, Performance-Based Payments, the terms of the clause at FAR 52.232-32 shall govern.

(c) The Contracting Officer will not accept the offeror's proposed performance-based payment financing if the financing does not conform to the following limitations:

(1) The Government will make delivery payments only for supplies delivered and accepted, or services rendered and accepted in accordance with the payment terms of this contract.

(2) The terms and conditions of the performance-based payments must-

(i) Comply with FAR 32.1004;

(ii) Be reasonable and consistent with all other technical and cost information included in the offeror's proposal; and

(iii) Their total shall not exceed 90 percent of the contract price if on a whole contract basis, or 90 percent of the delivery item price if on a delivery item basis.

(3) The terms and conditions of the performance-based financing must be in the best interests of the Government.

(d) The offeror's proposal of performance-based payment financing shall include the following:

(1) The proposed contractual language describing the performance-based payments (see FAR 32.1004 for appropriate criteria for establishing performance bases and performance-based finance payment amounts).

(2) A listing of-

(i) The projected performance-based payment dates and the projected payment amounts; and

(ii) The projected delivery date and the projected payment amount.

(3) Information addressing the Contractor's investment in the contract.

(e) Evaluation of the offeror's proposed prices and financing terms will include whether the offeror's proposed performance-based payment events and payment amounts are reasonable and consistent with all other terms and conditions of the offeror's proposal.

(End of Provision)

52.233-2	Service of Protest. (Deviation 2026-O0038)	2026-02

Service of Protest (Feb 2026) (Deviation 2026-O0038)

(a) Protests, (as defined in FAR 33.102), that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), must be served on the Contracting Officer identified in the solicitation by obtaining written and dated acknowledgment of receipt from them.

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

US Army Corps of Engineers

ATTN: CESWF-CT, Shayla J. Lucas

819 Taylor Street, Rm# 2A17

Fort. Worth, TX 76102-0300

Email: SWF-Protest@usace.army.mil

(End of provision)

52.252-1	Solicitation Provisions Incorporated by Reference.	1998-02

Solicitation Provisions Incorporated by Reference (Feb 1998)

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

Revolutionary Federal Acquisition Regulation Overhaul (RFO):

https://www.acquisition.gov/far-overhaul

Department of Defense FAR Supplement (DFARS) RFO Class Deviations:

https://www.acq.osd.mil/dpap/dars/dfars_far_overhaul_class_deviations.html

USACE Acquisition Instruction (UAI):

https://www.usace.army.mil/Business-With-Us/Contracting/Resources/

(End of provision)

52.252-3	Alterations in Solicitation.	1984-04

Alterations in Solicitation (Apr 1984)

Portions of this solicitation are altered as follows:

____ ____ ____

(End of clause)

52.252-5	Authorized Deviations in Provisions.	2020-11

Authorized Deviations in Provisions (Nov 2020)

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

(b) The use in this solicitation of any **RFO/DFARS overhaul** (48 CFR Chapter **2**) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of provision)

DFARS Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.204-7019	Notice of NIST SP 800-171 DoD Assessment Requirements.	2023-11		

NOTICE OF NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (NOV 2023)

(a) Definitions.

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

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

(b) Requirement. In order to be considered for award, if the Offeror is required to implement NIST SP 800-171, the Offeror shall have a current assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) (see 252.204-7020) for each covered contractor information system that is relevant to the offer, contract, task order, or delivery order. The Basic, Medium, and High NIST SP 800-171 DoD Assessments are described in the NIST

SP 800-171 DoD Assessment Methodology located at https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf.

(c) Procedures.

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

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

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

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

(i) The email shall include the following information:

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

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

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

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

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

(D) Date the assessment was completed.

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

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

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

System Security Plan CAGE Codes supported by this plan
Brief description of the plan architecture Date of assessment Total
Score Date score of 110 will achieved

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

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

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

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

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

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

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

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

(3) Accessibility.

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

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

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

(End of provision)

252.204-7024	Notice on the Use of the Supplier Performance Risk System.	2023-03

NOTICE ON THE USE OF THE SUPPLIER PERFORMANCE RISK SYSTEM (MAR 2023)

(a) Definitions. As used in this provision-

"Item risk" means the probability that a product, based on intended use, will introduce performance risk resulting in safety issues, mission degradation, or monetary loss.

"Price risk" means a measure of whether a proposed price for a product or service is consistent with historical prices paid for that item or service.

"Supplier risk" means the probability that an award may subject the procurement to the risk of unsuccessful performance or to supply chain risk (see Defense Federal Acquisition Regulation

Supplement 239.7301).

(b) The Supplier Performance Risk System (SPRS), available at https://piee.eb.mil/, will be used in the evaluation of the Quoter or Offeror's performance. SPRS retrieves item, price, quality, delivery, and contractor information on contracts from Government reporting systems in order to develop risk assessments.

(c) The Contracting Officer will consider SPRS risk assessments during the evaluation of quotations or offers received in response to this solicitation as follows:

(1) Item risk will be considered to determine whether the procurement represents a high performance risk to the Government.

(2) Price risk will be considered in determining if a proposed price is consistent with historical prices paid for a product or a service or otherwise creates a risk to the Government.

(3) Supplier risk, including but not limited to quality and delivery, will be considered to assess the risk of unsuccessful performance and supply chain risk.

(d) SPRS risk assessments are generated daily. Quoters or Offerors are able to access their risk assessments by following the access instructions in the SPRS user's guide available at https://www.sprs.csd.disa.mil/reference.htm. Quoters and Offerors are granted access to SPRS for their own risk assessment classifications only. SPRS reporting procedures and risk assessment methodology are detailed in the SPRS user's guide. The method to challenge a rating generated by SPRS is also provided in the user's guide. SPRS evaluation criteria are available at https://www.sprs.csd.disa.mil/pdf/SPRS_DataEvaluationCriteria.pdf.

(e) The Contracting Officer may consider any other available and relevant information when evaluating a quotation or an offer.

(End of provision)

252.204-7025	Notice of Cybersecurity Maturity Model Certification Level Requirements.	2025-11

NOTICE OF CYBERSECURITY MATURITY MODEL CERTIFICATION LEVEL REQUIREMENTS (NOV 2025)

(a) *Definitions*. As used in this provision, "controlled unclassified information (CUI)," "current," "Cybersecurity Maturity Model Certification (CMMC) status," "Cybersecurity Maturity Model Certification unique identifier (CMMC UID)," "Federal contract information (FCI)", and "plan of action and milestones" have the meaning given in the Defense Federal Acquisition Regulation Supplement 252.204-7021, Contractor Compliance With the Cybersecurity Maturity Model Certification Level Requirements, clause of this solicitation.

(b)(1) *Cybersecurity Maturity Model Certification (CMMC) level*. The CMMC level required by this solicitation is: ***CMMC Level 1 (Self)***. This CMMC level, or higher (see 32 CFR part 170), is required prior to award for each contractor information system that will process, store, or transmit Federal contract information (FCI) or controlled unclassified information (CUI) during performance of the contract.

(2) The Offeror will not be eligible for award of a contract, task order, or delivery order resulting from this solicitation if the Offeror does not have, for each of the contractor information systems that will process, store, or transmit FCI or CUI and that will be used in performance of a contract resulting from this solicitation-

(i) The current CMMC status entered in the Supplier Performance Risk System (SPRS) (*https://piee.eb.mil*) at the CMMC level required by paragraph (b)(1) of this provision; and

(ii) A current affirmation of continuous compliance with the security requirements identified at 32 CFR part 170 in SPRS.

(c) *Plan of action and milestones*. If the Offeror has a CMMC Status of Conditional, the Offeror shall successfully close out a valid plan of action and milestones (32 CFR 170.21) to achieve a CMMC Status of Final.

(d) *CMMC unique identifiers*. The Offeror shall provide, in the proposal, the CMMC unique identifier(s) (CMMC UIDs) issued by SPRS for each contractor information system that will process, store, or transmit FCI or CUI during performance of a contract, task order, or delivery order resulting from this solicitation. The Offeror also shall update the list when new CMMC UIDs are generated in SPRS. The CMMC UIDs are provided in SPRS after the Offeror enters the results of self-assessment(s) for each such information system.

(End of provision)

252.215-7012	Requirements for Submission of Proposals via Electronic Media.	2018-01

REQUIREMENTS FOR SUBMISSION OF PROPOSALS VIA ELECTRONIC MEDIA (JAN 2018)

The Offeror shall submit the cost portion of the proposal via the following electronic media: ____ [Insert media format, e.g., electronic spreadsheet format, electronic mail, etc.]

(End of provision)

252.215-7013	Supplies and Services Provided by Nontraditional Defense Contractors.	2023-01

SUPPLIES AND SERVICES PROVIDED BY NONTRADITIONAL DEFENSE CONTRACTORS (JAN 2023)

Offerors are advised that in accordance with 10 U.S.C. 3457, supplies and services provided by a nontraditional defense contractor, as defined in DFARS 202.101, may be treated as commercial products or commercial services. The decision to apply commercial product or commercial service procedures to the procurement of supplies and services from a nontraditional defense contractor does not require a commercial product or commercial service determination and does not mean the supplies or services are commercial.

(End of provision)

SECTION 00 21 16
INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

1. GENERAL DESCRIPTION OF WORK

This construction project is for the expansion of hangar doors at Facility B90176, Fort Hood, Texas, to support the HADES mission and accommodate the ME-11B (Bombardier Global 6500) aircraft. The project includes replacing two existing hangar doors each with a single 120-foot-wide rolling sectional door of equal height vertical fabric door with two sections of increased height, requiring structural modifications to the pre-engineered metal building (PEMB).

Exterior improvements involve extending the trench drain and adjusting adjacent man-doors and wall mounted utility lines. Interior work consists of installing higher-capacity motors for the new door, refinishing and restriping affected areas of the hangar floor, making minor partitions and finish modifications to support new flight group requirements

2. OFFEROR'S QUESTIONS AND COMMENTS

a. All questions and/or comments are to be submitted via ProjNet at http://www.projnet.org/projnet. To submit and review bid inquiry items, bidders will need to be a current registered user or self-register into system. To self-register go to web page, enter email and bidder inquiry key, click Quick Add link, select agency USAGE, enter Key for this solicitation listed below, and your e-mail address, click Continue. Fill in all required information and click Add User. Verify that information on next screen is correct and click continue. From this page you may view all bidder inquiries or add inquiry. Bidders will receive an acknowledgement of their question via email, followed by an answer to their question after it has been processed by our technical team.

b. The Solicitation Number is: **W9126G26RA087**
The Bidder Inquiry Key is: **95NKA6-GDCFPI**

c. Last day to submit ProjNet questions is seven calendar days prior to bid closure date in order to ensure adequate time is allotted to form an appropriate response and amend the solicitation, if necessary. If the system is not closed in a timely manner, an inquiry posted within seven calendar days of the receipt of proposals will still be regarded as untimely and may not be afforded a substantive response.

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d. Offerors are requested to ask only one question per inquiry. If multiple questions are included, only the first one will be answered.

e. Oral explanations or instructions are not binding. Any information given to an offeror, whether oral or through ProjNet, that impacts the solicitation and/or offer will not be binding unless given in the form of a written amendment to the solicitation.

f. Offerors are requested to review the specification in its entirety, review the Bidder Inquiry System for answers to questions prior to submission of a new inquiry. The call center operates weekdays from 8AM to 5PM U.S. Central Standard Time Zone (Chicago). The telephone number for the Call Center is 833-389-1097 and 217-367- 3273.

3. PROPOSAL EXPENSES AND PRE-CONTRACT COSTS

This solicitation does not commit the Government to pay as a direct charge any costs incurred by the Offeror in the preparation and submission of its proposal or revisions. A stipend is not authorized.

4. NEGOTIATIONS

The Government intends to evaluate proposals and award a contract without negotiations with offerors (except clarifications as described in RFO 15.202(a)(2)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The concept of a simultaneous competitive range and a common cut-off date for Final Proposal Revisions does not apply to this acquisition methodology.

5. HIGHEST TECHNICALLY RATED WITH A FAIR AND REASONABLE PRICE (HTR-FRP) APPROACH

Award will be made to the responsible Offeror with the highest technically rated proposal found to have a fair and reasonable price. The HTR-FRP approach prioritizes technical merit and forbids the tradeoff between non-price factors and price. This approach prioritizes the best possible performance, provided the price is determined to be fair and reasonable. Here, all proposals are initially evaluated based solely on the non-price factors specified in the RFP. Only the price of the highest-ranked technical proposal is then evaluated to ensure it is fair and reasonable. Price is not an evaluation factor for the purpose of ranking proposals; it will be evaluated for fairness and reasonableness for the highest technically rated proposal in accordance with RFO 15.103-3.

6. SITE VISIT

Pursuant to Contract Clause "RFO 52.236-3, Site Investigation and Conditions Affecting the Work," prospective offerors will be permitted to inspect the site where services are to be performed and to satisfy themselves as to all general and local conditions that may affect the cost of performance of the Contract to the extent such information is reasonably obtainable. Offerors are urged and expected to inspect the site where the work will be performed. See the site visit information below:

Date: 22 June 2026
Time: 10:00am, CST
Location: Central Texas Area Office (CTAO) at Fort Hood

Bldg. 4617 72nd St and Sante Fe Avenue
Ft. Hood, TX 76544
POC: Brad D. Butts
EMAIL: brad.d.butts@usace.army.mil
Phone: (254)220-2126

Note: Offerors and subcontractors wishing to participate must submit a complete listing of all personnel to attend the preproposal site visit, via encrypted email, to the referenced Base Access POC, a minimum of five (5) business days prior to the preproposal site visit.

7. PROPOSAL SUBMISSION

a. GUIDING PRINCIPLES FOR PROPOSAL SUBMISSION & REVIEW

This section outlines the foundational principles governing the submission and evaluation of all proposals. Adherence to these principles is mandatory.

(1) Completeness and Accuracy: Proposals must be submitted with all required information. Assumptions made by an offeror in place of required data may render the proposal non-compliant. If specific information is unavailable, this must be explicitly stated and explained.

(2) Regulatory Adherence and Citation: All submissions are reviewed for strict adherence to the current Revolutionary Federal Acquisition Regulation (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), Army Federal Acquisition Regulation Supplement (AFARS), USACE Acquisition Instructions (UAI), and all related policies, including all changes from the Revolutionary FAR Overhaul (RFO).

(3) Currency of Information: Offerors are solely responsible for ensuring their proposals comply with all regulations and amendments in effect at the time of solicitation.

(4) Mandatory Submission Requirements: Failure to provide the following documentation with the proposal may eliminate it from further consideration.

b. PROPOSAL SUBMISSION REQUIREMENTS

(1) Each volume shall be submitted electronically via the Procurement Integrated Enterprise Environment (PIEE) Solicitation module; no hard copies will be accepted. Any portion of the proposal that is changed (as a result of negotiations or proposal revisions) should be annotated and dated. Each volume shall be clearly labeled with its Title and Volume number. Each paragraph should be single spaced and shall be separated by at least one blank line. All narratives shall be in Adobe PDF format and shall be on 8 ½ x 11 size pages and a standard, 12-point minimum font size applies. Schedule Diagram, Drawings shall be in Adobe PDF format and shall be on 11 x 17 size pages. Where page limitations are specified, 11 x 17 size

pages will be considered as one (1) page. Arial or New Times Roman fonts are required.

Page limitations, where specified in the RFP, shall be considered a maximum. Pages that exceed the required page limitations will not be evaluated. Additional pages over the maximum allowed will be removed or not read and will not be evaluated by the Government. Tables and illustrations may use a reduced font size no less than 8-point and may be produced in landscape mode. All volumes of the proposal must be received by the closing date and time set for receipt of proposals. Offerors may use compressions utility software such as WinZip or PKZip to reduce file size and facilitate transmission.

Offerors are advised to follow the PIEE instructions for uploading files. Additional instructions/guidance can be found at https://pieetraining.eb.mil/wbt/sol/Posting_Offer.pdf

Interested parties shall submit responses no later than the date specified on the solicitation document. The time & date of proposal receipt will be the delivery time & date recorded within PIEE suite at https://piee.eb.mil/. Do not assume that electronic submission will occur instantaneously. Large files may take some time to upload.

Offerors should time their upload effort with prudence by not waiting until the last few minutes—this will allow for unexpected delays in the transmittal process and troubleshooting. It is the offeror's responsibility to obtain written confirmation of receipt of all electronic files of the full proposal by the Fort Worth District Contracting office. In the event that the Solicitation Module is down, an alternate method for proposal submission will be provided only after obtaining approval from the Contracting Officer **shayla.j.lucas@usace.army.mil** to use an alternate submission method. Offerors are responsible for ensuring electronic copies are virus-free and shall run an anti-virus scan before submission.

(2) The following volumes of material shall be submitted:

Volume	Title	Digital Copies	Maximum Pages
I	TECHNICAL PROPOSAL	1	20 Pages
II	PRICE PROPOSAL	1	No page limitation

(3) Proposal Formats/Sections:

(a) The first page of the proposal for each volume must include the elements found at 52.215-1(c)(2).

(b) Table of Contents. Each volume of the proposal shall contain a detailed table
of contents and must be bookmarked. If more than one Adobe PDF file is used for a volume, the complete table of contents shall be included in each. The offerors shall not submit any materials not required by this solicitation.

(c) Do not cross-reference similar material in the Past Performance/Technical Proposal with the Price Proposal. **No dollar amounts from Volume II shall be included in Volume I.**

(d) As this is a competitive negotiation acquisition, there is no public bid opening, and no information will be given out as to the number of offerors or the results of the competition until all awards are made.

(e) Bonds Format: Offerors shall submit bid bonds (Standard Form 24) in electronic format. Electronic copies of bid bonds shall be included in Volume II: Offerors Certifications and Price. Hard copies of bid bonds with the raised seal are no longer required to be mailed in at this time and are not to be sent to the contracting office. Verification of Bid Bonds with sureties will be completed during the evaluation process and before award. Bid bond submissions shall be due by the proposal due date and time. Offerors are responsible for the accurate submission of the Bid Bonds with all signatures and seals applied.

(4) Joint Venture and LLC Proposal Requirements:

(a) For Joint Ventures:

- Joint Venture Agreement: A complete copy of the JV agreement and any addendum must be submitted with the proposal. For 8(a), HUBZone, or Mentor-Protege JVs, the agreement must comply with **13 CFR Part 124**, **13 CFR Part 126**, and **13 CFR Part 125**, respectively.
- Representations and Certifications: A small business JV offeror must submit the representation required in Section 00 45 00 and RFO solicitation provision 52.219-1, Small Business Program Representations, for all applicable small business categories (Small, SDVOSB, WOSB, EDWOSB, HUBZone).

(b) Limited Liability Companies (LLCs):

- Proof of Signature Authority: The offeror must submit a copy of the operating agreement or other documentation that clearly demonstrates the authority of the signatory to bind the LLC to the contract.

(c) Core Joint Venture (JV) Agreement Provisions:

The submitted JV Agreement should, at a minimum, contain the following provisions to be considered compliant. If the JV Agreement is general and does not address the resources and responsibilities specific to the proposed work, this must be addressed in an addendum.

- **Purpose & Management:** The agreement must state the specific purpose of the JV and designate the small business partner as the "managing venturer."
- **Ownership & Profit:** For a separate legal entity JV, the small business must own at least 51%. It must also state that profits will be distributed commensurately with the work performed by each partner.
- **Bank Account:** The agreement must provide for a special bank account in the name of the JV, requiring consent from all parties for any withdrawals.
- **Resources & Responsibilities:** The agreement must itemize the resources to be provided by each partner and specify each party's responsibilities for contract performance. For Mentor-Protégé JVs, reference 13 CFR 125.8(b)(vi) and (vii), for 8(a), reference 13 CFR 124.513(c)(6) and (7), and for HUBZone, reference 13 CFR 126.616(c)(6) and (7).
- **Performance & Records:** This agreement binds all parties, jointly and severally, to uphold the terms and guarantee the full performance of all contractual duties. All official records pertaining to this agreement shall be securely maintained at the designated office of the managing venturer.

(d) Performance of Work Requirements:

- **JV Work Share:** The joint venture as a whole must perform the applicable percentage of work required by the prime contract's limitation on subcontracting clause.
- **Small Business Work Share:** The small business partner(s) must perform at least 40% of the work done by the joint venture itself. This work must be substantive and not just administrative in nature. If the small business partner is not expected to exceed the 40% workshare on this project individually, the JV must submit the workshare (in dollars) between each partner on all other projects to support that the workshare for this contract will result in compliance with the 40% requirement for the aggregate workshare across all contracts.

c. <u>PROPOSAL FILES</u>

(1) Format. The submission shall be clearly indexed and logically assembled. Each volume shall be clearly identified and shall begin at the top of a page. All pages of each volume shall be appropriately numbered and identified by the complete company name, date and solicitation number in the header and/or footer.

(2) File Naming Convention:

Files submitted to PIEE shall be named as follows:

W9126G26RA087_COMPANY_NAME_VOLUME I
W9126G26RA087_COMPANY_NAME_VOLUME II

(3) Content Requirement.

(a) Each offeror must submit a TECHNICAL PROPOSAL (Volume I), OFFEROR'S CERTIFICATIONS AND PRICE PROPOSAL (Volume II). All volumes of the proposal must be submitted as separate volumes/files as outlined in paragraph 2 above. Do not cross-reference similar material between volumes.

(b) Proposals shall be received by the closing date and time set for receipt of proposals.

(c) Do not include exceptions to the terms and conditions of the solicitation in your proposal. Should the offer include any standard company terms and conditions that conflict with the terms and conditions of the solicitation, the offer may be determined "unacceptable" and thus ineligible for award. Should the offeror have any questions related to specific terms and conditions, these should be resolved prior to the submission of the offer.

(d) The data criteria specified for each factor identified in Section 00 22 16, shall be submitted as part of the proposal.

8. TARGET PRICE RANGE

The target price range for this project is between **$6,500,000.00 and $8,500,000.00.**

9. DEFINITIONS AND RATINGS

Significant Strength. An aspect of an Offeror's proposal with appreciable merit or will exceed specified performance or capability requirements to the considerable advantage of the Government during contract performance.

Strength. An aspect of an offeror's proposal with merit or will exceed specified performance or capability requirements to the advantage of the Government during contract performance.

Weakness. A flaw in the proposal that increases the risk of unsuccessful contract performance. See RFO 15.001.
Significant Weakness. A flaw in the proposal that appreciably increases the risk of unsuccessful contract performance. See RFO 15.001.

Deficiency. Is any part of an offer that does not conform to a material requirement of a RFP. A material requirement is one that affects price, quantity, quality, or delivery, or that the RFP requires to be met at the time of proposal submission. See RFO 15.001.

Uncertainty. Any aspect of a non-cost/price factor proposal for which the intent of the offer is unclear (e.g., more than one way to interpret the offer or inconsistencies in the proposal indicating that there may have been an error, omission, or mistake).

In accordance with the DOD Source Selection Guide, Section 3.1, the Army methodology for evaluating Technical Approach and Related Risk is the Combined Technical/Risk Rating (see Table below). This methodology considers risk, in conjunction with the strengths, weaknesses, significant weaknesses, uncertainties, and deficiencies in determining technical ratings.

Combined Technical/Risk Rating Method	
Rating	**Description**
Outstanding	Proposal demonstrates an exceptional approach and understanding of the requirements and contains multiple strengths and/or at least one significant strength, and risk of unsuccessful performance is low.
Good	Proposal indicates a thorough approach and understanding of the requirements and contains at least one strength or significant strength, and risk of unsuccessful performance is low to moderate.
Acceptable	Proposal meets requirements and indicates an adequate approach and understanding of the requirements, and risk of unsuccessful performance is no worse than moderate.
Marginal	Proposal has not demonstrated an adequate approach and understanding of the requirements, and/or risk of unsuccessful performance is high.
Unacceptable	Proposal does not meet requirements of the solicitation and, thus, contains one or more deficiencies and is unawardable, and/or risk of performance is unacceptably high.

Note: Risk will not be rated separately; the Adjective Risk Ratings table is provided to define risk that is included in the combined technical/risk ratings.

Adjectival Risk Rating	**Description**
Low	Proposal may contain weakness/weaknesses which have low potential to cause disruption of schedule, increased cost, or degradation of performance. Normal contractor emphasis and normal Government monitoring will likely be able to overcome any difficulties.
Moderate	Proposal contains a significant weakness or combination of weaknesses which may have a moderate potential to cause disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will likely be able to overcome any difficulties.

High	Proposal contains a significant weakness or combination of weaknesses which is likely to have high potential to cause significant disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will unlikely be able to overcome any difficulties.
Unacceptable	Proposal contains a deficiency or a combination of significant weaknesses that causes an unacceptable level of risk of unsuccessful performance.

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

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

Section 00 22 00 - Supplementary Instructions

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.217-5	Evaluation of Options. (Deviation 2026-O0038)	2026-02		

Evaluation of Options (Feb 2026) (Deviation 2026-O0038)

Except when it is determined in accordance with FAR 17.202(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

SECTION 00 22 16
DESIGN-BID-BUILD SELECTION PROCEDURES

Award will be made to the Offeror whose proposal represents the best overall value through the HTR-FRP approach. The HTR-FRP approach prioritizes technical merit and forbids the tradeoff between non-price factors and price. The approach prioritizes the best possible performance, provided the price is determined to be fair and reasonable. Here, all proposals are initially evaluated based solely on the non-price factors specified in the RFP. Only the price of the highest-ranked technical proposal is then evaluated to ensure it is fair and reasonable. The non-price evaluation factors are in descending order of importance: Past Performance and Construction Schedule. Price is not an evaluation factor for the purpose of ranking proposals; it will be evaluated for fairness and reasonableness for the highest technically rated proposal in accordance with RFO 15.103-3. Relative weights among technical factors are provided in this Section. The Source Selection Evaluation Board (SSEB) reviews, evaluates, and rates the proposals against the source selection criteria in the RFP.

BASIS FOR AWARD

The Contracting Officer will award a single firm-fixed-price contract to the Offeror responsible that submits the highest technically rated proposal with a price that is determined to be fair and reasonable. This source selection will be conducted in accordance with the HTR-FRP approach described in RFO 15.103-3. Under this approach, proposals will first be evaluated and ranked based on the non-price factors only. Price is not an evaluation factor for the purpose of ranking proposals and will not be considered during the technical evaluation. After the Source Selection Authority (SSA) determines the highest technically rated proposal, the price of only that proposal will be evaluated for fairness and reasonableness in accordance with RFO Subpart 15.4. If the price of the highest technically rated proposal is determined to be fair and reasonable, that proposal will be selected for award. If the price is determined not to be fair and reasonable, the Government will reject that offer and proceed to evaluate the price of the next highest technically rated proposal. This sequential approach will continue until a contract is awarded to the highest technically rated responsible offeror with a fair and reasonable price. The Government will not award a contract to an Offeror whose proposal contains a deficiency as defined in RFO 15.001.

VOLUME I: PAST PERFORMANCE/TECHNICAL PROPOSAL			
FACTOR	**LOCATION**	**DESCRIPTION**	**RELATIVE IMPORTANCE**
FACTOR 1	Vol I, TAB A	PAST PERFORMANCE	MOST IMPORTANT FACTOR
FACTOR 2	Vol I, TAB B	TECHNICAL APPROACH	LESS IMPORTANT THAN FACTOR 1

NOTE: All evaluation factors, other than price, when combined, are considered approximately equal to price.

FACTOR 1 - PAST PERFORMANCE:

TAB A - FACTOR 1 - PAST PERFORMANCE refers to the quality of relevant and recent project experience. This tab shall contain past performance information regarding same/similar projects that demonstrate the experience of the offeror and/or proposed team. The past performance evaluation factor assesses the degree of confidence the Government has in an offeror's ability to supply products and services that meet users' needs, based on a demonstrated record of performance.

A. Submission Requirements for Factor 1:

Offerors shall submit no more than five Government and/or commercial projects for Construction which are recent and relevant to the efforts required by this solicitation as defined below. Use the attached Construction Past Performance Worksheet (Attachment 1) to submit construction experience. Limit each worksheet to no more than three pages.

Relevant: Demonstrate the experience of the offeror and/or proposed team on projects same/similar in SIZE, SCOPE, and COMPLEXITY to that described in the solicitation. Offerors shall identify and describe the relevancies for each of the projects submitted compared to the scope of this project. The Government will evaluate the information provided in making the relevancy determination.

Recent: All projects submitted for construction experience must have been completed within six years from the date of the solicitation. The Government will consider projects completed within six (6) years of the solicitation issuance date to be recent. If a project is not recent, the Government will not evaluate it further.

If any firm has multiple functions or divisions, limit the project examples to those performed by the division or unit submitting the offer. If projects were design-bid-build, identify them as such. If the Offeror is a Joint Venture (JV) and past performance cannot be provided as a JV, each partner shall submit past performance information. Combined number of projects submitted shall be no more than the number allowed.

Past Performance Assessment Questionnaire (PPQ) (Attachment 2) included in the solicitation is provided for the offeror or its team members to submit to the client for each project the offeror includes in its proposal for Factor 1: Past Performance that does not have a final Contractor Performance Assessment Reporting System (CPARS) evaluation or is a non-Federal Government project. Ensure correct phone numbers and email addresses are provided for the client point of contact. Completed PPQ's should be submitted with your proposal. If the offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the offeror should complete and submit with the proposal the first page of the PPQ which will provide contract and client information for the respective project(s).

Offerors should follow-up with clients/references to ensure timely submittal of questionnaires. If the client requests, questionnaires may be submitted directly to the Government's point of contact, Shayla J. Lucas via email at **shayla.j.lucas@usace.army.mil** prior to proposal closing date. Offerors shall not incorporate by reference into their proposal PPQs previously submitted for other RFPs. However, this does not preclude the Government from utilizing previously submitted PPQ information in the past performance evaluation. Do not request PPQs on projects that have a final CPARS evaluation. If a final CPARS evaluation exists and a PPQ is provided for the same project, the CPARS evaluation will be reviewed as the official past performance record for the project, and the PPQ will not be considered by the Source Selection Board or the SSA.

For USACE or other DoD projects which are underway but do not yet have a final CPARS evaluation, one PPQ per contract may be submitted; to be considered, the PPQ shall be signed by the Administrative Contracting Officer (ACO) or Contracting Officer for the contract.

Offerors are not required to submit any additional past performance information. The Government will utilize CPARS, and any other information deemed relevant to assess confidence in the Offeror's ability to perform.

Offerors are encouraged to submit completed CPARS for projects submitted for past performance experience.

Offerors may submit performance recognition documents received within the last six years, such as awards, award fee determinations, customer letters of commendation, and any other forms of performance recognition. There is no page limit for the performance recognition documents.

Offerors may submit information on past performance issues and corrective actions taken to prevent these issues from reoccurring. Discuss whether these corrective actions have been implemented on projects awarded subsequent to the performance issues, the effectiveness of the corrective actions, and POC information for the subsequent projects. Limit to no more than three pages, if submitted.

In addition to the above, the Government may review any other sources of information for evaluating past performance. Other sources may include, but are not limited to, past performance information retrieved through CPARS, using all CAGE/UEI numbers of team members (partnership, joint venture, teaming arrangement, or parent company/subsidiary/affiliate) identified in the offeror's proposal, inquiries of owner representative(s), Electronic Subcontract Reporting System (eSRS), and any other known sources not provided by the offeror.

While the Government may elect to consider data from other sources, the burden of providing detailed, current, accurate and complete past performance information rests with the Offeror.

B. Evaluation Criteria for Factor 1:

1. Relevancy Determination

a. The Government will evaluate the Offeror's past performance to determine how relevant each of the past performance projects is to the project under consideration. The Government may place greater value on projects performed as a prime contractor than as a subcontractor, depending upon overall role and relevancy considerations. Federal Government project past performance will not be rated inherently more important than non-Federal Government project past performance.

b. Projects completed outside the defined time period for recency will not be considered relevant to this solicitation.

c. More relevant past performance will typically be a stronger predictor of future success and have more influence on the past performance confidence assessment than past performance of lesser relevance.

d. Projects with lower degrees of relevance will not be as strong of predictors of likely future contract performance success and will typically have less influence on the final past performance confidence rating.

e. Projects that have little or no relevance typically do not influence the performance confidence rating; however, any projects with adverse past performance could reflect larger company-wide concerns and may impact upon the past performance confidence rating.

2. Confidence Determination

a. The SSEB will review the past performance information available to determine the quality and usefulness as it applies to performance confidence assessment. If the Government cannot establish the Offeror's relevant past performance, it reserves the right to utilize the PPQ to conduct telephone interviews on any source it deems relevant to the evaluation. References may be asked to comment on items such as quality of construction, timeliness, management of the work, subcontractor management, including timely payment to subs or suppliers, safety, relations between owner and designer or contractor, level of support for such things as as-built documentation, O&M manuals, training, correcting construction errors, warranty work, etc.

b. The Government's evaluation is not limited to past performance information on the cited example projects.

c. In determining the performance confidence rating for Past Performance, the degree of relevancy/recency of each of the considered efforts; the overall performance record of the offeror on each contract assessed; number and severity of problems, the demonstrated effectiveness of corrective actions taken (not just planned or promised); recognition documents; and trend data will be evaluated. Projects with higher degrees of relevance will typically have a greater influence on the final performance confidence rating. Projects with lower degrees of relevance will typically have less influence on the final performance confidence rating however, any projects with adverse past performance could reflect larger company-wide concerns and may impact upon the past performance confidence rating. Projects which are comparatively more recent may be better predictors of likely future success than older projects. The resulting relevant/recent assessment conclusions will then be combined, along with the assessed quality of performance on prior projects, to arrive at a single performance confidence rating for the Past Performance Factor.

d. The confidence rating will be established based on the past performance of the firms or that of its predecessor, if applicable. An entity may not establish past performance based on the past performance of its key personnel apart from that of the entity. If the Government does not obtain past performance information and cannot establish a past performance record for the Offeror through other sources, a rating of "Neutral Confidence" will be assigned.

e. If adverse past performance information is received and the Government initiates discussions, the offeror will be given the chance to respond to this information. CPARS included in the official record will be treated as if the offeror has already had an opportunity to address any adverse past performance identified during the evaluation process.

f. Although the SSEB may not rate an offeror that lacks recent, relevant past performance favorably or unfavorably with regard to past performance, the SSA may determine that a "Substantial Confidence" or "Satisfactory Confidence" past performance rating is worth more than a "Neutral Confidence" past performance rating in a best value tradeoff as long as the determination is consistent with stated solicitation criteria.

C. Evaluation and Rating System

a. A single, overall confidence rating shall be assigned to Past Performance.

b. The relevancy determination will assess the Offeror's past performance on a project-by-project basis to determine how relevant a recent effort accomplished by the Offeror is to the effort to be acquired under this solicitation.

c. The confidence rating assesses the risks associated with each Offeror's likelihood of success in performing the requirements stated in the RFP based on the Offeror's demonstrated performance on recent projects. SSEB members and the SSA may use personal knowledge or information from other sources in its evaluation of an Offeror's past performance, provided such information is consistent with the established evaluation criteria of the RFP. Offerors that have no relevant performance record will be given a neutral confidence rating.

FACTOR 2 – TECHNICAL APPROACH:

TAB B - FACTOR 2 - TECHNICAL APPROACH

A. Submission Requirements for Factor 2:

Offerors shall provide a comprehensive, well-organized description of their team's approach to successfully executing the requirements outlined in the RFP. The narrative should demonstrate a clear understanding of the scope of work, illustrate the offeror's capability to meet or exceed performance expectations and describe how the work will be delivered on time and within budget.

FACTOR 2 shall be limited to 20 pages. Tables, illustrations, and drawings are excluded from this limitation.

The Technical Approach shall include, at a minimum, the following elements:

1. Project Schedule

• Provide a detailed narrative and accompanying graphic schedules (e.g., Gantt chart) that clearly outlines all major features of work, milestones, and sequencing of work. Graphic schedules shall include, as a minimum, Activity ID, Activity Description, Original Duration, early start and early finish dates, and total float for each activity.

• The schedule must reflect a logical progression of tasks and demonstrate the reasonableness and realism of the proposed duration.

• For proposal evaluation purposes only, assume Notice to Proceed (NTP) will be issued on 10 September 2026.

NOTE: The Technical Approach factor shall include a project schedule demonstrating completion of all contract work per duration identified in Section 01 00 00.00 44

2. Disruption Mitigation

This project, located at Fort Hood, Texas, presents challenges which can impact project timelines, costs, safety, and requires careful planning and innovative solutions.

• Explain your strategy for minimizing schedule delays and cost growth, and for maintaining project safety as well as disruption to ongoing operations and adjacent activities during the construction effort.

• Include any innovative methods, staging techniques, or sequencing approaches intended to reduce impacts.

3. Project Execution Plan

Provide a comprehensive work plan describing how the project will be managed and executed from start to finish. At a minimum, address the following areas:

• Site mobilization and demobilization

• Subcontractor management

• Safety management and compliance

• Environmental compliance and sustainability measures

• Physical and information security requirements

4. Methodology and Innovation

• Describe the specific techniques, tools, frameworks, or best practices your team will use to accomplish the work.

• Highlight any innovative solutions or value-added approaches that will improve efficiency, safety, quality, or cost-effectiveness.

5. Key Personnel

• Identify all key personnel assigned to the project.

• Include their roles, responsibilities, qualifications, and relevant experience managing similar efforts.

• Explain the structure of the project team and reporting relationships.

6. Risk Management

• Provide a risk mitigation plan that identifies potential construction-related risks and outlines proactive strategies to address them.

• Include both internal and external risk factors (e.g., weather delays, supply chain issues, subcontractor performance).

7. Quality Control

• Describe how you will comply with Section 01 45 00.

• Provide your internal quality control measures that exceed the requirements of the solicitation that will be implemented to ensure that all deliverables meet contractual, regulatory, and technical requirements.

• Discuss inspection protocols, testing methods, and corrective action processes.

8. Communication Plan

• Describe how your team will communicate with the Government throughout the project lifecycle.

• Include the frequency and format of progress updates, stakeholder coordination, points of contact, and issue escalation protocols.

B. Evaluation Criteria for Factor 2:

The Government will evaluate the offeror's Technical Approach to determine the degree to which it reflects a comprehensive understanding of the requirements and the feasibility of the proposed plan to successfully execute the work. This evaluation will consider the clarity, completeness, and logic of the overall approach, as well as the offeror's ability to deliver quality results within the required timeframe and with minimal disruption to ongoing operations.

The evaluation will assess how well the offeror demonstrates an understanding of the scope of work and project objectives. This includes the offeror's ability to articulate the tasks, constraints, and operational environment in a manner that reflects a strong grasp of the technical and logistical challenges inherent in the project. Particular emphasis will be placed on the realism and feasibility of the proposed schedule. The Government will evaluate whether the submitted narrative and graphic (e.g., Gantt chart) schedules clearly identify all major features of work, milestones, and activity sequencing. The schedule will be assessed for logic, completeness, and consistency with the assumed NTP date of 10 September 2026.

The offeror's strategy for mitigating challenges such as schedule delays, cost growth, and project safety as well as minimizing disruption to ongoing operations will also be evaluated. The Government will consider the practicality and effectiveness of proposed sequencing, staging, and work-around measures intended to reduce impacts on the installation or adjacent activities. Proposals that demonstrate innovative but realistic approaches to disruption mitigation may be evaluated more favorably.

The work plan will be reviewed for its level of detail and the adequacy of its approach to

managing and executing the construction effort. This includes evaluation of the offeror's plans for site mobilization, subcontractor management, quality control, safety management, environmental compliance, and adherence to security requirements. The Government will assess how clearly the offeror presents these elements and the degree to which they contribute to overall project success.

Additionally, the methodology and techniques proposed to execute the work will be evaluated for appropriateness and effectiveness. This includes the use of industry best practices, management frameworks, construction methods, and any value-added or innovative approaches that enhance project performance, efficiency, or cost effectiveness.

The qualifications and experience of proposed key personnel will be assessed to determine their ability to successfully manage and execute the project. The evaluation will consider the clarity of team structure, the relevance of personnel experience to the scope of work, and the definition of roles and responsibilities.

The Government will review the offeror's risk mitigation plan to assess how well potential risks are identified, analyzed, and addressed. Evaluation will consider the realism of the proposed mitigation strategies and the offeror's ability to proactively manage risk throughout the project lifecycle.

The quality control approach will be evaluated based on the offeror's proposed procedures for ensuring compliance with contract requirements, including the use of inspections, testing protocols, and corrective action measures to ensure deliverable accuracy and completeness.

Finally, the Government will assess the offeror's communication approach, including how the team will maintain effective interaction with Government stakeholders throughout the project. This includes evaluation of reporting mechanisms, issue escalation procedures, and coordination practices.

VOLUME II: PRICE PROPOSAL

TAB	CONTENTS OF THE PRICE PROPOSAL
A	Proposal Cover Sheet & Acknowledgement of Amendments
B	**Price (FACTOR 3)**
C	Section 00 45 00 – Representations and Certifications
D	Bid Guarantee (Bid Bond)
E	Joint Venture Agreement (If Applicable)
F	Supplemental Data Form

General Instructions: In accordance with RFO 15.402 and 15.403-2, certified cost or pricing data are not required based on the fact that adequate competition is expected for this procurement. If after receipt of proposals the Contracting Officer

determines that there is insufficient information available to determine price reasonableness and none of the exceptions at RFO 15.403-2 apply, the Offeror may be required to submit cost or pricing data. Additionally, in the event that adequate competition is not obtained, the Contracting Officer may incorporate RFO Clause 52.215-20 entitled, “Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data,” into the solicitation and request a Certificate of Current Cost or Pricing Data**. There are no page limitations for this volume.** Proposal information included in this volume which is not directly related to Price will be disregarded.

TAB A - Proposal coversheet and acknowledgement of all amendments (SF30s) completed and signed by authorized individual of the offeror.

TAB B - **Price - FACTOR 3.** Proposed price schedule is to be completed in its entirety by all offerors to include the Subtotals and Totals section as found in Section 00 10 00 - Solicitation, CLIN Schedule.

TAB C - Section 00 45 00 – Representations and Certifications. Confirm that the Offeror’s representations and certifications have been completed in the System for Award Management (SAM). Submit the representations and certifications not entered in SAM that are included in Section 00 45 00 of this solicitation, under this tab.

TAB D - Offerors shall provide a fully executed Bid Bond as required by RFO Clause 52.228-1, Bid Guarantee electronically in Tab D. This requirement is to be completed regardless of Bid Bond requirement submission located in other parts of these instructions**. For the purposes of this Request for Proposal, please note that IAW RFO 28.001:** Bond means a written instrument executed by a bidder or contractor (the “principal”), and a second party (the “surety” or “sureties”) (except as provided in RFO 28.204), to assure fulfillment of the principal’s obligations to a third party (the “obligee” or “Government”), identified in the bond. If the principal’s obligations are not met, the bond assures payment, to the extent stipulated, of any loss sustained by the obligee.”

Bonds shall therefore be executed in the name of the legal entity, whether a joint venture, partnership, or the Prime Contractor of an informal teaming arrangement, with whom the Government would enter into a contract for a successful offeror. The entity named on the bond must be able to acquire bonding capacity on its own merits, and not as the result of indemnification from a subcontractor or third party. Compliance. Failure to comply with the RFP requirements for Price information may reduce or eliminate the offeror’s chance of being selected for award. Offerors shall ensure that the information presented in this volume is consistent and correlates with the information contained in the other proposal volumes.

TAB E - Joint Venture and LLC, if applicable. See Section 00 21 16 paragraph 7.a(4).

TAB F - Supplemental Data Form (Attachment 3) must be filled out in its entirety by all Offerors.

Price Evaluation:

Adjectival ratings shall not be used for offerors' price proposals. The Government will fully evaluate, if applicable, all priced Contract Line-Item Numbers (CLINs) for award. For award purposes, the total proposed price for all CLINs will be added together into a total sum (contract value). The Offeror's Price proposal will be evaluated as follows:

1. Firm Fixed Price Evaluation: For a price to be fair and reasonable, it must represent a price to the Government that a prudent person would pay in the conduct of competitive business. The Offeror's proposed fixed-price CLINs may be evaluated, using one or more of the techniques described in RFO 15.404-1 in order to determine if they are fair and reasonable

2. Overall Price Proposal Evaluation: The overall Price proposal will be evaluated for the following:

a. Compliance: The Price proposal submitted by the Offeror will be evaluated for compliance based upon the submission requirements contained in this Section.

b. Unbalanced Pricing: The Offeror's overall Price proposal will be evaluated for unbalanced pricing as defined in RFO 15.404-6. An offer may be rejected if the contracting officer determines that the lack of balance poses an unacceptable risk to the Government (see RFO 15.404-6 (b)(2)).

c. Errors: The Offeror's price proposal will be reviewed for errors. The Offeror may be given an opportunity to clarify certain aspects of their proposal at the sole discretion of the Contracting Officer.

d. Business Systems: The Government may verify the adequacy of the Offeror’s business systems, if applicable.

e. Total Evaluated Price: The total evaluated price consists of summing the Offeror’s proposed fixed-price CLIN prices together.

Negotiations: The Government intends to award without negotiations with offerors (except clarification as described in RFO 15.202(a)(2). Therefore, the offeror's initial proposal should contain the offeror's best possible technical solution, as price will not be used for ranking proposals. The concept of a simultaneous competitive range and a common cut-off date for Final Proposal Revisions does not apply to this acquisition methodology.

ATTACHMENT 1 - PAST PERFORMANCE ASSESSMENT WORKSHEET
(Limit each worksheet to no more than 3 pages)

CONSTRUCT/ON PROJECT#			
Offeror:			
Project Location and Contract Number:			
Was this project performed by the division or unit of the company submitting the offer for this solicitation?			
Owner:			
Owner's Point of Contact for Reference:		Telephone:	
Awarded Construction Cost:		Final Construction Cost:	
Explain Cost Growth, if any:			
Date of Award:	Original Completion Date:	Revised Completion Date:	Percent Complete:
Explain Time Growth, if any:			
General Scope of Construction and Offeror's Role:			
Work Your Company Self-Performed:		Extent and Type of Work You Subcontracted Out:	
Identify and describe the relevancies for this project compared to the scope of the solicitation. The Government will evaluate the information provided in making the relevancy determination.			
Did any members of the proposed team (firms, not individuals) have a role in this project? Identify the team members (by firm), their role in this project, and their proposed role in this solicitation.			

ATTACHMENT 2 - USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ)

CONTRACT INFORMATION (Contractor to complete Blocks 1-4)

I. Contractor Information

Firm Name: CAGE Code:
Address: UEI Number:
Phone Number:
Email Address:
Point of Contact: Contact Phone Number:

2. Work Performed as: Prime Contractor Sub Contractor Joint Venture Other (Explain) Percent of project work performed:
If subcontractor, who was the prime (Name/Phone #):

3. Contract Information

Contract Number:
Delivery/Task Order Number (if applicable):
Contract Type: Firm Fixed Price Cost Reimbursement Other (Please specify):
Contract Title:
Contract Location:

Award Date (mm/dd/yy):
Contract Completion Date (mm/dd/yy):
Actual Completion Date (mm/dd/yy):
Explain Differences:

Original Contract Price (Award Amount):
Final Contract Price *(to include all modifications, if applicable): Explain* Differences:

4. Project Description:

Complexity of Work High Med Routine
How is this project relevant to project of submission? *(Please provide details such as similar equipment, requirements, conditions, etc.)*

CLIENT INFORMATION (Client to complete Blocks 5-8)

5. Client Information
Name:
Title:
Phone Number:
Email Address:

6. Describe the client's role in the project:

7. Date Questionnaire was completed (mm/dd/yy):

8. Client's Signature:

NOTE: USACE REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO USACE WITH THEIR PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON USACE SOLICITATIONS. CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO USACE. PLEASE CONTACT THE OFFEROR FOR USACE POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

USACE PAST PERFORMANCE QUESTIONAIRRE
Continued

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

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

Please circle the adjective rating which best reflects your evaluation of the contractor's performance.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	E	VG	S	M	U	N
b) Ability to meet quality standards specified for technicalperformance	E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolutionwithout extensive customer guidance	E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (withoutadverse effect on performance)	E	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedulesincluding any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	E	VG	S	M	U	N
b) Rate the contractor's use of available resources toaccomplish tasks identified in the contract	E	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with theproject?	E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing withyour staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike,and concerned with the interests of the customer?	E	VG	S	M	U	N
d) Overall customer satisfaction	E	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/orlabor force?	E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce tothis effort	E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractorpersonnel	E	VG	S	M	U	N
e) Utilization of Small Business concerns	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projectswith multiple disciplines	E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, executionand response to Government changes	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability toeffectively lead, manage and control the program)	E	VG	S	M	U	N

5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within thecontractually agreed price(s)?	E	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainabilityor other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please ratethe Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)	E	VG	S	M	U	N
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain inRemarks section.*		Yes			No	
e) If this is/was a Government contract, has/was this contractbeen partially or completely terminated for default or convenience or are there any pending terminations? *Indicateif show cause or cure notices were issued, or any default action in comment section below.*		Yes			No	
f) Have there been any indications that the contractor has hadany financial problems? *If yes, please explain below.*		Yes			No	
6. SAFETY/SECURITY						
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, andrespond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety,correction of noted deficiencies, etc.)	E	VG	S	M	U	N
b) Contractor complied with all security requirements for theproject and personnel security requirements.	E	VG	S	M	U	N
7. GENERAL						
a) Ability to successfully respond to emergency and/or surgesituations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	E	VG	S	M	U	N
b) Compliance with contractual terms/provisions (explain ifspecific issues)	E	VG	S	M	U	N
c) In summary, provide an overall rating for the workperformed by this contractor.	E	VG	S	M	U	N

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

_____

_____

_____

Supplemental Data Form

Purpose: This form collects information to assess responsibility in accordance with (IAW) RFO 9.104-1 and to support the overall evaluation of the proposal. The information provided will help the Government determine whether the prospective contractor is responsible and will be used exclusively for that purpose.

Instructions: The form must be completed and returned with the proposal. If there are any questions about how to complete this form, they should be submitted in ProjNet.

If submitting a proposal as a JV and/or Mentor/Protégé, one copy of this form using the JV/Mentor/Protégé information must be provided, as well as a completed form for each of the partners. Specific sections of the form will provide additional instructions regarding what must be completed by the JV and/or individual partners.

A. Contractor General Information

Company Name	
Address (Street, City, and State)	
UEI	
Parent Company Name & UEI (if applicable)	

Small Business Status (mark all that apply with an X)			
	8(a)		Veteran-Owned
	Alaskan Native Corporation/Indian Tribe		Native Hawaiian Organization
	Small Disadvantaged Business		HUBZone
	Woman-Owned		Joint Venture
	Economically Disadvantaged Woman-Owned		Mentor/Protégé
	Service-Disabled Veteran Owned		Other than Small Business

B. Points of Contact for Current Proposal

For JVs: POCs must be populated in at least one of the forms (JV and/or individual partners), with partner-specific POCs identified based on the roles performed by each partner in creating the proposal. A financial POC must be provided for the JV if populated, or a POC must be provided for each partner if the JV is unpopulated.

Supplemental Data Form

Primary Proposal POC - this person is the primary liaison and can answer general questions about the proposal

Name	
Title	
Phone	
Email	

C. Organizational Personnel:

For JVs: only populated JVs must provide this information at the JV level, and it must be populated for the individual partners regardless of whether the JV is populated or unpopulated.

Total Current Key Personnel	
Total Current Permanent Personnel (not including Key)	
Max Personnel at any time	

D. Financial Data:

For JVs: only populated JVs must provide this information at the JV level, and it must be populated for the individual partners regardless of whether the JV is populated or unpopulated.

Fiscal Year start/end (e.g. January 1 – December 31):

For the prior three completed fiscal years, provide the following, as applicable:

Description	Current Year to Date	Prior Year	Two Years Prior	Three Years Prior
Total Revenue				
Net Income				
Total Assets (less equipment)				
Equipment (carrying value)				
Current Assets			N/A	N/A
Total Liabilities				
Current Liabilities			N/A	N/A
Payroll Expense				
Fringe Rate				
Overhead Rate				
G&A Rate				

E. Government Sales Data:

For JVs: this must be completed by both the JV and all partners.

Please place an “X” in the box in the table below associated with the average percentage of total revenue provided from Federal Government customers over the last three years.

Less than 10%	
10% - 25%	
26% - 50%	
51% -75%	
75% or more	

What was the dollar value of the largest Federal Government contract received in the last five years?

If different from above, what is the dollar value of the largest contract ever performed (to include commercial efforts)?

Supplemental Data Form
Schedule A – Existing Commitments

List below the construction projects ***currently in progress*** over $7___M. Also list construction projects for which your firm has submitted a bid, providing the solicitation number, offer/bid value, description and location, and POC information for the person that issued the solicitation (Percent Complete will be N/A). Please do not include information for bids that have expired or where a solicitation was cancelled.

For JVs: this must be completed by both the JV and all partners.

Contract or Solicitation Number	Contract or Offer Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Complete

Supplemental Data Form

Schedule A – Existing Commitments

Contract or Solicitation Number	Contract or Offer Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Complete

Supplemental Data Form
Schedule B – Completed Projects

List below the principal construction projects your firm has completed within the past six years, including all DoD contracts, with a total value exceeding 5% of the most recently completed year's revenue. The POC provided should be a Contracting Officer or any DoD/federal contracts and the equivalent role for any private efforts. The description should highlight scopes relevant to the current project proposed. Projects under this 5% threshold may be included if they provide specific experience relevant to the currently proposed efforts.

For JVs: this must be completed by both the JV and all partners.

Contract Number	Contract Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Sub-contracted

Supplemental Data Form
Schedule B – Completed Projects

Contract Number	Contract Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Sub-contracted

Supplemental Data Form
Schedule C – Construction and/or Technical Equipment

List total equipment and facilities owned for performing the prospective contract and present status as to whether it is currently committed to existing contracts. If an asset is currently being used but is expected to be available for use on this effort, provide the estimated date the equipment will be available.

Acceptable descriptions for Condition are “New,” “Good,” or “Fair”

Acceptable entries for Present Status are “in use” or “available”

For JVs: this must be completed by both the JV and all partners. If an equipment listing is already provided as part of the JV Agreement or an addendum has been submitted specifically identifying the equipment to be provided for this effort, any of the fields in the table below that are not included in that list may be added to it and submitted in that format.

Quantity	Description	Condition	Purchase Price	Accumulated Depreciation	Present Status	Available Date

Supplemental Data Form
Schedule C – Construction and/or Technical Equipment

Quantity	Description	Condition	Purchase Price	Accumulated Depreciation	Present Status	Available Date

Section 00 45 00 - Representations and Certifications

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.203-11	Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions.	2024-09		

Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (Sep 2024)

(a) Definitions. As used in this provision-"Lobbying contact" has the meaning provided at 2 U.S. C. 1602(8). The terms "agency," "influencing or attempting to influence," "officer or employee of an agency," "person," "reasonable compensation," and "regularly employed" are defined in the FAR clause of this solicitation entitled "Limitation on Payments to Influence Certain Federal Transactions" (52.203-12).

(b) Prohibition. The prohibition and exceptions contained in the FAR clause of this solicitation entitled "Limitation on Payments to Influence Certain Federal Transactions" (52.203-12) are hereby incorporated by reference in this provision.

(c) Certification. The offeror, by signing its offer, hereby certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on its behalf in connection with the awarding of this contract.

(d) Disclosure. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(e) Penalty. Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by 31 U.S.C. 1352. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure required to be filed or amended by this provision, shall be subject to civil penalties as provided in 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(End of provision)

52.203-18	Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation.	2017-01

Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation (Jan 2017)

(a) Definition. As used in this provision-

Internal confidentiality agreement or statement, subcontract, and subcontractor , are defined in the clause at 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.

(b) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions), Government agencies are not permitted to use funds appropriated (or otherwise made available) for contracts with an entity that requires employees or subcontractors of such entity seeking to report waste, fraud, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(c) The prohibition in paragraph (b) of this provision does not contravene requirements applicable to Standard Form 312, (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(d) Representation. By submission of its offer, the Offeror represents that it will not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(End of provision)

52.204-5	Women-Owned Business (Other Than Small Business).	2014-10

Women-Owned Business (Other Than Small Business) (Oct 2014)

(a) Definition."Women-owned business concern," as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (c)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it [ ] is a women-owned business concern.

(End of provision)

52.209-2	Prohibition on Contracting With Inverted Domestic Corporations-Representation. (Deviation 2026-O0038)	2026-02

Prohibition on Contracting with Inverted Domestic Corporations-Representation (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

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

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) Government agencies are not permitted to use appropriated (or otherwise made available) funds for contracts with either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation, unless the exception at 9.108-3(b) applies or the requirement is waived in accordance with the procedures at 9.108-5.

(c) Representation. The Offeror represents that-

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

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

(End of provision)

52.209-5	Certification Regarding Responsibility Matters. (Deviation 2026-O0038)	2026-02

Certification Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(a)

(1) The Offeror certifies, to the best of its knowledge and belief, that-

(i) The Offeror and/or any of its Principals-

(A) Are [ ] are not [ ] presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have [ ] have not [ ], within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property (if offeror checks "have", the offeror shall also see 52.209-7, if included in this solicitation);

(C) Are [ ] are not [ ] presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision; and

(D) Have [ ], have not [ ], within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds the threshold at 9.104-5(a)(2) for which the liability remains unsatisfied. Federal taxes are considered delinquent if both of the following criteria apply:

(1) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if a pending administrative or judicial challenge remains. In the case of a judicial challenge to the liability, the liability is not finally determined

until all judicial appeal rights have been exhausted.

(2) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) The Offeror has [ ] has not [ ], within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

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

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the Government will consider the certification in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) This provision does not require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a). The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If the Government later determines that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.209-7	Information Regarding Responsibility Matters. (Deviation 2026-O0038)	2026-02

Information Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

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

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

(1) The total value of all current, active contracts and grants, including all priced options; and

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

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

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

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

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

(i) In a criminal proceeding, a conviction.

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

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

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

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

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

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

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

(End of provision)

52.209-11	Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. (Deviation 2026-O0038)	2026-02

Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law (Feb 2026) (Deviation 2026-O0038)

(a) The Government will not enter into a contract with any corporation that-

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

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

(b) The Offeror represents that-

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

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

(End of provision)

52.209-12	Certification Regarding Tax Matters.	2025-10

Certification Regarding Tax Matters (Oct 2025)

(a) This provision implements section 523 of Division B of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), and similar provisions, if contained in subsequent appropriations acts.

(b) If the Offeror is proposing a total contract price that will exceed $7 million (including options), the Offeror shall certify that, to the best of its knowledge and belief, it

(1) Has [ ] filed all Federal tax returns required during the three years preceding the certification;

(2) Has not [ ] been convicted of a criminal offense under the Internal Revenue Code of 1986; and

(3) Has not [ ], more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

(End of provision)

52.209-13	Violation of Arms Control Treaties or Agreements-Certification. (Deviation 2026-O0038)	2026-02

Violation of Arms Control Treaties or Agreements-Certification (Feb 2026) (Deviation 2026-O0038)

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

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

[ ] (1) The Offeror certifies that-

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

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

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

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

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

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

(i) An inability to certify compliance.

(ii) An inability to conclude compliance.

(iii) A statement about compliance concerns.

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

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

(d) Do not submit an offer unless-

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

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

(i) Waived application under 22 U.S.C. 2593e(d) or (e); or

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

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

(End of provision)

52.219-1	Small Business Program Representations. (Deviation 2026-O0038)	2026-02

Small Business Program Representations (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

Economically disadvantaged women-owned small business (EDWOSB) concern means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127, and the concern is certified by SBA or an approved third-party certifier in accordance with 13 CFR 127.300. It automatically qualifies as a women-owned small business concern eligible under the WOSB Program.

HUBZone small business concern means a small business concern that meets the requirements described in 13 CFR 126.200, is certified by the Small Business Administration (SBA) and designated by SBA as a HUBZone small business concern in the Small Business Search (SBS) (13 CFR 126.103).

Service-disabled veteran-owned small business (SDVOSB) concern eligible under the SDVOSB Program means an SDVOSB concern that is designated in the System for Award Management

(SAM) as certified by the Small Business Administration (SBA) in accordance with 13 CFR 128.300.

Small business concern-

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

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

Small disadvantaged business concern means a small business concern that-

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by one or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States, and

(2) The management and daily business operations of which are controlled (as defined at 13 CFR 124.106) by individuals who meet the criteria in paragraph (1) of this definition.

Women-owned small business (WOSB) concern eligible under the WOSB Program (in accordance with 13 CFR part 127) means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States, and the concern is certified by SBA or an approved third-party certifier in accordance with 13 CFR 127.300.

(b)

(1) The North American Industry Classification System (NAICS) code for this acquisition is ____ [insert NAICS code].

(2) The small business size standard is ____[insert size standard].

(3) The small business size standard for a concern that submits an offer, other than on a construction or service acquisition, but proposes to furnish an end item that it did not itself manufacture, process, or produce (i.e., nonmanufacturer), is 500 employees, or 150 employees for information technology value-added resellers under NAICS code 541519, if the acquisition-

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

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

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

(c) Representations.

(1) The offeror represents as part of its offer that-

(i) it [ ] is, [ ] is not a small business concern; or

(ii) It [ ] is, [ ] is not a small business joint venture that complies with the requirements of 13 CFR 121.103(h) and 13 CFR 125.8(a) and (b). [_____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.]

(2) [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it [ ] is, [ ] is not a women-owned small disadvantage business concern.

(3) Women-owned small business (WOSB) joint venture eligible under the WOSB Program. The offeror represents as part of its offer that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.]

(4) Economically disadvantaged women-owned small business (EDWOSB) joint venture. The offeror represents as part of its offer that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.]

(5) SDVOSB joint venture eligible under the SDVOSB Program. [Complete only if the offeror is certified as a SDVOSB concern]. The offeror represents as part of its offer that it [ ] is, [ ] is not a SDVOSB joint venture eligible under the SDVOSB Program that complies with the requirements of 13 CFR 128.402. [____The offeror shall enter the name and unique entity identifier of each party to the joint venture:__.]

(6) HUBZone joint venture eligible under the HUBZone Program. [Complete only if the offeror is a HUBZone small business concern.] The offeror represents, as part of its offer, that it [ ] is, [ ] is not a HUBZone joint venture that complies with the requirements of 13 CFR 126.616(a) through (c). [____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.] Each HUBZone small business concern participating in the HUBZone joint venture must be certified as a HUBZone concern.

(d) Notice. Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a business concern that is small, HUBZone small, small disadvantaged, service-disabled veteran-owned small, economically disadvantaged women-owned small, or women-owned small eligible under the WOSB Program in order to obtain a contract to be awarded under the preference programs established pursuant to section 8, 9, 15, 31, and 36 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, will be-

(1) Punished by imposition of fine, imprisonment, or both;

(2) Subject to administrative remedies, including suspension and debarment; and

(3) Ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.223-1	Biobased Product Certification. (Deviation 2026-O0038)	2026-02

Biobased Product Certification (Feb 2026) (Deviation 2026-O0038)

As required by the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101(4)) and the Energy Policy Act of 2005 (7 U.S.C. 8102(a)(2)(F)), the Offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture at https://www.biopreferred.gov/resources/categories.html to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the Offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.

(End of provision)

52.223-4	Recovered Material Certification.	2008-05

Recovered Material Certification (May 2008)

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

(End of provision)

52.229-12	Tax on Certain Foreign Procurements. (Deviation 2026-O0038)	2021-02

Tax on Certain Foreign Procurements (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

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

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

(2) A domestic partnership;

(3) A domestic corporation;

(4) Any estate (other than a foreign estate, within the meaning of 26 U.S.C. 7701(a)(31)); and

(5) Any trust if-

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

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

(b) This clause applies only to foreign persons. It implements 26 U.S.C. 5000C and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.

(c)

(1) If the Contractor is a foreign person and has only a partial or no exemption to the withholding, the Contractor shall include the Department of the Treasury IRS Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, with each voucher or invoice submitted under this contract throughout the period in which this status is applicable. The excise tax withholding is applied at the payment level, not at the contract level. The Contractor should revise each IRS Form W-14 submission to reflect the exemption (if any) that applies to that particular invoice, such as a different exemption applying. In the absence of a completed IRS Form W-14 accompanying a payment request, the default withholding percentage is 2 percent for the section 5000C withholding for that payment request. Information about IRS Form W-14 and its separate instructions is available via the internet at www.irs.gov

/w14.

(2) If the Contractor-

(i) Is a foreign person; and

(ii) Has indicated in its offer in the provision 52.229-11, Tax on Certain Foreign Procurements-Notice and Representation, that it is fully exempt from the withholding; and

(iii) Certified the full exemption on the IRS Form W-14, and if that full exemption no longer applies due to a change in circumstances during the performance of the contract that causes the Contractor to become subject to the withholding for the 2 percent excise tax; then the Contractor shall-

(A) Notify the Contracting Officer within 30 days of a change in circumstances that causes the Contractor to be subject to the excise tax withholding under 26 U.S.C. 5000C; and

(B) Comply with paragraph (c)(1) of this clause.

(d) The Government will withhold a full 2 percent of each payment unless the Contractor claims an exemption. If the Contractor enters a ratio in Line 12 of the IRS Form W-14, the result of Line 11 divided by Line 10, the Government will withhold from each payment an amount equal to 2 percent multiplied by the contract ratio. If the Contractor marks box 9 of the IRS Form W-14 (rather than completes Lines 10 through 12), the Contractor must identify and enter the specific exempt and nonexempt amounts in Line 15 of the IRS Form W-14; the Government will then withhold 2 percent only from the nonexempt amount. See the IRS Form W-14 and its instructions.

(e) Exemptions from the withholding under this clause are described at 26 CFR 1.5000C-1(d)(5) through (7). Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the 26 U.S.C. 5000C tax are adjudicated by the IRS as the 26 U.S.C. 5000C tax is a tax matter, not a contract issue.

(f) Taxes imposed under 26 U.S.C. 5000C may not be-

(1) Included in the contract price; nor

(2) Reimbursed.

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

(End of clause)

DFARS Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.203-7005	Representation Relating to Compensation of Former DoD Officials.	2022-09		

REPRESENTATION RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2022)

(a) Definition. "Covered DoD official" is defined in the clause at 252.203-7000, Requirements Relating to Compensation of Former DoD Officials.

(b) By submission of this offer, the Offeror represents, to the best of its knowledge and belief, that all covered DoD officials employed by or otherwise receiving compensation from the Offeror, and who are expected to undertake activities on behalf of the Offeror for any resulting contract, are presently in compliance with all applicable post-employment restrictions, including those contained in 18 U.S.C. 207, 41 U.S.C. 2101-2107, 5 CFR part 2641, section 1045 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91), and Federal Acquisition Regulation 3.104-2.

(End of provision)

252.204-7007	Alternate A, Annual Representations and Certifications.	2025-10	Alternate A	2025-10

ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (OCT 2025)

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

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

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

[ ] (i) Paragraph (e) applies.

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

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

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

(ii) 252.216-7008, Economic Price Adjustment-Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when

the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

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

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

(v) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of $200,000 or more.

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

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

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

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

[ ](ii) 252.225-7000, Buy American-Balance of Payments Program Certificate.

[ ](iii) 252.225-7020, Trade Agreements Certificate.

[ ] Use with Alternate I.

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

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

[ ] Use with Alternate I.

[ ] Use with Alternate II.

[ ] Use with Alternate III.

[ ] Use with Alternate IV.

[ ] Use with Alternate V.

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

[ ](vii) 252.232-7015, Performance-Based Payments-Representation.

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

FAR/DFARS Provision #	Title	Date	Change
____	____	____	
____	____	____	
____	____	____	
____	____	____	
____	____	____	

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

(End of provision)

252.204-7008 Compliance with Safeguarding 2016-10

Covered Defense Information
Controls.

COMPLIANCE WITH SAFEGUARDING COVERED DEFENSE INFORMATION CONTROLS (OCT 2016)

(a) Definitions. As used in this provision-

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

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

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

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

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

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

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

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

(End of provision)

252.204-7016	Covered Defense Telecommunications Equipment or Services-Representation.	2019-12

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

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

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

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

(End of provision)

252.204-7017	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment	2021-05

or Services-Representation.

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

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

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

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

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

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

The Offeror represents that it [ ] will [ ] will not provide covered defense telecommunications

equipment or services as a part of its offered products or services to DoD in the performance of any award resulting from this solicitation.

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

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

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

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

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

(End of provision)

252.219-7000	Advancing Small Business Growth.	2023-06

ADVANCING SMALL BUSINESS GROWTH (JUN 2023)

(a) This provision implements 10 U.S.C. 4959.

(b) The Offeror acknowledges by submission of its offer that by acceptance of the contract

resulting from this solicitation, the Offeror may exceed the applicable small business size standard of the North American Industry Classification System (NAICS) code assigned to the contract and would no longer qualify as a small business concern for that NAICS code. Small business size standards matched to industry NAICS codes are published by the Small Business Administration and are available at 13 CFR 121.201 and https://www.sba.gov/document /support-table-size-standards. The Offeror is therefore encouraged to develop the capabilities and characteristics typically desired in contractors that are competitive as other-than-small contractors in this industry.

(c) For procurement technical assistance, the Offeror may contact the nearest APEX Accelerator. APEX Accelerator locations are available at https://www.apexaccelerators.us.

(End of provision)

252.223-7997	Prohibition on Procurement of Certain Items Containing Perfluorooctane Sulfonate or Perfluorooctanoic Acid -- Representation. (Deviation 2022-O0010)	2022-09	Deviation 2022-O0010	2022-09

PROHIBITION ON PROCUREMENT OF CERTAIN ITEMS CONTAINING PERFLUOROOCTANE SULFONATE OR PERFLUOROOCTANOIC ACID - REPRESENTATION (DEVIATION 2022-O0010) (SEP 2022)

(a) Effective April 1, 2023, in accordance with section 333 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116-283) the Department of Defense may not procure any covered items that contain perfluorooctane sulfonate (PFOS) or perfluorooctanoic acid (PFOA). A covered item includes:

(1) Nonstick cookware or cooking utensils for use in galleys or dining facilities; and

(2) Upholstered furniture, carpets, and rugs that have been treated with stain-resistant coatings.

(b) Representation. By submission of its offer, the Offeror represents that it is not providing as part of its offer any covered items containing PFOS or PFOA.

(End of provision)

252.225-7031 Secondary Arab Boycott of Israel 2005-06
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SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

(a) Definitions. As used in this provision-

(1) "Foreign person" means any person (including any individual, partnership, corporation, or other form of association) other than a United States person.

(2) " United States " means the 50 States, the District of Columbia , outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.

(3) " United States person" is defined in 50 U.S.C. App. 2415(2) and means-

(i) Any United States resident or national (other than an individual resident outside the United States who is employed by other than a United States person);

(ii) Any domestic concern (including any permanent domestic establishment of any foreign concern); and

(iii) Any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern that is controlled in fact by such domestic concern.

(b) Certification. If the offeror is a foreign person, the offeror certifies, by submission of an offer, that it-

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. 2407(a) prohibits a United States person from taking.

(End of provision)

252.225-7055	Representation Regarding Business Operations with the Maduro Regime.	2022-05

REPRESENTATION REGARDING BUSINESS OPERATIONS WITH THE MADURO REGIME (MAY 2022)

(a) Definitions. As used in this provision-

"Agency or instrumentality of the government of Venezuela," "business operations," "government of Venezuela," and "person" have the meaning given in the clause 252.225-7056, Prohibition Regarding Business Operations with the Maduro Regime, of this solicitation.

(b) Prohibition. In accordance with section 890 of the National Defense Authorization Act for Fiscal Year 2020 (Pub. L. 116-92), DoD is prohibited from entering into a contract for the procurement of products or services with any person that has business operations with an authority of the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government, unless the person has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.

(c) Representation. By submission of its offer, the Offeror represents that the Offeror is a person that-

(1) Does not have any business operations with an authority of the Maduro regime or the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government; or

(2) Has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control

of the Department of the Treasury.

(End of provision)

252.225-7057	Preaward Disclosure of Employment of Individuals Who Work in the People's Republic of China.	2022-08

PREAWARD DISCLOSURE OF EMPLOYMENT OF INDIVIDUALS WHO WORK IN THE PEOPLE'S REPUBLIC OF CHINA (AUG 2022)

(a) Definitions. As used in this provision-

"Covered contract" and "covered entity" have the meaning given in the clause 252.225-7058, Postaward Disclosure of Employment of Individuals Who Work in the People's Republic of China.

(b) Prohibition on award. In accordance with section 855 of the National Defense Authorization Act for Fiscal Year 2022 (Pub. L. 117-81, 10 U.S.C. 4651 note prec.), DoD may not award a contract to the Offeror if it is a covered entity and proposes to employ one or more individuals who will perform work in the People's Republic of China on a covered contract, unless the Offeror has disclosed its use of workforce and facilities in the People's Republic of China.

(c) Preaward disclosure requirement. At the time of submission of an offer for a covered contract, an Offeror that is a covered entity shall provide disclosures to include-

(1) The proposed use of workforce on a covered contract or subcontract, if the Offeror employs one or more individuals who perform work in the People's Republic of China;

(2) The total number of such individuals who will perform work in the People's Republic of China; and

(3) A description of the physical presence, including street address or addresses, in the

People's Republic of China, where work on the covered contract will be performed.

(End of provision)

252.225-7059	Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region-Representation.	2023-06

PROHIBITION ON CERTAIN PROCUREMENTS FROM THE XINJIANG UYGHUR AUTONOMOUS REGION-REPRESENTATION (JUN 2023)

(a) Definitions. "Forced labor" and "XUAR", as used in this provision, have the meaning given in the 252.225-7060, Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region, clause of this solicitation.

(b) Prohibition. DoD may not knowingly procure any products mined, produced, or manufactured wholly or in part by forced labor from XUAR or from an entity that has used labor from within or transferred from XUAR as part of any forced labor programs, as specified in paragraph (b) of the 252.225-7060, Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region, clause of this solicitation.

(c) Representation. By submission of its offer, the Offeror represents that it has made a good faith effort to determine that forced labor from XUAR will not be used in the performance of a contract resulting from this solicitation.

(End of provision)

Section 00 70 00 - Conditions of the Contract

FAR Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.217-7	Option for Increased Quantity-Separately Priced Line Item.	1989-03		

Option for Increased Quantity-Separately Priced Line Item (Mar 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor as follows:

Option 1- CLIN 0002: Within 60 days of Notice to Proceed

Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.222-3	Convict Labor. (Deviation 2026-O0038)	2026-02		

Convict Labor (Feb 2026) (Deviation 2026-O0038)

(a) Except as provided in paragraph (b) of this clause, the Contractor must not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons-

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if-

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-7	Withholding of Funds. (Deviation 2026-O0038)	2026-02

Withholding of Funds (Feb 2026) (Deviation 2026-O0038)

The Contracting Officer must, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other federally assisted contract subject to prevailing wage requirements, which is held by

the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.223-7	Notice of Radioactive Materials. (Deviation 2026-O0038)	2026-02

Notice of Radioactive Materials (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, ____*days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in title 10 of the Code of Federal Regulations, in effect on the date of this contract, or (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved.

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall-

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

* The Contracting Officer shall insert the number of days required in advance of delivery of the item or completion of the servicing to assure that required licenses are obtained and appropriate personnel are notified to institute any necessary safety and health precautions.

(End of clause)

52.223-9	Estimate of Percentage of Recovered Material Content for EPA-Designated Items. (Alternate I)	2008-05	Alternate I	2008-05

Alternate I (May 2008). As prescribed in 23.108(b)(2), redesignate paragraph (b) of the basic clause as paragraph (c) and add the following paragraph (b) to the basic clause:

(b) The Contractor shall execute the following certification required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(i)(2)(C)):

Certification

I, ____(name of certifier), am an officer or employee responsible for the performance of this contract and hereby certify that the percentage of recovered material content for EPA-designated items met the applicable contract specifications or other contractual requirements.

____[Signature of the Officer or Employee]

____[Typed Name of the Officer or Employee]

____[Title]

____[Name of Company, Firm, or Organization]

____[Date]

(End of certification)

52.223-10	Waste Reduction Program. (DEVIATION 2025-O0004)	2025-03	Deviation 2025-O0004	2025-03

WASTE REDUCTION PROGRAM (MAR 2025)(DEVIATION 2025-O0004)

(a) Definitions. As used in this clause—

Recycling means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

Waste prevention means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

Waste reduction means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) The Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, et seq.) and implementing regulations (40 CFR part 247).

(End of clause)

52.223-23	Sustainable Products and Services. (DEVIATION 2025-O0004)	2026-02	Deviation 2025-O0004	2025-03

SUSTAINABLE PRODUCTS AND SERVICES (MAR 2025) (DEVIATION 2025-O0004)

(a) Definitions. As used in this clause-

Biobased product means a product determined by the U.S. Department of Agriculture (USDA) to be a commercial product or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials, or that is an intermediate ingredient or feedstock. The term includes, with respect to forestry materials, forest products that meet biobased content requirements, notwithstanding the market share the product holds, the age of the product, or whether the market for the product is new or emerging. (7 U.S.C. 8101) (7 CFR 3201.2).

Recovered material means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process. (42 U.S.C. 6903).

Sustainable products and services means:

(1) Products containing recovered material designated by the U.S. Environmental Protection Agency (EPA) under the Comprehensive Procurement Guidelines (42 U.S.C. 6962) (40 CFR part 247) (https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program#products).

(2) Energy- and water-efficient products that are ENERGY STAR® certified or Federal Energy Management Program (FEMP)-designated products (42 U.S.C. 8259b) (10 CFR part 436, subpart C) (https://www.energy.gov/eere/femp/search-energy-efficient-products and https://www.energystar.gov/products?s=mega).

(3) Biobased products meeting the content requirement of the USDA under the BioPreferred® program (7 U.S.C. 8102) (7 CFR part 3201) (https://www.biopreferred.gov).

(4) Acceptable chemicals, products, and manufacturing processes listed under EPA's Significant New Alternatives Policy (SNAP) program, which ensures a safe and smooth transition away from substances that contribute to the depletion of stratospheric ozone (42 U.S. C. 7671l) (40 CFR part 82, subpart G) (https://www.epa.gov/snap).

(b) Requirements.

(1) The sustainable products and services, including the purchasing program and type of product or service, that are applicable to this contract, and any products or services that are not subject to this clause, will be set forth in the statement of work or elsewhere in the contract.

(2) The Contractor shall ensure that the sustainable products and services required by this contract are-

(i) Delivered to the Government;

(ii) Furnished for use by the Government;

(iii) Incorporated into the construction of a public building or public work; and

(iv) Furnished for use in performing services under this contract, where the cost of the products is a direct cost to this contract (versus costs which are normally applied to the Contractor's general and administrative expenses or indirect costs). This includes services performed by contractors performing management and operation of Government-owned facilities to the same

extent that, at the time of award, an agency would be required to comply if an agency operated or supported the facility.

(3) [Reserved]

(c) Resource. The Green Procurement Compilation (GPC) available at https://sftool.gov /greenprocurement provides a comprehensive list of sustainable products and services and sustainable acquisition guidance. The Contractor should review the GPC when determining which statutory purchasing programs apply to a specific product or service.

(End of clause)

52.227-4	Patent Indemnity-Construction Contracts. (Alternate I)	2007-12	Alternate I	2007-12

Alternate I (Dec 2007). As prescribed in 27.201-2 (d)(2), designate the first paragraph of the basic clause as paragraph (a) and add the following paragraph (b) to the basic clause:

(b) This patent indemnification shall not apply to the following items: _____[Contracting Officer list the items to be excluded.]

52.228-15	Performance and Payment Bonds-Construction (Deviation 2020-O0016)	2020-06	Deviation 2020-O0016	2020-04

PERFORMANCE AND PAYMENT BONDS-CONSTRUCTION (APR 2020) (DEVIATION 2020-O0016)

(a) Definitions. As used in this clause-

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is $150,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25, except that no seal is required). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment bonds (Standard Form 25A, except that no seal is required). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection.

(i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of the Treasury, Financial Management Service, Surety Bond Branch, 3700 East West Highway,

Room 6F01, Hyattsville, MD 20782. Or via the internet at http://www.fms.treas.gov/c570/.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 3133(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.240-90	Security Prohibitions and Exclusions Representations and Certifications. (Deviation 2026-O0038)	2026-02

Security Prohibitions and Exclusions Representations and Certifications (Feb 2026) (Deviation 2026-O0038)

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

Backhaul, covered article, covered telecommunications equipment or services, critical technology, FASCSA order, Intelligence community, interconnection arrangements, national security system, roaming, sensitive compartmented information, sensitive compartmented information system, source, and substantial or essential component have the meanings provided in the clause 52.240-91, Security Prohibitions and Exclusions.

Business operations means engaging in commerce in any form, including by acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other apparatus of business or commerce.

Marginalized populations of Sudan means-

(1) Adversely affected groups in regions authorized to receive assistance under section 8(c) of the Darfur Peace and Accountability Act (Pub. L. 109-344) (50 U.S.C. 1701 note); and

(2) Marginalized areas in Northern Sudan described in section 4(9) of such Act.

Restricted business operations means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate-

(1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;

(2) Are conducted under specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;

(3) Consist of providing goods or services to marginalized populations of Sudan;

(4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;

(5) Consist of providing goods or services that are used only to promote health or education; or

(6) Have been voluntarily suspended.

Sensitive technology-

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically-

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

(b) Procedures.

(1) Covered telecommunications and video surveillance. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) at https://www.sam.gov for entities excluded from receiving federal awards for "covered telecommunications equipment or services."

(2) FASCSA Orders.

(i) The Offeror shall search in SAM for the phrase "FASCSA order" for any covered article, or any products or services produced or provided by a source, if there is an applicable FASCSA order described in paragraph (e) of FAR 52.240-91, Security Prohibitions and Exclusions.

(ii) The Offeror shall review the solicitation for any FASCSA orders that are not in SAM but are effective and apply to the solicitation and resultant contract (see FAR 40.204-1(c)(2)).

(iii) FASCSA orders issued after the date of solicitation do not apply unless added by an amendment to the solicitation.

(c) Covered telecommunications equipment or services representations. By submission of its offer, the Offeror represents that, after conducting a reasonable inquiry (that looks at any information in the Offeror's possession but does not need to include an internal or third-party audit)-

(1) It will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation, except as waived by the solicitation, or as disclosed in paragraph (g); and

(2) It does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services, except as waived by the solicitation, or as disclosed in paragraph (g).

(d) FASCSA Representation. By submission of this offer, the offeror represents that it has conducted a reasonable inquiry, and that the offeror does not propose to provide or use in response to this solicitation any covered article, or any products or services produced or provided by a source, if the covered article or the source is prohibited by an applicable FASCSA order in effect on the date the solicitation was issued, except as waived by the solicitation, or as disclosed in paragraph (g). A reasonable inquiry will look at any information in the offeror's possession but does not need to include an internal or third-party audit.

(e) Sudan certification. By submission of its offer, the offeror certifies, after conducting a reasonable inquiry (that looks at any information in the offeror's possession but does not need to include an internal or third-party audit), that the offeror does not conduct any restricted business operations in Sudan.

(f) Iran Representation and Certifications.

(1) Except as provided in paragraph (f)(2) of this provision or if a waiver has been granted in accordance with FAR 40.203-3, the offeror, after conducting a reasonable inquiry (that looks at any information in the offeror's possession but does not need to include an internal or third-party audit), by submission of its offer-

(i) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(ii) Certifies that the offeror, or any person (as defined at section 15 of the Iran Sanctions Act of 1996, Pub. L. 104-172, 50 U.S.C. 1701 note) owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Act. These sanctioned activities are in the areas of development of the petroleum resources of Iran, production of refined petroleum products in Iran, sale and provision of refined petroleum products to Iran, and contributing to Iran's ability to acquire or develop certain weapons or technologies; and

(iii) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds $15,000 with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at https://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx)

(2) Exception for trade agreements. The representation and certification requirements of paragraph (f)(1) of this provision do not apply if-

(i) This solicitation includes a trade agreements notice or certification (e.g., 52.225-6, Trade Agreements Certificate); and

(ii) The offeror has certified that all the offered products to be supplied are designated country

end products or designated country construction material.

(iii) The offeror shall email questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(g) Disclosure.

(1) If the Offeror is not able to represent compliance with the prohibitions in paragraphs (c) or (d), then the Offeror shall disclose within 72 hours to the contracting office identified in paragraph (g)(2) the following information for each product or service not compliant:

(i) Contract number and order number, if applicable;

(ii) Identification of whether this disclosure relates to paragraph (c) on covered telecommunication equipment or services, or to paragraph (d) on FASCSA orders;

(iii) A description of the products or services that the Contractor identifies or has reason to suspect is prohibited (include brand; model number, such as the original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable);

(iv) The entity that produced the product or service (include entity name, unique entity identifier, Contractor and Government Entity (CAGE) code, facilities responsible for design, fabrication, assembly, packaging, and test of the product, and whether the entity was the OEM or a distributor (provide manufacturer codes and distributor codes used for the product));

(v) Description of the functionality of the product or service and how that functionality impacts the risk to the product or service;

(vi) An explanation of any factors relevant to determining if the product or service should be permitted by an applicable exception, exemption, or waiver (if the offeror would like the Government to consider a waiver);

(vii) Whether alternative products or services are available that would be compliant with the prohibition;

(viii) If the product or service is related to item maintenance, include the following information on the item being maintained:

(A) Brand;

(B) Model number, OEM number, manufacturer part number, or wholesaler number; and

(C) Item description, as applicable.

(ix) Any readily available information about mitigation actions undertaken or recommended.

(2) If a disclosure is required to be submitted to a contracting office, the offeror shall submit the disclosure as follows:

(i) If a Department of Defense contracting office, the offeror shall submit the disclosure to the website at https://dibnet.dod.mil.

(ii) For all other contracting offices, the Offeror shall submit the disclosure to the Contracting Officer.

(3) If the disclosure provided does not contain any of the information required by paragraph (1), and the Offeror later discovers new information that is required by paragraph (1), then the Offeror shall submit a subsequent disclosure within 72 hours of discovering the new information.

(h) Executive agency review of disclosures. The Contracting Officer will review disclosures provided in paragraph (g) to determine if any applicable waiver may be sought. The Contracting Officer may choose not to pursue a waiver and may instead make an award to an Offeror that does not require a waiver.

(End of provision)

52.240-91	Security Prohibitions and Exclusions. (Deviation 2026-O0038)	2026-02

Security Prohibitions and Exclusions (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

American Security Drone Act-covered foreign entity means an entity included on a list that the Federal Acquisition Security Council (FASC) develops and maintains and publishes in the System for Award Management (SAM) at https://www.sam.gov (section 1822 of Pub. L. 118-31, 41 U.S.C. 3901 note prec.).

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

Covered application means the social networking service TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited.

Covered article, as defined in 41 U.S.C. 4713(k), means:

(1) Information technology, as defined in 40 U.S.C. 11101, including cloud computing services of all types;

(2) Telecommunications equipment or telecommunications service, as those terms are defined in section 3 of the Communications Act of 1934 (47 U.S.C. 153);

(3) The processing of information on a Federal or non-Federal information system, subject to the requirements of the Controlled Unclassified Information program (see 32 CFR part 2002); or

(4) Hardware, systems, devices, software, or services that include embedded or incidental information technology.

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

Covered telecommunications equipment or services means-

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

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance

and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

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

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

Critical technology means-

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

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

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

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

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

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

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

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

FASC-prohibited unmanned aircraft system means an unmanned aircraft system manufactured or assembled by an American Security Drone Act-covered foreign entity.

FASCSA order means any of the following orders issued under the Federal Acquisition Supply Chain Security Act (FASCSA) requiring removing covered articles from executive agency information systems or excluding one or more named sources or named covered articles from executive agency procurement actions, as described in 41 CFR 201-1.303(d) and (e):

(1) The Secretary of Homeland Security may issue FASCSA orders that apply to civilian agencies, to the extent not covered by paragraph (2) or (3) of this definition. This type of FASCSA order may be referred to as a Department of Homeland Security (DHS) FASCSA order.

(2) The Secretary of Defense may issue FASCSA orders that apply to the Department of Defense (DoD) and national security systems other than sensitive compartmented information systems. This type of FASCSA order may be referred to as a DoD FASCSA order.

(3) The Director of National Intelligence (DNI) may issue FASCSA orders that apply to the intelligence community and sensitive compartmented information systems, to the extent not covered by paragraph (2) of this definition. This type of FASCSA order may be referred to as a DNI FASCSA order.

Information technology, as defined in 40 U.S.C. 11101(6)-

(1) Means any equipment or interconnected system or subsystem of equipment, used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency, if the equipment is used by the executive agency directly or is used by a contractor under a contract with the executive agency that requires the use-

(i) Of that equipment; or

(ii) Of that equipment to a significant extent in the performance of a service or the furnishing of a product;

(2) Includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar

procedures, services (including support services), and related resources; but

(3) Does not include any equipment acquired by a Federal contractor incidental to a Federal contract.

Intelligence community, as defined by 50 U.S.C. 3003(4), means the following-

(1) The Office of the Director of National Intelligence;

(2) The Central Intelligence Agency;

(3) The National Security Agency;

(4) The Defense Intelligence Agency;

(5) The National Geospatial-Intelligence Agency;

(6) The National Reconnaissance Office;

(7) Other offices within the Department of Defense for the collection of specialized national intelligence through reconnaissance programs;

(8) The intelligence elements of the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the Federal Bureau of Investigation, the Drug Enforcement Administration, and the Department of Energy;

(9) The Bureau of Intelligence and Research of the Department of State;

(10) The Office of Intelligence and Analysis of the Department of the Treasury;

(11) The Office of Intelligence and Analysis of the Department of Homeland Security; or

(12) Such other elements of any department or agency as may be designated by the President, or designated jointly by the Director of National Intelligence and the head of the department or agency concerned, as an element of the intelligence community.

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connecting a customer of telephone provider A to a customer of telephone

company B) or sharing data and other information resources.

Kaspersky Lab-covered article means any hardware, software, or service that-

(1) Is developed or provided by a Kaspersky Lab-covered entity;

(2) Includes any hardware, software, or service developed or provided in whole or in part by a Kaspersky Lab-covered entity; or

(3) Contains components using any hardware or software developed in whole or in part by a Kaspersky Lab-covered entity.

Kaspersky Lab-covered entity means-

(1) Kaspersky Lab;

(2) Any successor entity to Kaspersky Lab, including any change in name, e.g., "Kaspersky";

(3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(4) Any entity of which Kaspersky Lab has a majority ownership.

National security system, as defined in 44 U.S.C. 3552, means any information system (including any telecommunications system) used or operated by an agency or by a contractor of an agency, or other organization on behalf of an agency-

(1) The function, operation, or use of which involves intelligence activities; involves cryptologic activities related to national security; involves command and control of military forces; involves equipment that is an integral part of a weapon or weapons system; or is critical to the direct fulfillment of military or intelligence missions, but does not include a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications); or

(2) Is protected at all times by procedures established for information that have been specifically authorized under criteria established by an Executive order or an Act of Congress to be kept classified in the interest of national defense or foreign policy.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because

signal coverage is too weak or because traffic is too high.

Sensitive compartmented information means classified information concerning or derived from intelligence sources, methods, or analytical processes, which is required to be handled within formal access control systems established by the Director of National Intelligence.

Sensitive compartmented information system means a national security system authorized to process or store sensitive compartmented information.

Source means a non-Federal supplier, or potential supplier, of products or services, at any tier.

Subsidiary means an entity in which more than 50 percent of the entity is owned directly by a parent corporation or through another subsidiary of a parent corporation.

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

Unmanned aircraft means an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft (49 U.S.C. 44801(11)).

Unmanned aircraft system means an unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the operator to operate safely and efficiently in the national airspace system (49 U.S.C. 44801(12)).

(b) Prohibitions on providing or using specific products or services in performance of contract. Unless a waiver or exception applies, the Contractor is prohibited from providing any products or services to the Government or using in the performance of the contract any of the following:

(1) A covered application on any information technology owned or managed by the Government, or on any information technology used or provided by the Contractor under this contract, including equipment provided by the Contractor's employees (section 102 of Division R of the Consolidated Appropriations Act, 2023 (Pub. L. 117-328));

(2) A Kaspersky Lab-covered article (Section 1634 of Division A of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91));

(3) Covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system (paragraphs (a)(1)(A)

of section 889 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232)). This does not prohibit contractors from providing-

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

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

(c) Prohibition on unmanned aircraft systems manufactured or assembled by American Security Drone Act-covered foreign entities.

(1) Prohibition. The Contractor is prohibited from-

(i) Delivering any FASC-prohibited unmanned aircraft system, which includes unmanned aircraft (i.e., drones) and associated elements (sections 1823 and 1826 of American Security Drone Act of 2023, within the National Defense Authorization Act for Fiscal Year 2024, Pub. L. 118-31, Div. A, Title XVIII, Subtitle B, 41 U.S.C. 3901 note prec.);

(ii) On or after December 22, 2025, operating a FASC-prohibited unmanned aircraft system in the performance of the contract (section 1824 of Pub. L. 118-31); and

(iii) On or after December 22, 2025, using Federal funds to procure or operate a FASC-prohibited unmanned aircraft system (section 1825 of Pub. L. 118-31).

(2) Procedures. The Contractor shall search SAM for the FASC-maintained list of American Security Drone Act-covered foreign entities before proposing, or using in performance of the contract, any unmanned aircraft system. Also, the Contractor shall ensure any effort or expenditure associated with a FASC-prohibited unmanned aircraft system is consistent with a corresponding exemption, exception, or waiver determination expressly stated in the contract.

(3) Exemptions, exceptions, and waivers. The prohibitions in paragraph (c) of this clause do not apply where the agency has determined an exemption, exception, or waiver applies, and the contract indicates that such a determination has been made. See sections 1823 through 1825 and 1832 of Public Law 118-31 for statutory requirements pertaining to exemptions, exceptions, and waivers.

(d) Prohibition on using or providing specific products or services or conducting certain

transactions regardless of connection to contract.

(1) Certain telecommunications and video surveillance equipment, systems, or services.

(i) Unless an applicable waiver has been issued by the Government, the Contractor cannot use any equipment, systems, or services that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system (paragraph (a)(1)(B) of section 889 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232)).

(ii) This prohibition applies to using covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. This does not prohibit the contractor from using-

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

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

(2) Office of Foreign Assets Control Restrictions.

(i) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(ii) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas.

(A) For lists of entities and individuals subject to economic sanctions, see OFAC's List of Specially Designated Nationals and Blocked Persons at https://home.treasury.gov/policy-issues/financial-sanctions/specially-designated-nationals-and-blocked-persons-list-sdn-human-readable-lists.

(B) For more information about these restrictions, as well as updates, see OFAC's regulations

at 31 CFR chapter V and at https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanctions-programs-and-information.

(C) To conduct electronic screens of potential parties to regulated transactions, see the consolidated screening list at https://www.trade.gov/consolidated-screening-list, which consolidates multiple export screening lists of the Departments of Commerce, State, and the Treasury.

(3) Sudan prohibition. The Contractor is prohibited from conducting any restricted business operations in Sudan in accordance with Accountability and Divestment Act of 2007 (Pub. L. 110-174).

(4) Iran prohibitions.

(i) Unless an exception applies according to paragraph (d)(4)(iii) or the Government grants a waiver, the contractor shall not engage in certain activities or transactions relating to Iran (section 6(b)(1)(A) of Iran Sanctions Act (50 U.S.C. 1701 note).

(ii) Unless an exception applies according to paragraph (d)(4)(iii) or the Government grants a waiver, contractor shall not export certain sensitive technology to Iran, as determined by the President, and has an active exclusion in SAM (22 U.S.C. 8515).

(iii) The prohibition in paragraphs (d)(4)(i) and (d)(4)(ii) do not apply if the acquisition is subject to trade agreements and the offeror certifies that all the offered products are designated country end products or designated country construction material (see part 25).

(iv) Unless an exception applies or the Government grants a waiver, contractors are prohibited from knowingly engaging in any significant transaction (i.e., over $15,000) with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked according to the International Emergency Economic Powers Act (section 6(b)(1)(B) of Iran Sanctions Act (50 U.S.C. 1701 note)).

(e) Governmentwide exclusion and removal orders.

(1) Unless the Government has issued an applicable waiver, contractors shall not provide or use as part of the performance of the contract any covered article, or any products or services produced or provided by a source, if the covered article or the source is prohibited by an applicable FASCSA order as follows:

(i) For solicitations and contracts awarded by a Department of Defense contracting office, DoD FASCSA orders apply.

(ii) For all other solicitations and contracts, DHS FASCSA orders apply.

(2) The Contractor shall search for the phrase "FASCSA order" in the System for Award Management (SAM) at https://www.sam.gov to locate applicable FASCSA orders.

(3) The Government may identify in the solicitation other FASCSA orders that are not in SAM, which are effective and apply to the solicitation and resulting contract.

(4) A FASCSA order issued after the date of solicitation applies to this contract only if added by an amendment to the solicitation or modification to the contract (see FAR 40.204-1(c)).

(f) Reasonable inquiry. The contractor shall conduct a reasonable inquiry to determine if there are any prohibited products or services. The inquiry will look at any information in the entity's possession but does not need to include an internal or third-party audit.

(g) Removal of prohibited products and services. For Federal Supply Schedules, Governmentwide acquisition contracts, multi-agency contracts or any other procurement instrument intended for use by multiple agencies, upon notification from the Contracting Officer, during the performance of the contract, the Contractor shall promptly make any necessary changes or modifications to remove any product or service produced or provided by a source that this clause prohibits.

(h) General report.

(1) If the Contractor identifies or is notified by any source, (including a subcontractor at any tier), that any product or service provided or used (or to be provided or used) during contract performance does not comply with any prohibition in this clause, then the Contractor shall report the following information, or as much information is known, in writing to the contracting office as identified in paragraph (h)(2) within 72 hours:

(i) Contract number and order number, if applicable;

(ii) The specific prohibition the product or service is not complying with;

(iii) A description of the products or services that the Contractor identifies or has reason to suspect is prohibited (include brand; model number, such as the original equipment

manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable);

(iv) The entity that produced the product or service (include entity name, unique entity identifier, Contractor and Government Entity (CAGE) code, facilities responsible for design, fabrication, assembly, packaging, and test of the product, and whether the entity was the OEM or a distributor (provide manufacturer codes and distributor codes used for the product));

(v) Description of the functionality of the product or service and how that functionality impacts the risk to the product or service;

(vi) An explanation of any factors relevant to determining if the product or service should be permitted by an applicable exception, exemption, or waiver (if the contractor would like the Government to consider a waiver, and asks for such a waiver);

(vii) Whether alternative products or services are available that would comply with the prohibition;

(viii) If the product or service is related to item maintenance, include the following information on the item being maintained:

(A) Brand;

(B) Model number, OEM number, manufacturer part number, or wholesaler number; and

(C) Item description, as applicable.

(ix) Any readily available information about mitigation actions implemented or recommended.

(2) If a report must be submitted to a contracting office, the Contractor shall submit the report as follows:

(i) If a Department of Defense contracting office, the Contractor shall report to the website at https://dibnet.dod.mil.

(ii) For all other contracting offices, the Contractor shall report to the Contracting Officer.

(iii) For indefinite delivery contracts, the Contractor shall report to both the contracting office for the indefinite delivery contract and the contracting office for any affected order.

(3) If the report provided does not contain any of the information required by paragraph (h)(1) of this clause, and the contractor later discovers new information that is required by paragraph (h)(1) of this clause, then the contractor shall submit a subsequent report within 72 hours of discovering the new information.

(4) The contractor shall also report the information in paragraph (h)(1) if the contractor wishes to ask for a waiver of the requirements of a new FASCSA order being applied through modification.

(i) New FASCSA orders report.

(1) During contract performance, the Contractor shall review SAM at least once every three months, or as advised by the Contracting Officer, to check for covered articles subject to FASCSA order(s), or for products or services produced by a source subject to FASCSA order(s) not currently identified under paragraph (e) of this clause.

(2) If the Contractor identifies a new FASCSA order(s) that could impact their supply chain, then the Contractor shall conduct a reasonable inquiry to identify whether a covered article or product or service produced or provided by a source subject to the FASCSA order(s) was provided to the Government or used during contract performance. The inquiry will look at any information in the entity's possession but does not need to include an internal or third-party audit.

(3) The Contractor shall submit a report to the contracting office identified in paragraph (h)(2) of this clause if the Contractor identifies, including through any notification by a subcontractor at any tier, that a covered article or product or service produced or provided by a source was provided to the Government or used during contract performance and is subject to a FASCSA order(s). For indefinite delivery contracts, the Contractor shall report to both the contracting office for the indefinite delivery contract and the contracting office for any affected order. The Contractor shall report the following information within 72 hours for each covered article or each product or service produced or provided by a source, where the covered article or source is subject to a FASCSA order:

(i) Contract number and order number, if applicable;

(ii) Name of the covered article or source subject to a FASCSA order;

(iii) The specific FASCSA order the product or service does not comply with;

(iv) The elements of (h)(1)(iii) through (ix) of this clause.

(j) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (j) but excluding subparagraphs (d)(1) and (i)(1), in all subcontracts and other contractual instruments, including subcontracts for acquiring commercial products or commercial services.

(End of clause)

52.240-93	Basic Safeguarding of Covered Contractor Information Systems. (Deviation 2026-O0038)	2026-02

Basic Safeguarding of Covered Contractor Information Systems (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

Federal contract information-

(1) Means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government; but

(2) Does not include information provided by the Government to the public (such as on public websites) or simple transactional information (such as information necessary to process payments).

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

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

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

(b) Safeguarding requirements.

(1) Basic requirements. The Contractor shall safeguard its covered contractor information systems by implementing, at minimum, the following security controls:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of clause)

DFARS Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting. (DEVIATION 2024-	2024-05	Deviation 2024-O0013	2024-05

O0013 REVISION 1)

SAFEGUARDING COVERED DEFENSE INFORMATION AND CYBER INCIDENT REPORTING (MAY 2024) (DEVIATION 2024-O0013 REVISION 1)

(a) Definitions. As used in this clause-

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

analyses and related information, and computer software executable code and source code.

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

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

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

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

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

(i) Except as provided in paragraph (b)(2)(ii) of this clause, the covered contractor information system shall be subject to the security requirements in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, “Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations”, Revision 2 (available via the internet at https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-171r2.pdf).

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

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

(C) If the DoD CIO has previously adjudicated the contractor’s requests indicating that a

requirement is not applicable or that an alternative security measure is equally effective, a copy of that approval shall be provided to the Contracting Officer when requesting its recognition under this contract.

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

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

(c) Cyber incident reporting requirement.

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

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

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

(2) Cyber incident report. The cyber incident report shall be treated as information created by

or for DoD and shall include, at a minimum, the required elements at https://dibnet.dod.mil.

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

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

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

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

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

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

(i) Use and release of contractor attributional/proprietary information not created by or for DoD. Information that is obtained from the contractor (or derived from information obtained from the

contractor) under this clause that is not created by or for DoD is authorized to be released outside of DoD-

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

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

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

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

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

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

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

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

(m) Subcontracts. The Contractor shall-

(1) Include this clause, including this paragraph (m), in subcontracts, or similar contractual

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

(2) Require subcontractors to-

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

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

(End of clause)

252.204-7998	Alternate A, Annual Representations and Certifications. (DEVIATION 2026-O0043)	2026-02	Alternate A Deviation 2026-O0043	2026-02 2026-02

Alternate A, Annual Representations and Certifications (DEVIATION 2026-O0043)(FEB 2026)

Include the following paragraphs (e), (f), and (g) in the provision at FAR 52.204-7:

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

(2) If the provision at FAR 52.204-7, System for Award Management - Registration, is not included in this solicitation, and the Offeror has an active registration in the System for Award

Management (SAM), the Offeror may choose to use paragraph (g) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

[ ] (i) Paragraph (g) applies.

[ ] (ii) Paragraph (g) does not apply and the Offeror has completed the individual representations and certifications in the solicitation.

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

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

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

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

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

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

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

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

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

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

[ ](ii) 252.225-7000, Buy American--Balance of Payments Program Certificate.

[ ](iii) 252.225-7020, Trade Agreements Certificate.

[ ]Use with Alternate I.

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

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

[ ]Use with Alternate I.

[ ]Use with Alternate II.

[ ]Use with Alternate III.

[ ]Use with Alternate IV.

[ ]Use with Alternate V.

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

[ ] (vii) 252.232-7015, Performance-Based Payments--Representation.

(g) The Offeror has completed the annual representations and certifications electronically via the SAM website at https://www.sam.gov After reviewing the SAM database information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in FAR 52.204-7 and paragraph (f) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in this offer by reference (see FAR 4.203-1); except for the changes identified below [Offeror to insert changes, identifying change by provision number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are

current, accurate, and complete as of the date of this offer.

FAR/DFARS provision No.	Title	Date	Change
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

(End of provision)

252.215-7992	Only One Offer. (DEVIATION 2026-O0048)	2026-03	Deviation 2026-O0048	2026-03

ONLY ONE OFFER (DEVIATION 2026-O0048) (MAR 2026)

(a) Cost or pricing data requirements. After initial submission of offers, if the Contracting Officer notifies the Offeror that only one offer was received, the Offeror agrees to--

(1) Submit any additional cost or pricing data that is required in order to determine whether the price is fair and reasonable (10 U.S.C. 3705) or to comply with the statutory requirement for certified cost or pricing data (10 U.S.C. 3702); and

(2) Except as provided in paragraph (b) of this provision, if the acquisition exceeds the certified cost or pricing data threshold and an exception to the requirement for certified cost or pricing data at FAR 15.403-2(b)(2) through (5) does not apply, certify all cost or pricing data in accordance with paragraph (c) of DFARS provision 252.215-7994, Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data, of this solicitation.

(b) Canadian Commercial Corporation. If the Offeror is the Canadian Commercial Corporation, certified cost or pricing data are not required. If the Contracting Officer notifies the Canadian Commercial Corporation that additional data other than certified cost or pricing data are required in accordance with DFARS 225.870-4(c), the Canadian Commercial Corporation shall obtain and provide the following:

(1) Profit rate or fee (as applicable).

(2) Analysis provided by Public Works and Government Services Canada to the Canadian Commercial Corporation to determine a fair and reasonable price (comparable to the analysis required at 15.404).

(3) Data other than certified cost or pricing data necessary to permit a determination by the U. S. Contracting Officer that the proposed price is fair and reasonable [U.S. Contracting Officer to provide description of the data required in accordance with FAR 15.403-1 with the notification].

____

(4) As specified in FAR 15.403-1(d), an offeror who does not comply with a requirement to submit data that the U.S. Contracting Officer has deemed necessary to determine price reasonableness or cost realism is ineligible for award unless the head of the contracting activity determines that it is in the best interest of the Government to make the award to that offeror.

(c) Subcontracts. Unless the Offeror is the Canadian Commercial Corporation, the Offeror shall insert the substance of this provision, including this paragraph (c), in all subcontracts exceeding the simplified acquisition threshold defined in FAR part 2.

(End of provision)

252.215-7993	Proposal Adequacy Checklist. (DEVIATION 2026-O0048)	2026-03	Deviation 2026-O0048	2026-03

PROPOSAL ADEQUACY CHECKLIST (DEVIATION 2026-O0048) (MAR 2026)

The offeror shall complete the following checklist, providing location of requested information, or an explanation of why the requested information is not provided. In preparation of the offeror's checklist, offerors may elect to have their prospective subcontractors use the same or similar checklist as appropriate.

PROPOSAL ADEQUACY CHECKLIST

REFERENCES SUBMISSION ITEM PROPOSAL PAGE No. If not provided EXPLAIN (may use continuation pages)

GENERAL INSTRUCTIONS

1. FAR 15.408-2, Table 15-1, Section I Paragraph A Is there a properly completed first page of the proposal per FAR 15.408-2 Table 15-1 I.A or as specified in the solicitation? ____ ____

2. FAR 15.408-2, Table 15-1, Section I Paragraph A(7) Does the proposal identify the need for Government-furnished material/tooling/test equipment? Include the accountable contract number and contracting officer contact information if known. ____ ____

3. FAR 15.408-2, Table 15-1, Section I Paragraph A(8) Does the proposal identify and explain notifications of noncompliance with Cost Accounting Standards Board or Cost Accounting Standards (CAS); any proposal inconsistencies with your disclosed practices or applicable CAS; and inconsistencies with your established estimating and accounting principles and procedures? ____ ____

4. FAR 15.408-2, Table 15-1, Section I, Paragraph C(1)FAR 2.101, "Cost or pricing data" Does the proposal disclose any other known activity that could materially impact the costs?This may include, but is not limited to, such factors as--(1) Vendor quotations;(2) Nonrecurring costs;(3) Information on changes in production methods and in production or purchasing volume;(4) Data supporting projections of business prospects and objectives and related operations costs;(5) Unit-cost trends such as those associated with labor efficiency;(6) Make-or-buy decisions;(7) Estimated resources to attain business goals; and(8) Information on management decisions that could have a significant bearing on costs. ____ ____

5. FAR 15.408-2, Table 15-1, Section I Paragraph B Is an Index of all certified cost or pricing data and information accompanying or identified in the proposal provided and appropriately referenced? ____ ____

6. FAR 15.403-2(b) Are there any exceptions to submission of certified cost or pricing data pursuant to FAR 15.403-2(b)? If so, is supporting documentation included in the proposal? (Note questions 18-20.) ____ ____

7. FAR 15.408-2, Table 15-1, Section I Paragraph C(2)(i) Does the

proposal disclose the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data? ____ ____

8. FAR 15.408-2, Table 15-1, Section I Paragraph C(2)(ii) Does the proposal disclose the nature and amount of any contingencies included in the proposed price? ____ ____

9. FAR 15.408-2, Table 15-1, Section II, Paragraph A or B Does the proposal explain the basis of all cost estimating relationships (labor hours or material) proposed on other than a discrete basis? ____ ____

10. FAR 15.408-2, Table 15-1, Section I Paragraphs D and E Is there a summary of total cost by element of cost and are the elements of cost cross-referenced to the supporting cost or pricing data? (Breakdowns for each cost element must be consistent with your cost accounting system, including breakdown by year.) ____ ____

11. FAR 15.408-2, Table 15-1, Section I Paragraphs D and E If more than one Contract Line Item Number (CLIN) or sub Contract Line Item Number (sub-CLIN) is proposed as required by the RFP, are there summary total amounts covering all line items for each element of cost and is it cross-referenced to the supporting cost or pricing data? ____ ____

12. FAR 15.408-2, Table 15-1, Section I Paragraph F Does the proposal identify any incurred costs for work performed before the submission of the proposal? ____ ____

13. FAR 15.408-2, Table 15-1, Section I Paragraph G Is there a Government forward pricing rate agreement (FPRA)? If so, the offeror shall identify the official submittal of such rate and factor data. If not, does the proposal include all rates and factors by year that are utilized in the development of the proposal and the basis for those rates and factors? ____ ____

COST ELEMENTS

MATERIALS AND SERVICES

14. FAR 15.408-2, Table 15-1, Section II Paragraph A Does the proposal include a consolidated summary of individual material and services, frequently referred to as a Consolidated Bill of Material (CBOM), to include the basis for pricing? The offeror's consolidated summary shall include raw materials, parts, components, assemblies, subcontracts and services to be produced or performed by others, identifying as a minimum the item, source, quantity, and price. ____ ____

SUBCONTRACTS (Purchased materials or services)

15. DFARS 215.404-8 Has the offeror identified in the proposal those subcontractor proposals, for which the contracting officer has initiated or may need to request field pricing analysis? ____ ____

16. FAR 15.404-8(b)FAR 52.244-2 Per the thresholds of FAR 15.404-8(b),

Subcontract Pricing Considerations, does the proposal include a copy of the applicable subcontractor's certified cost or pricing data? ____ ____

17. FAR 15.408-2, Table 15-1, Note 1; Section II Paragraph A Is there a price/cost analysis establishing the reasonableness of each of the proposed subcontracts included with the proposal?If the offeror's price/cost analyses are not provided with the proposal, does the proposal include a matrix identifying dates for receipt of subcontractor proposal, completion of fact finding for purposes of price/cost analysis, and submission of the price/cost analysis? ____ ____

EXCEPTIONS TO CERTIFIED COST OR PRICING DATA

18. FAR 52.215-20,FAR 2.101, "commercial product" or "commercial service" Has the offeror submitted an exception to the submission of certified cost or pricing data for commercial products or commercial services proposed either at the prime or subcontractor level, in accordance with provision 52.215-20?a. Has the offeror specifically identified the type of commercial product or commercial service claim (FAR 2.101 "commercial product" or "commercial service" definition), and the basis on which the commercial product or commercial service meets the definition?b. For modified commercial products (FAR 2.101 "commercial product" definition); did the offeror classify the modification(s) as either--i. A modification of a type customarily available in the commercial marketplace (paragraph (3)(i)); orii. A minor modification (paragraph (3)(ii)) of a type not customarily available in the commercial marketplace made to meet Federal Government requirements not exceeding the thresholds in FAR 15.403-2(c)(3)(iii)(B)?c. For proposed commercial products "of a type", or "evolved" or modified (FAR 2.101 "commercial product" definition), did the contractor provide a technical description of the differences between the proposed item and the comparison item (s)? ____ ____

19. [Reserved]

20. FAR 15.408-2, Table 15-1, Section II Paragraph A(1) Does the proposal support the degree of competition and the basis for establishing the source and reasonableness of price for each subcontract or purchase order priced on a competitive basis exceeding the threshold for certified cost or pricing data? ____ ____

INTERORGANIZATIONAL TRANSFERS

21. FAR 15.408-2, Table 15-1, Section II Paragraph A.(2) For inter-organizational transfers proposed at cost, does the proposal include a complete cost proposal in compliance with Table 15-1? ____ ____

22. FAR 15.408-2, Table 15-1, Section II Paragraph A(1) For inter-organizational transfers proposed at price in accordance with FAR 31.205-26(e), does the proposal provide an analysis by the prime that supports the exception from certified cost or pricing data in accordance with FAR15.403-2? ____ ____

DIRECT LABOR

23. FAR 15.408-2, Table 15-1, Section II Paragraph B Does the proposal

include a time phased (i.e.; monthly, quarterly) breakdown of labor hours, rates and costs by category or skill level? If labor is the allocation base for indirect costs, the labor cost must be summarized in order that the applicable overhead rate can be applied. ____ ____

24. FAR 15.408-2, Table 15-1, Section II Paragraph B For labor Basis of Estimates (BOEs), does the proposal include labor categories, labor hours, and task descriptions, (e.g.; Statement of Work reference, applicable CLIN, Work Breakdown Structure, rationale for estimate, applicable history, and time-phasing)? ____ ____

25. FAR subpart 22.10 If covered by the Service Contract Labor Standards statute (41 U.S.C. chapter 67), are the rates in the proposal in compliance with the minimum rates specified in the statute? ____ ____

INDIRECT COSTS

26. FAR 15.408-2, Table 15-1, Section II Paragraph C Does the proposal indicate the basis of estimate for proposed indirect costs and how they are applied? (Support for the indirect rates could consist of cost breakdowns, trends, and budgetary data.) ____ ____

OTHER COSTS

27. FAR 15.408-2, Table 15-1, Section II Paragraph D Does the proposal include other direct costs and the basis for pricing? If travel is included does the proposal include number of trips, number of people, number of days per trip, locations, and rates (e.g. airfare, per diem, hotel, car rental, etc)? ____ ____

28. FAR 15.408-2, Table 15-1, Section II Paragraph E If royalties exceed $1,500 does the proposal provide the information/data identified by Table 15-1? ____ ____

29. FAR 15.408-2, Table 15-1, Section II Paragraph F When facilities capital cost of money is proposed, does the proposal include submission of Form CASB-CMF or reference to an FPRA/FPRP and show the calculation of the proposed amount? ____ ____

FORMATS FOR SUBMISSION OF LINE ITEM SUMMARIES

30. FAR 15.408-2, Table 15-1, Section III Are all cost element breakdowns provided using the applicable format prescribed in FAR 15.408-2, Table 15-1 III? (or alternative format if specified in the request for proposal) ____ ____

31. FAR 15.408-2, Table 15-1, Section III Paragraph B If the proposal is for a modification or change order, have cost of work deleted (credits) and cost of work added (debits) been provided in the format described in FAR 15.408-2, Table 15-1.III.B? ____ ____

32. FAR 15.408-2, Table 15-1, Section III Paragraph C For price revisions /redeterminations, does the proposal follow the format in FAR 15.408-2, Table 15-1.III. C? ____ ____

OTHER

33. FAR 16.4 If an incentive contract type, does the proposal include offeror proposed target cost, target profit or fee, share ratio, and, when applicable, minimum /maximum fee, ceiling price? ____ ____

34. FAR 16.203-4 and FAR 15.408-2, Table 15-1, Section II, Paragraphs A, B, C, and D If Economic Price Adjustments are being proposed, does the proposal show the rationale and application for the economic price adjustment? ____ ____

35. FAR 52.232-28 If the offeror is proposing Performance-Based Payments did the offeror comply with FAR 52.232-28? ____ ____

36. FAR 15.110(v)FAR 52.215-22FAR 52.215-23 Excessive Pass-through Charges- Identification of Subcontract Effort: If the offeror intends to subcontract more than 70% of the total cost of work to be performed, does the proposal identify: (i) the amount of the offeror's indirect costs and profit applicable to the work to be performed by the proposed subcontractor(s); and (ii) a description of the added value provided by the offeror as related to the work to be performed by the proposed subcontractor(s)? ____ ____

(End of provision)

252.215-7996	Notification to Offerors-Postaward Debriefings. (DEVIATION 2026-O0048)	2026-03	Deviation 2026-O0048	2026-03

NOTIFICATION TO OFFERORS--POSTAWARD DEBRIEFINGS (DEVIATION 2026-O0048) (MAR 2026)

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

"Nontraditional defense contractor" means an entity that is not currently performing and has not performed any contract or subcontract for DoD that is subject to full coverage under the cost accounting standards prescribed pursuant to 41 U.S.C. 1502 and the regulations implementing such section, for at least the 1-year period preceding the solicitation of sources by DoD for the procurement (10 U.S.C. 3014).

(b) Postaward debriefing.

(1) Upon timely request, the Government will provide a written or oral postaward debriefing to successful or unsuccessful offerors for contract awards valued at $15 million

(2) When required, the minimum postaward debriefing information will include the following:

(i) For contracts in excess of $15 million and not in excess of $150 million with a small business or nontraditional defense contractor, an option for the small business or nontraditional defense contractor to request disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(ii) For contracts in excess of $150 million, disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(3) If a required postaward debriefing is provided--

(i) The debriefed Offeror may submit additional written questions related to the debriefing not later than 2 business days after the date of the debriefing;

(ii) The agency will respond in writing to timely submitted additional questions within 5 business days after receipt by the contracting officer; and

(iii) The postaward debriefing will not be considered to be concluded until the later of--

(A) The date that the postaward debriefing is delivered, orally or in writing; or

(B) If additional written questions related to the debriefing are timely received, the date the agency delivers its written response.

(c) Contract performance. The Government may suspend performance of or terminate the awarded contract upon notice from the Government Accountability Office of a protest filed within the time periods listed in paragraphs (c)(1) through (3) of this provision, whichever is later:

(1) Within 10 days after the date of contract award.

(2) Within 5 days after a debriefing date offered to the protestor under a timely debriefing request in accordance with Federal Acquisition Regulation (FAR) 15.301 unless an earlier

debriefing date is negotiated as a result.

(3) Within 5 days after a postaward debriefing under FAR 15.301 is concluded in accordance with Defense Federal Acquisition Regulation Supplement 215.301-170.

(End of provision)

252.225-7966	Prohibition Regarding Russian Fossil Fuel Business Operations-Representation (Deviation 2024-O0006, Revision 1)	2024-03	Deviation 2024-O0006	2024-03

PROHIBITION REGARDING RUSSIAN FOSSIL FUEL BUSINESS OPERATIONS—REPRESENTATION (DEVIATION 2024-O0006, REVISION 1) (MAR 2024)

(a) Definitions. The terms business operations and fossil fuel company have the meanings given in the 252.225-7967 clause of this solicitation.

(b) Representation. By submission of an offer, the Offeror represents it is not, or that it does not knowingly have fossil fuel business operations with an entity or individual that is, 50 percent or more owned, individually or collectively, by-

(1) An authority of the government of the Russian Federation; or

(2) A fossil fuel company that operates in the Russian Federation, except if the fossil fuel company transports oil or gas-

(i) Through the Russian Federation for sale outside of the Russian Federation; and

(ii) That was extracted from a country other than the Russian Federation with respect to the energy sector of which the President has not imposed sanctions as of the date on which the contract is awarded.

(End of provision)

252.225-7967	Prohibition Regarding Russian Fossil Fuel Business Operations (Deviation 2024-O0006, Revision 1)	2024-02	Deviation 2024-O0006	2024-02

PROHIBITION REGARDING RUSSIAN FOSSIL FUEL BUSINESS OPERATIONS (DEVIATION 2024-O0006, REVISION 1) (FEB 2024)

(a) Definitions. As used in this clause-

“Business operations” means knowingly engaging in commerce in any form, including acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other known apparatus of business or commerce. The term does not include-

(1) Any shipment subject to price caps as specified in the-

(i) “Statement of the G7 and Australia on a Price Cap for Seaborne Russian-Origin Crude Oil”, issued on December 2, 2022, between member countries of that coalition; or

(ii) “Statement of the G7 and Australia on Price Caps for Seaborne Russian-Origin Petroleum Products Berlin, Brussels, Canberra, London, Ottawa, Paris, Rome, Tokyo, Washington”, issued on February 4, 2023, between such members, if such shipment complies with the applicable price caps; or

(A) Actions taken for the benefit of the country of Ukraine, as determined by the Secretary; or

(B) Actions taken to support the suspension or termination of business operations for commercial activities during the period beginning on the effective date and ending on December 31, 2029, including-

(1) Any action to secure or divest from facilities, property, or equipment;

(2) The provision of products or services provided to reduce or eliminate operations in territory internationally recognized as the Russian Federation or to comply with sanctions relating to the Russian Federation; and;

(3) Activities that are incident to liquidating, dissolving, or winding down a subsidiary or legal entity in Russia.

Fossil fuel company means an entity or individual that-

(1) Carries out oil, gas, or coal exploration, development, or production activities;

(2) Processes or refines oil, gas, or coal; or

(3) Transports, or constructs facilities for the transportation of, Russian oil, gas, or coal.

(b) Prohibition. In accordance with section 804 of the National Defense Authorization Act for Fiscal Year 2024 (Pub. L. 118-31), the Contractor is prohibited from entering into a subcontract or other contractual instrument for the procurement of products or services with any entity or individual that is known to be, or that is known to have fossil fuel business operations with an entity or individual that is, not less than 50 percent owned, individually or collectively, by-

(1) An authority of the government of the Russian Federation; or

(2) A fossil fuel company that operates in the Russian Federation, except if the fossil fuel company transports oil or gas-

(i) Through the Russian Federation for sale outside of the Russian Federation; and

(ii) That was extracted from a country other than the Russian Federation with respect to the energy sector of which the President has not imposed sanctions as of the date on which the contract is awarded.

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

(End of clause)

252.225-7993	Prohibition on Providing Funds to the Enemy. (DEVIATION 2024-O0003)	2023-12	Deviation 2024-O0003	2023-12

PROHIBITION ON PROVIDING FUNDS TO THE ENEMY (DEVIATION 2024-O0003) (DEC 2023)

(a) The Contractor shall-

(1) Exercise due diligence to ensure that none of the funds, including supplies and services, received under this contract are provided directly or indirectly (including through subcontracts) to a person or entity who is actively opposing United States or Coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities;

(2) Check the list of prohibited/restricted sources in the System for Award Management (SAM) at www.sam.gov-

(i) Prior to subcontract award; and

(ii) At least on a monthly basis; and

(3) Terminate or void in whole or in part any subcontract with a person or entity listed in SAM as a prohibited or restricted source pursuant to section 841 of the National Defense Authorization Act for Fiscal Year 2015 (Pub. L. 113-291), as amended, unless the Contracting Officer provides to the Contractor written approval of the head of the contracting activity to continue the subcontract.

(b) The Head of the Contracting Activity has the authority to-

(1) Terminate any contract for default, in whole or in part, if the Head of the Contracting Activity determines in writing that the contractor failed to exercise due diligence, as required by paragraph (a) of this clause; or

(2)(i) Void any contract, in whole or in part, if the Head of the Contracting Activity determines in writing that any funds received under this contract have been provided directly or indirectly to a

person or entity who is actively opposing United States or Coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

(ii) When voided in whole or in part, a contract is unenforceable as contrary to public policy, either in its entirety or with regard to a segregable task or effort under the contract, respectively.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts, including subcontracts for commercial products and commercial services, under this contract that have an estimated value over $50,000 and will be performed outside the United States and its outlying areas.

(End of clause)

252.232-7004	DoD Progress Payment Rates (DEVIATION 2020-O0010)	2014-10	Deviation 2020-O0010	2020-03

DOD PROGRESS PAYMENT RATES (MAR 2020) (DEVIATION 2020-O0010)

If the Contractor is a small business concern, the Progress Payments clause of this contract is modified to change each mention of the progress payment rate and liquidation rate (excepting paragraph (k), Limitations on Undefinitized Contract Actions) to 95 percent.

(End of clause)

252.240-7997	NIST SP 800-171 DoD Assessment Requirements. (DEVIATION 2026-O0025)	2026-02	Deviation 2026-O0025	2026-02

NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (DEVIATION 2026-O0025)(FEB 2026)

(a) Definitions.

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

High Assessment means an assessment that is conducted by Government personnel, trained in accordance with DoD policy and procedures, using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that--

(1) Consists of--

(i) A review of a contractor's previous assessment(s), as applicable;

(ii) A thorough document review;

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

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

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

Medium Assessment means an assessment conducted by Government personnel, trained in accordance with DoD policy and procedures, using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that--

(1) Consists of--

(i) A review of a contractor's previous assessment(s), as applicable;

(ii) A thorough document review; and

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

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

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

(c) Requirements. The Contractor shall provide access to its facilities, systems, and personnel necessary for the Government to conduct a Medium or High NIST SP 800-171 DoD Assessment, using the methodology described at 32 CFR 170.24, if necessary. The results of Medium or High NIST SP 800-171 DoD Assessments, when conducted by DCMA, will take precedence over any other assessment, in accordance with 32 CFR 170.16(a)(1)(iv), 32 CFR 170.17(a)(1)(iv), and 32 CFR 170.18(a)(1)(iv).

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

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

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

(ii) Organization conducting the assessment, i.e., DCMA.

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

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

(v) Summary level score (overall numerical score, not the individual value assigned for each requirement).

(vi) Date that all requirements are expected to be implemented based on information gathered

from associated plan(s) of action developed in accordance with NIST SP 800-171.

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

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

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

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

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

(g) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services (excluding commercially available off-the-shelf items).

(End of clause)

Section 00 72 00 - General Conditions

FAR Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.203-3	Gratuities.	1984-04		

Gratuities (Apr 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative-

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled-

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This paragraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5	Covenant Against Contingent Fees.	2014-05

Covenant Against Contingent Fees (May 2014)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

Bona fide employee, as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

Contingent fee, as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

Improper influence, as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-6	Restrictions on Subcontractor Sales to the Government.	2020-06

Restrictions on Subcontractor Sales to the Government (Jun 2020)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

(End of clause)

52.203-7	Anti-Kickback Procedures.	2020-06

Anti-Kickback Procedures (Jun 2020)

(a) Definitions.

Kickback, as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

Person, as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

Prime contract, as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

Prime Contractor as used in this clause, means a person who has entered into a prime contract with the United States.

Prime Contractor employee, as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

Subcontract, as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

Subcontractor, as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

Subcontractor employee, as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) 41 U.S.C. chapter 87, Kickbacks, prohibits any person from-

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by

a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)

(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c)(5) but excepting paragraph (c)(1) of this clause, in all subcontracts under this contract that exceed the threshold specified in Federal Acquisition Regulation 3.502-2(i) on the date of subcontract award.

(End of clause)

52.203-8 Cancellation, Rescission, and 2014-05

Recovery of Funds for Illegal or
Improper Activity.

Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (May 2014)

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C. 2102-2104, Restrictions on Obtaining and Disclosing Certain Information, the Government may-

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which-

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct violates 41 U.S.C.2102 for the purpose of either-

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct punishable under 41 U.S.C.2105(a).

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

(End of clause)

52.203-10 Price or Fee Adjustment for 2014-05

Illegal or Improper Activity.

Price or Fee Adjustment for Illegal or Improper Activity (May 2014)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of 41 U.S.C.2102 or 2103, as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be-

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts-

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may-

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be

reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the statute by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12	Limitation on Payments to Influence Certain Federal Transactions.	2020-06

Limitation on Payments to Influence Certain Federal Transactions (Jun 2020)

(a) Definitions. As used in this clause-

Agency means "executive agency" as defined in Federal Acquisition Regulation (FAR) 2.101.

Covered Federal action means any of the following actions:

(1) Awarding any Federal contract.

(2) Making any Federal grant.

(3) Making any Federal loan.

(4) Entering into any cooperative agreement.

(5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

Indian tribe and "tribal organization" have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b) and include Alaskan Natives.

Influencing or attempting to influence means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

Local government means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

Officer or employee of an agency includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.

(3) A special Government employee, as defined in section 202, Title 18, United States Code.

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

Person means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or

not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Reasonable compensation means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

Reasonable payment means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

Recipient includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Regularly employed means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

State means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibition. 31 U.S.C. 1352 prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352, the Contractor shall not use

appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of this contractor the extension, continuation, renewal, amendment, or modification of this contract.

(1) The term appropriated funds does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that these other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(c) Exceptions. The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) Agency and legislative liaison by Contractor employees.

(i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern-

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act,

as amended by Pub. L. 95-507, and subsequent amendments.

(2) Professional and technical services.

(i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(iii) As used in paragraph (c)(2) of this clause, "professional and technical services" are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).

(iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.

(d) Disclosure.

(1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(g) Subcontracts.

(1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract under this contract that exceeds the threshold specified in FAR 3.808 on the date of subcontract award. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in

any subcontract that exceeds the threshold specified in FAR 3.808 on the date of subcontract award.

(End of clause)

52.203-13	Contractor Code of Business Ethics and Conduct.	2021-11

Contractor Code of Business Ethics and Conduct (Nov 2021)

(a) Definitions. As used in this clause-

Agent means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

Full cooperation-

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors' and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require-

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from-

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

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

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

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

(b) Code of business ethics and conduct.

(1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall-

(i) Have a written code of business ethics and conduct;

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall-

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)

(i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has

credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed-

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729- 3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial product or commercial service as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals

and employees, and as appropriate, the Contractor's agents and subcontractors.

(2) An internal control system.

(i) The Contractor's internal control system shall-

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including-

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729- 3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that exceed the threshold specified in FAR 3.1004(a) on the date of subcontract award and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(End of clause)

52.203-16	Preventing Personal Conflicts of Interest.	2020-06

Preventing Personal Conflicts of Interest (Jun 2020)

(a) Definitions. As used in this clause-

Acquisition function closely associated with inherently governmental functions means supporting or providing advice or recommendations with regard to the following activities of a Federal agency:

(1) Planning acquisitions.

(2) Determining what supplies or services are to be acquired by the Government, including developing statements of work.

(3) Developing or approving any contractual documents, to include documents defining requirements, incentive plans, and evaluation criteria.

(4) Evaluating contract proposals.

(5) Awarding Government contracts.

(6) Administering contracts (including ordering changes or giving technical direction in contract performance or contract quantities, evaluating contractor performance, and accepting or rejecting contractor products or services).

(7) Terminating contracts.

(8) Determining whether contract costs are reasonable, allocable, and allowable.

Covered employee means an individual who performs an acquisition function closely associated with inherently governmental functions and is-

(1) An employee of the contractor; or

(2) A subcontractor that is a self-employed individual treated as a covered employee of the contractor because there is no employer to whom such an individual could submit the required disclosures.

Non-public information means any Government or third-party information that-

(1) Is exempt from disclosure under the Freedom of Information Act (5 U.S.C. 552) or otherwise protected from disclosure by statute, Executive order, or regulation; or

(2) Has not been disseminated to the general public and the Government has not yet determined whether the information can or will be made available to the public.

Personal conflict of interest means a situation in which a covered employee has a financial interest, personal activity, or relationship that could impair the employee's ability to act impartially and in the best interest of the Government when performing under the contract. (A de minimis interest that would not "impair the employee's ability to act impartially and in the best interest of the Government" is not covered under this definition.)

(1) Among the sources of personal conflicts of interest are-

(i) Financial interests of the covered employee, of close family members, or of other members of the covered employee's household;

(ii) Other employment or financial relationships (including seeking or negotiating for prospective employment or business); and

(iii) Gifts, including travel.

(2) For example, financial interests referred to in paragraph (1) of this definition may arise from-

(i) Compensation, including wages, salaries, commissions, professional fees, or fees for business referrals;

(ii) Consulting relationships (including commercial and professional consulting and service arrangements, scientific and technical advisory board memberships, or serving as an expert witness in litigation);

(iii) Services provided in exchange for honorariums or travel expense reimbursements;

(iv) Research funding or other forms of research support;

(v) Investment in the form of stock or bond ownership or partnership interest (excluding diversified mutual fund investments);

(vi) Real estate investments;

(vii) Patents, copyrights, and other intellectual property interests; or

(viii) Business ownership and investment interests.

(b) Requirements. The Contractor shall-

(1) Have procedures in place to screen covered employees for potential personal conflicts of interest, by-

(i) Obtaining and maintaining from each covered employee, when the employee is initially assigned to the task under the contract, a disclosure of interests that might be affected by the task to which the employee has been assigned, as follows:

(A) Financial interests of the covered employee, of close family members, or of other members of the covered employee's household.

(B) Other employment or financial relationships of the covered employee (including seeking or negotiating for prospective employment or business).

(C) Gifts, including travel; and

(ii) Requiring each covered employee to update the disclosure statement whenever the

employee's personal or financial circumstances change in such a way that a new personal conflict of interest might occur because of the task the covered employee is performing.

(2) For each covered employee-

(i) Prevent personal conflicts of interest, including not assigning or allowing a covered employee to perform any task under the contract for which the Contractor has identified a personal conflict of interest for the employee that the Contractor or employee cannot satisfactorily prevent or mitigate in consultation with the contracting agency;

(ii) Prohibit use of non-public information accessed through performance of a Government contract for personal gain; and

(iii) Obtain a signed non-disclosure agreement to prohibit disclosure of non-public information accessed through performance of a Government contract.

(3) Inform covered employees of their obligation-

(i) To disclose and prevent personal conflicts of interest;

(ii) Not to use non-public information accessed through performance of a Government contract for personal gain; and

(iii) To avoid even the appearance of personal conflicts of interest;

(4) Maintain effective oversight to verify compliance with personal conflict-of-interest safeguards;

(5) Take appropriate disciplinary action in the case of covered employees who fail to comply with policies established pursuant to this clause; and

(6) Report to the Contracting Officer any personal conflict-of-interest violation by a covered employee as soon as it is identified. This report shall include a description of the violation and the proposed actions to be taken by the Contractor in response to the violation. Provide follow-up reports of corrective actions taken, as necessary. Personal conflict-of-interest violations include-

(i) Failure by a covered employee to disclose a personal conflict of interest;

(ii) Use by a covered employee of non-public information accessed through performance of a

Government contract for personal gain; and

(iii) Failure of a covered employee to comply with the terms of a non-disclosure agreement.

(c) Mitigation or waiver.

(1) In exceptional circumstances, if the Contractor cannot satisfactorily prevent a personal conflict of interest as required by paragraph (b)(2)(i) of this clause, the Contractor may submit a request through the Contracting Officer to the Head of the Contracting Activity for-

(i) Agreement to a plan to mitigate the personal conflict of interest; or

(ii) A waiver of the requirement.

(2) The Contractor shall include in the request any proposed mitigation of the personal conflict of interest.

(3) The Contractor shall-

(i) Comply, and require compliance by the covered employee, with any conditions imposed by the Government as necessary to mitigate the personal conflict of interest; or

(ii) Remove the Contractor employee or subcontractor employee from performance of the contract or terminate the applicable subcontract.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts-

(1) That exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award; and

(2) In which subcontractor employees will perform acquisition functions closely associated with inherently governmental functions (i.e., instead of performance only by a self-employed individual).

(End of clause)

52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.	2017-01

Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017)

(a) Definitions. As used in this clause-

Internal confidentiality agreement or statement means a confidentiality agreement or any other written statement that the contractor requires any of its employees or subcontractors to sign regarding nondisclosure of contractor information, except that it does not include confidentiality agreements arising out of civil litigation or confidentiality agreements that contractor employees or subcontractors sign at the behest of a Federal agency.

Subcontract means any contract as defined in subpart 2.1 entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor means any supplier, distributor, vendor, or firm (including a consultant) that furnishes supplies or services to or for a prime contractor or another subcontractor.

(b) The Contractor shall not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(c) The Contractor shall notify current employees and subcontractors that prohibitions and restrictions of any preexisting internal confidentiality agreements or statements covered by this clause, to the extent that such prohibitions and restrictions are inconsistent with the prohibitions of this clause, are no longer in effect.

(d) The prohibition in paragraph (b) of this clause does not contravene requirements applicable to Standard Form 312 (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(e) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015, (Pub. L. 113-235), and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions) use of funds appropriated (or otherwise made available) is prohibited, if the Government determines that the Contractor is not in compliance with the provisions of this clause.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), in subcontracts under such contracts.

(End of clause)

52.204-9	Personal Identity Verification of Contractor Personnel.	2011-01

Personal Identity Verification of Contractor Personnel (Jan 2011)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

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

(1) When no longer needed for contract performance.

(2) Upon completion of the Contractor employee's employment.

(3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

(End of clause)

52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards. (Deviation 2026-O0038)	2026-02

Reporting Executive Compensation and First-Tier Subcontract Awards (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause:

Executive means officers, managing partners, or any other employees in management positions.

First-tier subcontract means a subcontract awarded directly by the Contractor to acquire supplies or services (including construction) for performing a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a contractor's general and administrative expenses or indirect costs.

Month of award means the month in which the Contracting Officer signs a contract or the month in which the Contractor signs a first-tier subcontract.

Total compensation means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the information described at 17 CFR 229.402 (c)(2).

(b) Requirement. Section 2(d)(2) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public; therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public. Nothing in this clause requires disclosing classified information.

(c) Reporting. Unless otherwise directed by the Contracting Officer, or as provided in paragraph (f) of this clause, the Contractor shall report the following in the System for Award Management at https://www.sam.gov as follows:

(1) Executive compensation of the prime contractor. The Contractor shall report the names and total compensation of each of the five most highly compensated executives for its preceding completed fiscal year, if-

(i) In the Contractor's preceding fiscal year, the Contractor received-

(A)80 percent or more of its annual gross revenues from Federal contracts (and subcontracts); loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(B)$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts); loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

(2) First-tier subcontract information. The Contractor shall report the following information by the

end of the month following the month of award of each first-tier subcontract award:

(i) Unique entity identifier for the subcontractor receiving the award and for the subcontractor's ultimate parent company, if the subcontractor has a parent company.

(ii) Name of the subcontractor.

(iii) Amount of the subcontract award.

(iv) Date of the subcontract award.

(v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(vi) The subcontract number assigned by the Prime Contractor.

(vii) Subcontractor's physical address.

(viii) Subcontractor's primary performance location.

(ix) The prime contract number, and order number if applicable.

(x) Awarding agency name and code.

(xi) Funding agency name and code.

(xii) Government contracting office code.

(xiii) The applicable North American Industry Classification System code.

(3) Executive compensation of the first-tier subcontractor. The Contractor shall report by the end of the month following the month of award of a first-tier subcontract award and annually thereafter (calculated from the prime contract award date) the names and total compensation of each of the five most highly compensated executives for that subcontractor in the subcontractor's preceding completed fiscal year, if-

(i) In the subcontractor's preceding fiscal year, the subcontractor received-

(A)80 percent or more of its annual gross revenues from Federal contracts (and subcontracts);

loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(B)$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts); loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986 (see http://www.sec.gov/answers/execomp.htm).

(d) Restriction. The Contractor shall not split or break down subcontracts to a value below the threshold at the Federal Acquisition Regulation 4.208(e), on the date of subcontract award, to avoid the reporting requirements in paragraph (c) of this clause.

(e) Duration. Continued reporting on first-tier subcontracts is not required unless one of the reported data elements changes during the performance of the subcontract. The Contractor is not required to make further reports after a first-tier subcontract expires.

(f) Exceptions.

(1) If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards for that subcontractor.

(g) Prepopulated data. The Subcontract Reports in SAM will prepopulate with some information from SAM and the Federal Procurement Data System (FPDS). If the FPDS information is incorrect, the Contractor should notify the Contracting Officer. If the SAM information is incorrect, the Contractor is responsible for correcting this information.

(End of clause)

52.204-13 System for Award Management- 2026-02

Maintenance. (Deviation 2026-O0038)

System for Award Management-Maintenance (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Commercial and Government Entity code means-

(1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity by unique location (referred to as "CAGE code"); or

(2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency to entities located outside the United States and its outlying areas that the DLA CAGE Branch records and maintains in the CAGE master file (referred to as "NCAGE code").

Unique Entity Identifier (UEI) means an identifier used to identify a specific commercial, nonprofit, or Government entity.

(b) Active registration.

(1) The Contractor shall maintain an active Federal Government contracts registration in the System for Award Management (SAM) at https://www.sam.gov during contract performance and through final payment under this contract. To maintain an active registration in SAM, the Contractor shall review at least annually its registration in SAM and validate that the information is current, accurate, and complete.

(2) The Contractor is responsible for the currency, accuracy, and completeness of the information provided within SAM, and for any liability resulting from the Government's reliance on inaccurate or incomplete information. Updating SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(c) Novation and change-of-name agreements.

(1) If the Contractor has legally changed its business name or "doing business as" name (whichever is shown on the contract), or has transferred the assets used to perform the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in part 42 of the Federal Acquisition Regulation (FAR), the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to -

(i) Change the legal business name in SAM;

(ii) Comply with the requirements of FAR part 42; and

(iii) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor shall provide with its written notification sufficient documentation to support the legally changed name.

(2) If the Contractor fails to comply with the requirements of paragraph (c)(1) of this clause, or fails to perform the agreement at paragraph (c)(1)(iii) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(d) Assignees.

(1) The Contractor shall not change the legal business name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see FAR part 32). Assignees shall be separately registered in SAM.

(2) Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be incorrect information within the meaning of the "Suspension of Payment" paragraph of the EFT clause of this contract.

(e) Unique entity identifier (UEI). The Contractor shall ensure that its UEI is maintained throughout the life of the contract.

(f) Commercial and Government Entity (CAGE) code. The Contractor shall ensure that the CAGE code is maintained throughout the life of the contract. To update a CAGE code, the Contractor shall initiate the change by updating its SAM registration.

(g) Communicating changes. The Contractor shall communicate any change to its UEI or CAGE code to the Contracting Officer within 30 days after the change, so a modification can be issued to update the UEI or CAGE code on this contract. A change in the UEI does not necessarily require a novation.

(End of clause)

52.204-19	Incorporation by Reference of Representations and Certifications.	2014-12

Incorporation by Reference of Representations and Certifications (Dec 2014)

The Contractor's representations and certifications, including those completed electronically via the System for Award Management (SAM), are incorporated by reference into the contract.

(End of clause)

52.204-91	Contractor Identification. (Deviation 2026-O0038)	2026-02

Contractor Identification (Feb 2026) (Deviation 2026-O0038)

Definitions. As used in this clause-

Commercial and Government Entity code means-

(1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity by unique location (referred to as "CAGE code"); or

(2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency (NSPA) to entities located outside the United States and its outlying areas that the DLA CAGE Branch records and maintains in the CAGE master file (referred to as "NCAGE code").

Unique entity identifier means an identifier used to identify a specific commercial, nonprofit, or Government entity.

(b) Unique entity identifier (UEI). The Contractor shall ensure that its UEI is maintained throughout the life of the contract.

(c) Commercial and Government Entity (CAGE) code. The Contractor shall ensure that the CAGE code is maintained throughout the life of the contract. The Contractor shall request changes to a CAGE code as indicated in the following table.

If the Contractor is…	Then…
Registered in the System for Award Management (SAM)	Initiate the change by updating its SAM registration
Located in the United States or its outlying areas and is not registered in SAM	Submit a change request to the DLA CAGE Branch via https://cage.dla.mil
Located outside the United States and its outlying areas and is not registered in SAM	Request a change by contacting the appropriate National Codification Bureau (https://www.nato.int/structur/ac/135/about/contacts) or NSPA (https://eportal.nspa.nato.int /AC135Public/scage/CageList.aspx)

(d) Communicating changes. The Contractor shall communicate any change to its UEI or CAGE code to the Contracting Officer within 30 days after the change, so a modification can be issued to update the UEI or CAGE code on this contract. A change in the UEI does not necessarily require a novation.

(End of clause)

52.209-6 Protecting the Government's 2026-02

Interest When Subcontracting With Contractors Debarred, Suspended, Proposed for Debarment, or Voluntarily Excluded. (Deviation 2026-O0038)

Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, Proposed for Debarment, or Voluntarily Excluded (Feb 2026) (Deviation 2026-O0038)

(a) Definition. As used in this clause-

Commercially available off-the-shelf (COTS) item

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

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

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

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

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

(b) The Government suspends or debars Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract, in excess of the threshold specified in FAR 9.405-2(b) on the date of subcontract award, with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless a compelling reason exists to do so.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed the threshold specified in FAR 9.405-2(b) on the date of subcontract award, other than a

subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, proposed for debarment, or voluntarily excluded by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, proposed for debarment, or voluntarily excluded (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, proposed debarment, or voluntary exclusion.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial products or commercial services, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each subcontract that-

(1) Exceeds the threshold specified in FAR 9.405-2(b) on the date of subcontract award; and

(2) Is not a subcontract for commercially available off-the-shelf items.

(End of clause)

52.209-9 Updates of Publicly Available 2026-02

Information Regarding
Responsibility Matters.
(Deviation 2026-O0038)

Updates of Publicly Available Information Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management via https://www.sam.gov.

(b) All information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consists of two segments-

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by-

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for-

(i) Past performance reviews required by part 42.

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that the Government has posted. FAPIIS will retain the comments as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) All information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available (section 3010 of Pub. L. 111-212).

(d) The Government will handle public requests for system information posted prior to April 15, 2011, under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

(End of clause)

52.209-10	Prohibition on Contracting With Inverted Domestic Corporations. (Deviation 2026-O0038)	2026-02

Prohibition on Contracting with Inverted Domestic Corporations (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

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

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

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

(c) Exceptions to this prohibition are located at 9.108-3.

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

(End of clause)

52.210-1	Market Research. (Deviation 2026-O0038)	2026-02

Market Research (Feb 2026) (Deviation 2026-O0038)

(a) Definition. As used in this clause-

Commercial product, commercial service, and nondevelopmental item have the meaning

contained in Federal Acquisition Regulation (FAR) 2.101.

(b) Before awarding subcontracts for noncommercial acquisitions, where the subcontracts are over the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, the Contractor shall conduct market research to determine, in the following order of priority, whether-

(1) A commercial product or commercial service can meet the agency's requirements;

(2) The requirements could be modified so the agency could use an existing commercial product or commercial service;

(3) A commercial product or commercial service could be modified to meet the agency's requirements; or

(4) The requirement can only be satisfied by a nondevelopmental item.

(End of clause)

52.211-12	Liquidated Damages-Construction.	2000-09

Liquidated Damages-Construction (Sept 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of **(see section 01 00 00.00 44)** for each calendar day of delay until the work is completed or accepted.

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

(End of clause)

52.211-13	Time Extensions.	2000-09

Time Extensions (Sept 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(End of clause)

52.211-15	Defense Priority and Allocation Requirements.	2008-04

Defense Priority and Allocation Requirements (Apr 2008)

This is a rated order certified for national defense, emergency preparedness, and energy program use, and the Contractor shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).

(End of clause)

52.215-2	Audit and Records-Negotiation. (Deviation 2026-O0038)	2026-02

Audit and Records-Negotiation (Feb 2026) (Deviation 2026-O0038)

(a) As used in this clause, records includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Certified cost or pricing data. If the Contractor has been required to submit certified cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the certified cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to-

(1) The proposal for the contract, subcontract, or modification;

(2) The discussions conducted on the proposal(s), including those related to negotiating;

(3) Pricing of the contract, subcontract, or modification; or

(4) Performance of the contract, subcontract or modification.

(d) Comptroller General.-

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any current employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary

course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating-

(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified for contractor record retention in Part 4 of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition-

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g)

(1) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, and-

(i) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(ii) For which certified cost or pricing data are required; or

(iii) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

(2) The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-10	Price Reduction for Defective Certified Cost or Pricing Data.	2011-08

Price Reduction for Defective Certified Cost or Pricing Data (Aug 2011)

(a) If any price, including profit or fee, negotiated in connection with this contract, or any cost reimbursable under this contract, was increased by any significant amount because-

(1) The Contractor or a subcontractor furnished certified cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) A subcontractor or prospective subcontractor furnished the Contractor certified cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) Any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction.

(b) Any reduction in the contract price under paragraph (a) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective certified cost or pricing data.

(c)

(1) If the Contracting Officer determines under paragraph (a) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current certified cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the certified cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)

(i) Except as prohibited by subdivision (c)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if-

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the certified cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if-

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(d) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid-

(1) Interest compounded daily, as required by 26 U.S.C.6622, on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C.6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted certified cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-11	Price Reduction for Defective Certified Cost or Pricing Data-Modifications. (Deviation 2026-O0038)	2026-02

Price Reduction for Defective Certified Cost or Pricing Data-Modifications (Feb 2026) (Deviation 2026-O0038)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-3(a) on the date of execution of the modification, except that this clause does not apply to any modification if an exception under FAR 15.403-2 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished certified cost or pricing data that were

not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor certified cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective certified cost or pricing data.

(d)

(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current certified cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the certified cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)

(i) Except as prohibited by paragraph (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if-

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the certified cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if-

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid-

(1) Interest compounded daily, as required by 26 U.S.C.6622, on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted certified cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-12	Subcontractor Certified Cost or Pricing Data. (Deviation 2026-O0038)	2026-02

Subcontractor Certified Cost or Pricing Data (Feb 2026) (Deviation 2026-O0038)

(a) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-3(a), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408-2, Table 15-1 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-2 applies. If the threshold for submission of certified cost or pricing data specified in FAR 15.403-3(a) is adjusted for inflation as set forth in FAR part 1, then the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.403-4 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that, when entered into, exceeds the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), the Contractor shall insert either##

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of certified cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Certified Cost or Pricing Data-Modifications.

(End of clause)

52.215-13 Subcontractor Certified Cost or 2026-02

Pricing Data-Modifications.
(Deviation 2026-O0038)

Subcontractor Certified Cost or Pricing Data-Modifications (Feb 2026) (Deviation 2026-O0038)

(a) The requirements of paragraphs (b) and (c) of this clause shall-

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-3(a) on the date of execution of the modification; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408-2, Table 15-1 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-2 applies. If the threshold for submission of certified cost or pricing data specified in FAR 15.403-3(a) is adjusted for inflation as set forth in FAR part 1, then the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.403-4 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of certified cost or pricing data in FAR 15.403-3(a) on the date of agreement on price or the date of award, whichever is later.

(End of clause)

52.215-15	Pension Adjustments and Asset Reversions. (Deviation 2026-O0038)	2026-02

Pension Adjustments and Asset Reversions (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.

(b) For segment closings, pension plan terminations, or curtailment of benefits, the amount of the adjustment shall be-

(1) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99), the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) ; and

(2) For contracts and subcontracts that are not subject to full coverage under the CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) , except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) shall be the sum of the pension plan costs allocated to all non-CAS covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) subpart 31.2 or for which certified cost or pricing data were submitted.

(c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which certified cost or pricing data were submitted or that are subject to FAR subpart 31.2.

(d) The Contractor shall include the substance of this clause in all subcontracts under this

contract that meet the applicability requirement of FAR 15.110(o).

(End of clause)

52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions. (Deviation 2026-O0038)	2026-02

Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall promptly notify the Contracting Officer in writing when the Contractor determines that it will terminate or reduce the benefits of a PRB plan.

(b) If PRB fund assets revert or inure to the Contractor, or are constructively received by it under a plan termination or otherwise, the Contractor shall make a refund or give a credit to the Government for its equitable share as required by 31.205-6(o)(5) of the Federal Acquisition Regulation (FAR). When determining or agreeing on the method for recovery of the Government's equitable share, the contracting parties should consider the following methods: cost reduction, amortizing the credit over a number of years (with appropriate interest), cash refund, or some other agreed upon method. Should the parties be unable to agree on the method for recovery of the Government's equitable share, through good faith negotiations, the Contracting Officer shall designate the method of recovery.

(c) The Contractor shall insert the substance of this clause in all subcontracts that meet the applicability requirements of FAR 15.110(r).

(End of clause)

52.215-19	Notification of Ownership	2026-02

Changes. (Deviation 2026-
O0038)

Notification of Ownership Changes (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall-

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

(c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.110(s).

(End of clause)

52.215-23	Limitations on Pass-Through Charges. (Deviation 2026-O0038)	2026-02

Limitations on Pass-Through Charges (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Added value means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

Excessive pass-through charge, with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

No or negligible value means the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

Subcontract means any contract, as defined in Federal Acquisition Regulation (FAR)2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor, as defined in FAR part 44, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) General. The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) Reporting. Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if-

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) Recovery of excessive pass-through charges. If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR 31; and

(2) For applicable DoD fixed-price contracts, as identified in 15.110(v)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) Access to records.

(1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) Subcontracts.The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that exceed the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, except if the contract is with DoD, then insert in all cost-reimbursement subcontracts and fixed-price subcontracts, except those identified in FAR 15.110(v)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in FAR 15.403-3(a) on the date of subcontract award.

(End of clause)

52.219-3	Notice of HUBZone Set-Aside or Sole-Source Award. (Deviation 2026-O0038)	2026-02

Notice of HUBZone Set-Aside or Sole-Source Award (Feb 2026) (Deviation 2026-O0038)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern, certified by the Small Business Administration (SBA), that appears on the List of Qualified HUBZone Small Business Concerns maintained by the SBA (13 CFR 126.103).

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside or awarded on a sole-source basis to, HUBZone small business concerns;

(2) Part or parts of a multiple-award contract that have been set aside for HUBZone small business concerns; and

(3) Orders set aside for HUBZone small business concerns under multiple-award contracts as described in 8.4 and 16.5

(c) General.

(1) Offers are solicited only from HUBZone small business concerns. Offers received from concerns that are not HUBZone small business concerns will not be considered.

(2) Any award resulting from this solicitation will be made to a HUBZone small business concern.

(d) Joint venture. A joint venture may be considered a HUBZone concern if-

(1) At least one party to the joint venture is a HUBZone small business concern and complies with 13 CFR 126.616(c); and

(2) Each party to the joint venture qualifies as small under the size standard for the solicitation, or the protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under the SBA mentor-protégé program.

(e) A HUBZone joint venture agrees that, in the performance of the contract, at least 40 percent of the aggregate work performed by the joint venture shall be completed by the HUBZone small business parties to the joint venture. Work performed by the HUBZone small business party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns. (Deviation 2026-O0038)	2026-02

Notice of Price Evaluation preference for HUBZone Small Business Concerns (Feb 2026) (Deviation 2026-O0038)

(a) Evaluation preference.

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(b) Waiver of evaluation preference. A HUBZone small business concern may choose to waive the evaluation preference. If the concern waives the preference, the factor will be added to its offer for evaluation purposes.

[ ] Offeror chooses to waive the evaluation preference.

(c) Joint venture. A HUBZone joint venture agrees that, in the performance of the contract, at least 40 percent of the aggregate work performed by the joint venture shall be completed by the HUBZone small business parties to the joint venture. Work performed by the HUBZone small business parties to the joint venture must be more than administrative functions.

(End of provision)

52.219-6	Notice of Total Small Business Set-Aside. (Deviation 2026-O0038)	2026-02

Notice of Total Small Business Set-Aside (Feb 2026) (Deviation 2026-O0038)

(a) Definition. Small business concern, as used in this clause-

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(2) Affiliates, as used in paragraph (a)(1) of this clause, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership, common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for small business concerns; and

(2) Orders set aside for small business concerns under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(End of clause)

52.219-8	Utilization of Small Business Concerns. (Deviation 2026-O0038)	2026-02

Utilization of Small Business Concerns (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this contract-

HUBZone small business concern means a small business concern that meets the requirements described in 13 CFR 126.200, certified by the Small Business Administration (SBA) and designated by SBA as a HUBZone small business concern in the Small Business Search (SBS) and the System for Award Management (SAM).

Service-disabled veteran-owned small business (SDVOSB) concern means an SDVOSB concern that meets the requirements described in 13 CFR 128.300, is certified by SBA, and is designated by SBA as an SDVOSB concern in SBS and SAM.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation and qualified as a small business under the criteria and size standards in 13 CFR part 121, including the size standard that corresponds to the NAICS code assigned to the contract or subcontract.

Small disadvantaged business (SDB) concern means a small business concern under the size standard applicable to the acquisition, that-

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by-

(i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding the threshold at 13 CFR 124.104(c)(2) after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13. CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

Veteran-owned small business (VOSB) concern means a small business concern-

(1) Not less than 51 percent of which is owned and controlled by one or more veterans (as defined at 38 U.S.C.101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business (WOSB) concern means a small business concern-

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women;

(2) Whose management and daily business operations are controlled by one or more women; and

(3) That is certified by SBA or an approved third- party certifier in accordance with 13 CFR 127.300 and is designated by SBA as a WOSB concern in SBS and SAM.

(b) It is the policy of the United States that small business concerns, VOSB concerns, SDVOSB concerns, HUBZone small business concerns, SDB concerns, and WOSB concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime

contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, VOSB concerns, SDVOSB concerns, HUBZone small business concerns, SDB concerns, and WOSB concerns.

(c)

(1) A joint venture qualifies as a small business concern if-

(i) Each party to the joint venture qualifies as small under the size standard for the solicitation; or

(ii) The protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under a SBA mentor-protégé program. (See 13 CFR 125.9(d).)

(2) A joint venture qualifies as a HUBZone small business concern if it complies with the requirements in 13 CFR 126.616(a) through (c).

(d) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the Small Business Administration or the awarding agency of the as may be necessary to determine the extent of the Contractor's compliance with this clause.

(e)

(1) Unless the Contractor has reason to question the representation, it may accept a subcontractor's written representations of its size and socioeconomic status as a small business or SDB, if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.

(2) Unless the Contractor has reason to question the representation, it may accept a subcontractor's representations of its size and socioeconomic status as a small business or SDB in the System for Award Management (SAM) if the subcontractor-

(i) Is registered in SAM; and

(ii) Represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.

(3) The Contractor may not require that the subcontractor register in SAM for the purposes of representing size or socioeconomic status in connection with a subcontract.

(4) A contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(5) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern, VOSB, SDVOSB, or WOSB concern is certified by SBA by checking SAM or SBS at https://search.certifications.sba.gov/.

(End of clause)

52.219-13	Notice of Set-Aside of Orders.	2020-03

Notice of Set-Aside of Orders (Mar 2020)

(a) The Contracting Officer may set aside orders for the small business concerns identified in 19.000(a)(3).

(b) The Contracting Officer will give notice of the order or orders, if any, to be set aside for small business concerns identified in 19.000(a)(3) and the applicable small business program. This notice, and its restrictions, will apply only to the specific orders that have been set aside for any of the small business concerns identified in 19.000(a)(3).

(End of clause)

52.219-27	Notice of Set-Aside for, or Sole-Source Award to, Service-Disabled Veteran-Owned Small	2026-02

Business (SDVOSB) Concerns
Eligible Under the SDVOSB
Program. (Deviation 2026-O0038)

Notice of Set-Aside for, or Sole-Source Award to, Service-Disabled Veteran-Owned Small Business (SDVOSB) Concerns Eligible Under the SDVOSB Program. (Feb 2026) (Deviation 2026-O0038)

(a) Definition.

Service-disabled veteran-owned small business (SDVOSB) concern means a small business concern-

(1)

(i) Not less than 51 percent of which is owned and controlled by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran; or

(2) A small business concern eligible under the SDVOSB Program in accordance with 13 CFR part 128 (see FAR 19.106).

(3) Service-disabled veteran, as used in this definition, means a veteran as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16) and who is registered in the Beneficiary Identification and Records Locator Subsystem, or successor system that is maintained by the Department of Veterans Affairs' Veterans Benefits Administration, as a service-disabled veteran.

Service-disabled veteran-owned small business (SDVOSB) concern eligible under the SDVOSB Program means an SDVOSB concern that is designated in the System for Award Management

(SAM) as certified by the Small Business Administration (SBA) in accordance with 13 CFR 128.300.

Service-disabled veteran-owned small business (SDVOSB) Program means a program that authorizes contracting officers to limit competition, including award on a sole-source basis, to SDVOSB concerns eligible under the SDVOSB Program.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for, or awarded on a sole-source basis to, SDVOSB concerns eligible under the SDVOSB Program;

(2) Part or parts of a multiple-award contract that have been set aside for SDVOSB concerns eligible under the SDVOSB Program; and

(3) Orders set aside for SDVOSB concerns eligible under the SDVOSB Program, under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from concerns designated in SAM as SDVOSB concerns certified by SBA. Offers received from concerns that are not SDVOSB concerns certified by SBA will not be considered.

(2) Any award resulting from this solicitation will be made only to a concern designated in SAM as an SDVOSB certified by SBA.

(d) A joint venture may be considered an SDVOSB concern if the managing partner of the joint venture complies with the criteria defined in paragraph (a) of this clause and 13 CFR 128.402.

(e) In a joint venture that complies with paragraph (d) of this clause, the SDVOSB party or parties to the joint venture shall perform at least 40 percent of the work performed by the joint venture. Work performed by the SDVOSB party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.219-28	Postaward Small Business Program Rerepresentation. (Deviation 2026-O0038)	2026-02

Postaward Small Business Program Rerepresentation (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

Small business concern-

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

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

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

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

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

(3) For long-term contracts-

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

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

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

(d) The small business size standard for a Contractor providing an end item that it does not manufacture, process, or produce itself, for a contract other than a construction or service contract, is 500 employees, or 150 employees for information technology value-added resellers under NAICS code 541519, if the acquisition-

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

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

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

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

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

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

(1) The Contractor represents that it [ ] is, [ ] is not a small business concern under ____NAICS Code assigned to ____contract number.

(2) [Complete only if the Contractor represented itself as a small business concern in paragraph (g)(1) of this clause.] The Contractor represents that it [ ] is, [ ] is not, a small disadvantaged business concern as defined in 13 CFR 124.1001.

(3) Women-owned small business (WOSB) joint venture eligible under the WOSB Program. The Contractor represents that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: __.]

(4) Economically disadvantaged women-owned small business (EDWOSB) joint venture. The Contractor represents that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: __ .]

(5) Service-disabled veteran-owned small business (SDVOSB) joint venture eligible under the SDVOSB Program. The Contractor represents that it [ ] is, [ ] is not an SDVOSB joint venture eligible under the SDVOSB Program that complies with the requirements of 13 CFR 128.402. [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: __.]

(6) HUBZone joint venture eligible under the HUBZone Program.[Complete only if the offeror is a HUBZone small business concern.] The offeror represents, as part of its offer, that It [ ] is, [ ] is not a HUBZone joint venture that complies with the requirements of 13 CFR 126.616(a) through (c). [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: .] Each HUBZone small business concern participating in the HUBZone joint venture must be certified as a HUBZone concern. [____Contractor to sign and date and insert authorized signer's name and title.]

(End of clause)

52.219-29	Notice of Set-Aside for, or Sole-Source Award to, Economically Disadvantaged Women-Owned Small Business Concerns. (Deviation 2026-O0038)	2026-02

Notice of Set-Aside for, or Sole-Source Award to, Economically Disadvantaged Women-Owned Small Business Concerns (Feb 2026) (Deviation 2026-O0038)

(a) Definition-

Economically disadvantaged women-owned small business (EDWOSB) concern as used in this clause, means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127, and is certified pursuant to 13 CFR 127.300 as an EDWOSB. It automatically qualifies as a women-owned small business (WOSB) concern eligible under the WOSB Program.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for, or awarded on a sole-source basis to, EDWOSB concerns;

(2) Part or parts of a multiple-award contract that have been set aside for EDWOSB concerns; and

(3) Orders set aside for EDWOSB concerns under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from certified EDWOSB concerns. Offers received from concerns that are not certified EDWOSB concerns will not be considered.

(2) Any award resulting from this solicitation will be made to a certified EDWOSB concern.

(d) Joint venture. A joint venture may be considered an EDWOSB concern if-

(1) At least one party to the joint venture complies with the criteria defined in paragraph (a) and paragraph (c)(1) of this clause, and 13 CFR 127.506(c); and

(2) Each party to the joint venture qualifies as small under the size standard for the solicitation, or the protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under the SBA mentor-protégé program.

(e) In a joint venture that complies with paragraph (d) of this clause, the EDWOSB party or parties to the joint venture shall perform at least 40 percent of the work performed by the joint venture. Work performed by the EDWOSB party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.219-30	Notice of Set-Aside for, or Sole-Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program. (Deviation 2026-O0038)	2026-02

Notice of Set-Aside for, or Sole-Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program (Feb 2026) (Deviation 2026-O0038)

(a) Definition.

Women-owned small business (WOSB) concern eligible under the WOSB Program (in accordance with 13 CFR part 127), as used in this clause, means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States, and the concern is certified by SBA or an approved third-party certifier in accordance with 13 CFR 127.300 as a WOSB. A certified EDWOSB is automatically eligible as a certified WOSB.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for, or awarded on a sole-source basis to, WOSB concerns eligible under the WOSB Program;

(2) Part or parts of a multiple-award contract that have been set aside for WOSB concerns eligible under the WOSB Program; and

(3) Orders set aside for WOSB concerns eligible under the WOSB Program, under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from certified WOSB concerns eligible under the WOSB Program. Offers received from concerns that are not certified WOSB concerns eligible under the WOSB Program shall not be considered

(2) Any award resulting from this solicitation will be made to a certified WOSB concern eligible under the WOSB Program.

(d) Joint venture. A joint venture may be considered a WOSB concern eligible under the WOSB Program if-

(1) At least one party to the joint venture complies with the criteria defined in paragraph (a) and (c)(1) of this clause, and 13 CFR 127.506(c); and

(2) Each party to the joint venture qualifies as small under the size standard for the solicitation, or the protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under the SBA mentor-protégé program.

(e) In a joint venture that complies with paragraph (d) of this clause, the WOSB party or parties to the joint venture shall perform at least 40 percent of the work performed by the joint venture. Work performed by the WOSB party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.222-4	Contract Work Hours and Safety Standards-Overtime Compensation. (Deviation 2026-O0038)	2026-02

Contract Work Hours and Safety Standards-Overtime Compensation (Feb 2026) (Deviation 2026-O0038)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.301-1) must require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate specified at 29 CFR 5.5(b)(2) per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37). In accordance with the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 2461 Note), the Department of Labor adjusts this civil monetary penalty for inflation no later than January 15 each year.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or

subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors must maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and must make them available to the Government until 3 years after contract completion. The records must contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors must allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also must allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor must insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower tier subcontracts. The Contractor must be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6	Construction Wage Rate Requirements. (Deviation 2026-O0038)	2026-02

Construction Wage Rate Requirements (Feb 2026) (Deviation 2026-O0038)

(a) Definition.-"Site of the work"-

(1) Means-

(i) The primary site of the work. The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) The secondary site of the work, if any. Any other site where a significant portion of the building or work is constructed, provided that such site is-

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided-

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the "primary site of the work" as defined in paragraph (a)(1)(i), or the "secondary site of the work" as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of bids and not on the Project site, are not included in the "site of the work." Such permanent, previously established facilities are not a part of the "site of the work" even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b)

(1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued

by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work must be effective from the first day on which work under the contract was performed at that site and must be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work must be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Construction Wage Rate Requirements statute on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(3) Such laborers and mechanics must be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Construction Wage Rate Requirements (Davis-Bacon Act) poster (WH-1321) must be posted at all times by the Contractor and its subcontractors at the primary site of the work and the secondary site of the work, if any, in a prominent and accessible place where it can be easily seen by the workers.

(c)

(1) The Contractor must complete and submit to the Contracting Officer the Standard Form (SF) 1444, Request for Authorization of Additional Classification and Rate, if any class of laborers or

mechanics that is not listed in the wage determination applicable to the contract is to be employed under the contract. Upon receipt of a complete SF 1444, the Contracting Officer will submit a report to the Administrator, Wage and Hour Division, for approving, modifying, disapproving, or rendering a final determination, of the additional classification and wage rate including any amount designated for fringe benefits.

(2) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraph (c) of this clause must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(d) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor must either pay the benefit as stated in the wage determination or must pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(e) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Construction Wage Rate Requirements statute have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

52.222-8	Payrolls and Basic Records. (Deviation 2026-O0038)	2026-02

Payrolls and Basic Records (Feb 2026) (Deviation 2026-O0038)

(a) Payrolls and basic records relating thereto must be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records must contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of

wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) (Construction Wage Rate Requirement statute)), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Construction Wage Rate Requirements, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B), the Contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs must maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)

(1) The Contractor must submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause, except that full social security numbers and home addresses must not be included on weekly transmittals. Instead the payrolls must only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be obtained from the U.S. Department of Labor Wage and Hour Division website at https://www.dol.gov/agencies/whd/forms. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors must maintain the full social security number and current address of each covered worker, and must provide them upon request to the Contracting Officer, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a Prime Contractor to require a subcontractor to provide addresses and social security numbers to the Prime Contractor for its own records, without weekly submission to the Contracting Officer.

(2) Each payroll submitted must be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and must certify-

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 must satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor must make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor must permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

52.222-9	Apprentices and Trainees. (Deviation 2026-O0038)	2026-02

Apprentices and Trainees (Feb 2026) (Deviation 2026-O0038)

(a) Apprentices.

(1) An apprentice will be permitted to work at less than the predetermined rate for the work performed when employed-

(i) Pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS) or with a State Apprenticeship Agency recognized by the OATELS; or

(ii) In the first 90 days of probationary employment as an apprentice in such an apprenticeship program, even though not individually registered in the program, if certified by the OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program.

(3) Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(1) of this clause, must be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program must be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.

(5) Apprentices must be paid fringe benefits in accordance with the provisions of the

apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes must be paid in accordance with that determination.

(6) In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees.

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS). The ratio of trainees to journeymen on the job site must not be greater than permitted under the plan approved by OATELS.

(2) Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees must be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees must be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the OATELS must be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program must be paid not less than the applicable wage rate in the wage determination for the work actually performed.

(3) In the event OATELS withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause must be in conformity with the equal employment opportunity requirements of Executive Order11246, as amended, and 29 CFR Part 30.

(End of clause)

52.222-10	Compliance with Copeland Act Requirements. (Deviation 2026-O0038)	2026-02

Compliance with Copeland Act Requirements (Feb 2026) (Deviation 2026-O0038)

The Contractor must comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-11	Subcontracts (Labor Standards). (Deviation 2026-O0038)	2026-02

Subcontracts (Labor Standards) (Feb 2026) (Deviation 2026-O0038)

(a) Definition. "Construction, alteration or repair," as used in this clause, means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation-

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-

site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the "site of the work" as defined in the FAR clause at 52.222-6, Construction Wage Rate Requirements of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the "site of the work" definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the "site of the work" definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the "site of the work" definition).

(b) The Contractor must insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled-

(1) Construction Wage Rate Requirements;

(2) Contract Work Hours and Safety Standards-Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements;

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination-Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Construction Wage Rate Requirements and Related Regulations; and

(11) Certification of Eligibility.

(c) The prime Contractor must be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d)

(1) Within 14 days after award of the contract, the Contractor must deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor must deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(e) The Contractor must insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

(End of clause)

52.222-12 Contract Termination-Debarment. 2014-05

Contract Termination-Debarment (May 2014)

A breach of the contract clauses entitled Construction Wage Rate Requirements, Contract Work Hours and Safety Standards-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards),

Compliance with Construction Wage Rate Requirements and Related Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13	Compliance with Construction Wage Rate Requirements and Related Regulations.	2014-05

Compliance with Construction Wage Rate Requirements and Related Regulations (May 2014)

All rulings and interpretations of the Construction Wage Rate Requirements and related statutes contained in 29 CFR parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

52.222-14	Disputes Concerning Labor Standards. (Deviation 2026-O0038)	2026-02

Disputes Concerning Labor Standards (Feb 2026) (Deviation 2026-O0038)

The United States Department of Labor has set forth in 29 CFR parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes must be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or

their representatives.

(End of clause)

52.222-15	Certification of Eligibility.	2014-05

Certification of Eligibility (May 2014)

(a) By entering into this contract, the Contractor certifies that neither it nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

52.222-30	Construction Wage Rate Requirements-Price Adjustment (None or Separately Specified Method).	2018-08

Construction Wage Rate Requirements-Price Adjustment (None or Separately Specified Method) (Aug 2018)

(a) The wage determination issued under the Construction Wage Rate Requirements statute by the Administrator, Wage and Hour Division, U.S. Department of Labor, that is effective for an option to extend the term of the contract, will apply to that option period.

(b) The Contracting Officer will make no adjustment in contract price, other than provided for elsewhere in this contract, to cover any increases or decreases in wages and benefits as a result of-

(1) Incorporation of the Department of Labor's wage determination applicable at the exercise of the option to extend the term of the contract;

(2) Incorporation of a wage determination otherwise applied to the contract by operation of law; or

(3) An increase in wages and benefits resulting from any other requirement applicable to workers subject to the Construction Wage Rate Requirements statute.

(End of clause)

52.222-35	Equal Opportunity for Veterans. (Deviation 2026-O0038)	2026-02

Equal Opportunity for Veterans (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

(b) Equal opportunity requirements. The Contractor must abide by the requirements of 38 U.S. C. 4212(a)(1) and (2). These requirements prohibit discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor must insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1302-1(a)(2) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor must act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

52.222-36	Equal Opportunity for Workers with Disabilities. (Deviation 2026-O0038)	2026-02

Equal Opportunity for Workers with Disabilities (Feb 2026) (Deviation 2026-O0038)

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

(b) Subcontracts. The Contractor must include the terms of this clause in every subcontract or purchase order in excess of the threshold specified in Federal Acquisition Regulation (FAR) 22.1401-2(a)(1) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor must act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

52.222-37	Employment Reports on Veterans. (Deviation 2026-O0038)	2026-02

Employment Reports on Veterans (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause, "active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," and "recently separated veteran," have the meanings given in Federal Acquisition Regulation (FAR) 22.1301.

(b) Unless the Contractor is a State or local government agency, the Contractor must report at least annually, as required by the Secretary of Labor, on-

(1) The total number of employees in the contractor's workforce, by job category and hiring location, who are protected veterans (i.e., active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans);

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of protected veterans (i.e., active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans); and

(3) The maximum number and minimum number of employees of the Contractor or subcontractor during the period covered by the report.

(c) The Contractor must report the above items by filing the VETS-4212 "Federal Contractor Veterans' Employment Report" (see "VETS-4212 Federal Contractor Reporting" and "Filing Your VETS-4212 Report" at http://www.dol.gov/vets/vets4212.htm).

(d) The Contractor must file VETS-4212 Reports no later than September 30 of each year.

(e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause must reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report.

(f) The number of veterans reported must be based on data known to the contractor when

completing the VETS-4212. The contractor's knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self-identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the contractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C. 4212.

(g) The Contractor must insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1302-1(b) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor.

(End of clause)

52.222-40	Notification of Employee Rights Under the National Labor Relations Act. (Deviation 2026-O0038)	2026-02

Notification of Employee Rights Under the National Labor Relations Act (Feb 2026) (Deviation 2026-O0038)

(a) During the term of this contract, the Contractor must post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR471.2 (d) and (f).

(1) Physical posting of the employee notice must be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor must also post the required notice electronically by displaying prominently, on any Web site that

is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required employee notice, printed by the Department of Labor, may be-

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-Management Standards Web site at http://www.dol.gov /olms/regs/compliance/EO13496.htm; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor must comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor must include the substance of this clause, including this paragraph (f), in every subcontract that exceeds $10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor must not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor must take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of clause)

52.222-42	Statement of Equivalent Rates for Federal Hires.	2014-05

Statement of Equivalent Rates for Federal Hires (May 2014)

In compliance with the Service Contract Labor Standards statute and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only: It is not a Wage Determination

Employee Class	Monetary Wage-Fringe Benefits
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

____ ____
____ ____
(End of clause)

52.222-44	Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment. (Deviation 2026-O0038)	2026-02

Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (Feb 2026) (Deviation 2026-O0038)

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to Contractor collective bargaining agreements.

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

(c) The contract price, contract unit price labor rates, or fixed hourly labor rates will be adjusted to reflect increases or decreases by the Contractor in wages and fringe benefits to the extent that these increases or decreases are made to comply with-

(1) An increased or decreased wage determination applied to this contract by operation of law; or

(2) An amendment to the Fair Labor Standards Act of1938 that is enacted subsequent to award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(d) Any such adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (c) of this clause, and to the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance; it must not otherwise include any amount for general and administrative costs, overhead, or profit.

(e) The Contractor must notify the Contracting Officer of any increase claimed under this clause

within 30 days after the effective date of the wage change, unless this period is extended by the Contracting Officer in writing. The Contractor must promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice must contain a statement of the amount and the change in fixed hourly rates (if this is a time-and-materials or labor-hour contract) claimed and any relevant supporting data that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price, contract unit price labor rates, or fixed hourly rates must be modified in writing. The Contractor must continue performance pending agreement on or determination of any such adjustment and its effective date.

(f) The Contracting Officer or an authorized representative must, until the expiration of 3 years after final payment under the contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor.

(End of clause)

52.222-50	Combating Trafficking in Persons. (Deviation 2026-O0038)	2026-02

Combating Trafficking in Persons (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Agent means any individual, including a director, an officer, an employee, or an independent contractor, authorized to act on behalf of the organization.

Coercion means-

(1) Threats of serious harm to or physical restraint against any person;

(2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

(3) The abuse or threatened abuse of the legal process.

Commercial sex act means any sex act on account of which anything of value is given to or received by any person.

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

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

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

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

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

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

Debt bondage means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

Employee means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

Forced Labor means knowingly providing or obtaining the labor or services of a person-

(1) By threats of serious harm to, or physical restraint against, that person or another person;

(2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or

(3) By means of the abuse or threatened abuse of law or the legal process.

Involuntary servitude includes a condition of servitude induced by means of-

(1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or

(2) The abuse or threatened abuse of the legal process.

Recruitment fees means fees of any type, including charges, costs, assessments, or other financial obligations, that are associated with the recruiting process, regardless of the time, manner, or location of imposition or collection of the fee.

(1) Recruitment fees include, but are not limited to, the following fees (when they are associated with the recruiting process) for-

(i) Soliciting, identifying, considering, interviewing, referring, retaining, transferring, selecting, training, providing orientation to, skills testing, recommending, or placing employees or potential employees;

(ii) Advertising;

(iii) Obtaining permanent or temporary labor certification, including any associated fees;

(iv) Processing applications and petitions;

(v) Acquiring visas, including any associated fees;

(vi) Acquiring photographs and identity or immigration documents, such as passports, including any associated fees;

(vii) Accessing the job opportunity, including required medical examinations and immunizations; background, reference, and security clearance checks and examinations; and additional certifications;

(viii) An employer's recruiters, agents or attorneys, or other notary or legal fees;

(ix) Language interpretation or translation, arranging for or accompanying on travel, or providing other advice to employees or potential employees;

(x) Government-mandated fees, such as border crossing fees, levies, or worker welfare funds;

(xi) Transportation and subsistence costs-

(A) While in transit, including, but not limited to, airfare or costs of other modes of transportation, terminal fees, and travel taxes associated with travel from the country of origin to the country of performance and the return journey upon the end of employment; and

(B) From the airport or disembarkation point to the worksite;

(xii) Security deposits, bonds, and insurance; and

(xiii) Equipment charges.

(2) A recruitment fee, as described in the introductory text of this definition, is a recruitment fee, regardless of whether the payment is-

(i) Paid in property or money;

(ii) Deducted from wages;

(iii) Paid back in wage or benefit concessions;

(iv) Paid back as a kickback, bribe, in-kind payment, free labor, tip, or tribute; or

(v) Collected by an employer or a third party, whether licensed or unlicensed, including, but not limited to-

(A) Agents;

(B) Labor brokers;

(C) Recruiters;

(D) Staffing firms (including private employment and placement firms);

(E) Subsidiaries/affiliates of the employer;

(F) Any agent or employee of such entities; and

(G) Subcontractors at all tiers.

Severe forms of trafficking in persons means-

(1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

(2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

Sex trafficking means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.

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

(b) Policy. The United States Government has adopted a policy prohibiting trafficking in persons including the trafficking-related activities of this clause. Contractors, contractor employees, and their agents must not-

(1) Engage in severe forms of trafficking in persons during the period of performance of the contract;

(2) Procure commercial sex acts during the period of performance of the contract;

(3) Use forced labor in the performance of the contract;

(4) Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee's identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;

(5)

(i) Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language understood by the employee or potential employee, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant costs to be charged to the employee or potential employee, and, if applicable, the hazardous nature of the work;

(ii) Use recruiters that do not comply with local labor laws of the country in which the recruiting takes place;

(6) Charge employees or potential employees recruitment fees;

(7)

(i) Fail to provide return transportation or pay for the cost of return transportation upon the end of employment-

(A) For an employee who is not a national of the country in which the work is taking place and who was brought into that country for the purpose of working on a U.S. Government contract or subcontract (for portions of contracts performed outside the United States); or

(B) For an employee who is not a United States national and who was brought into the United States for the purpose of working on a U.S. Government contract or subcontract, if the payment of such costs is required under existing temporary worker programs or pursuant to a written agreement with the employee (for portions of contracts performed inside the United States); except that-

(ii) The requirements of paragraphs (b)(7)(i) of this clause must not apply to an employee who is-

(A) Legally permitted to remain in the country of employment and who chooses to do so; or

(B) Exempted by an authorized official of the contracting agency from the requirement to provide return transportation or pay for the cost of return transportation;

(iii) The requirements of paragraph (b)(7)(i) of this clause are modified for a victim of trafficking in persons who is seeking victim services or legal redress in the country of employment, or for a witness in an enforcement action related to trafficking in persons. The contractor must provide the return transportation or pay the cost of return transportation in a way that does not obstruct the victim services, legal redress, or witness activity. For example, the contractor must not only offer return transportation to a witness at a time when the witness is still needed to testify. This paragraph does not apply when the exemptions at paragraph (b)(7)(ii) of this clause apply.

(8) Provide or arrange housing that fails to meet the host country housing and safety standards; or

(9) If required by law or contract, fail to provide an employment contract, recruitment agreement, or other required work document in writing. Such written work document must be in a language the employee understands. If the employee must relocate to perform the work, the work document must be provided to the employee at least five days prior to the employee relocating. The employee's work document must include, but is not limited to, details about work description, wages, prohibition on charging recruitment fees, work location(s), living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance process, and the content of applicable laws and regulations that prohibit trafficking in persons.

(c) Contractor requirements. The Contractor must-

(1) Notify its employees and agents of-

(i) The United States Government's policy prohibiting trafficking in persons, described in paragraph (b) of this clause; and

(ii) The actions that will be taken against employees or agents for violations of this policy. Such actions for employees may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

(2) Take appropriate action, up to and including termination, against employees, agents, or subcontractors that violate the policy in paragraph (b) of this clause.

(d) Notification.

(1) The Contractor must inform the Contracting Officer and the agency Inspector General immediately of-

(i) Any credible information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, subcontractor employee, or their agent has engaged in conduct that violates the policy in paragraph (b) of this clause (see also 18 U.S.C. 1351, Fraud in Foreign Labor Contracting, and 52.203-13(b)(3)(i)(A), if that clause is included in the solicitation or contract, which requires disclosure to the agency Office of the Inspector General when the Contractor has credible evidence of fraud); and

(ii) Any actions taken against a Contractor employee, subcontractor, subcontractor employee, or their agent pursuant to this clause.

(2) If the allegation may be associated with more than one contract, the Contractor must inform the contracting officer for the contract with the highest dollar value.

(e) Remedies. In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), (g), (h), or (i) of this clause may result in-

(1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;

(2) Requiring the Contractor to terminate a subcontract;

(3) Suspension of contract payments until the Contractor has taken appropriate remedial action;

(4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;

(5) Declining to exercise available options under the contract;

(6) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or

(7) Suspension or debarment.

(f) Mitigating and aggravating factors. When determining remedies, the Contracting Officer may consider the following:

(1) Mitigating factors. The Contractor had a Trafficking in Persons compliance plan or an awareness program at the time of the violation, was in compliance with the plan, and has taken appropriate remedial actions for the violation, that may include reparation to victims for such violations.

(2) Aggravating factors. The Contractor failed to abate an alleged violation or enforce the requirements of a compliance plan, when directed by the Contracting Officer to do so.

(g) Full cooperation.

(1) The Contractor must, at a minimum-

(i) Disclose to the agency Inspector General information sufficient to identify the nature and extent of an offense and the individuals responsible for the conduct;

(ii) Provide timely and complete responses to Government auditors' and investigators' requests for documents;

(iii) Cooperate fully in providing reasonable access to its facilities and staff (both inside and outside the U.S.) to allow contracting agencies and other responsible Federal agencies to conduct audits, investigations, or other actions to ascertain compliance with the Trafficking Victims Protection Act of 2000 (22 U.S.C. chapter 78), E.O. 13627, or any other applicable law or regulation establishing restrictions on trafficking in persons, the procurement of commercial sex acts, or the use of forced labor; and

(iv) Protect all employees suspected of being victims of or witnesses to prohibited activities, prior to returning to the country from which the employee was recruited, and must not prevent or hinder the ability of these employees from cooperating fully with Government authorities.

(2) The requirement for full cooperation does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not-

(i) Require the Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine;

(ii) Require any officer, director, owner, employee, or agent of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; or

(iii) Restrict the Contractor from-

(A) Conducting an internal investigation; or

(B) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

(h) Compliance plan.

(1) This paragraph (h) applies to any portion of the contract that-

(i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(ii) Has an estimated value that exceeds $700,000.

(2) The Contractor must maintain a compliance plan during the performance of the contract that is appropriate-

(i) To the size and complexity of the contract; and

(ii) To the nature and scope of the activities to be performed for the Government, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.

(3) Minimum requirements. The compliance plan must include, at a minimum, the following:

(i) An awareness program to inform contractor employees about the Government's policy prohibiting trafficking-related activities described in paragraph (b) of this clause, the activities prohibited, and the actions that will be taken against the employee for violations. Additional information about Trafficking in Persons and examples of awareness programs can be found at the Web site for the Department of State's Office to Monitor and Combat Trafficking in Persons at http://www.state.gov/j/tip/.

(ii) A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees

the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at help@befree.org.

(iii) A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employee or potential employee, and ensures that wages meet applicable host-country legal requirements or explains any variance.

(iv) A housing plan, if the Contractor or subcontractor intends to provide or arrange housing, that ensures that the housing meets host-country housing and safety standards.

(v) Procedures to prevent agents and subcontractors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or subcontractor employees that have engaged in such activities.

(4) Posting.

(i) The Contractor must post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the work is to be performed in the field or not in a fixed location) and on the Contractor's Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Contractor must provide the relevant contents of the compliance plan to each worker in writing.

(ii) The Contractor must provide the compliance plan to the Contracting Officer upon request.

(5) Certification. Annually after receiving an award, the Contractor must submit a certification to the Contracting Officer that-

(i) It has implemented a compliance plan to prevent any prohibited activities identified at paragraph (b) of this clause and to monitor, detect, and terminate any agent, subcontract or subcontractor employee engaging in prohibited activities; and

(ii) After having conducted due diligence, either-

(A) To the best of the Contractor's knowledge and belief, neither it nor any of its agents, subcontractors, or their agents is engaged in any such activities; or

(B) If abuses relating to any of the prohibited activities identified in paragraph (b) of this clause have been found, the Contractor or subcontractor has taken the appropriate remedial and

referral actions.

(i) Subcontracts.

(1) The Contractor must include the substance of this clause, including this paragraph (i), in all subcontracts and in all contracts with agents. The requirements in paragraph (h) of this clause apply only to any portion of the subcontract that-

(i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(ii) Has an estimated value that exceeds $700,000.

(2) If any subcontractor is required by this clause to submit a certification, the Contractor must require submission prior to the award of the subcontract and annually thereafter. The certification must cover the items in paragraph (h)(5) of this clause.

(End of clause)

52.222-54	Employment Eligibility Verification. (Deviation 2026-O0038)	2026-02

Employment Eligibility Verification (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

(1) Means any item of supply that is-

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

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

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products. Per 46 CFR 525.1 (c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

Employee assigned to the contract means an employee who was hired after November 6, 1986 (after November 27, 2009 in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1802-2. An employee is not considered to be directly performing work under a contract if the employee-

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

Subcontract means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

United States, as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U. S. Virgin Islands.

(b) Enrollment and verification requirements.

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award,

the Contractor must-

(i) Enroll. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) Verify all new employees. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) Verify employees assigned to the contract. For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor must use E-Verify to initiate verification of employment eligibility of-

(i) All new employees.

(A) Enrolled 90 calendar days or more. The Contractor must initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) Enrolled less than 90 calendar days. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor must initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) Employees assigned to the contract. For each employee assigned to the contract, the Contractor must initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor must follow the applicable

verification requirements at (b)(1) or (b)(2) respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) Option to verify employment eligibility of all employees. The Contractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the contract. The Contractor must initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of-

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor must comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspending and debarring official.

(ii) During the period between termination of the MOU and a decision by the suspending and debarring official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the Contractor is not suspended, debarred, or subject to a voluntary exclusion, then the Contractor must reenroll in E-Verify.

(c) Web site. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: https://www.e-Verify.gov.

(d) Individuals previously verified. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee-

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial

Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD)-12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) Subcontracts. The Contractor must include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that-

(1) Is for-

(i) Services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than $3,500; and

(3) Includes work performed in the United States.

(End of clause)

52.222-62	Paid Sick Leave Under Executive Order 13706. (Deviation 2026-O0038)	2026-02

Paid Sick Leave Under Executive Order 13706 (Feb 2026) (Deviation 2026-O0038)

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

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

Employee -

(1)

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

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

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

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

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

(2)

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

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

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

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

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

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

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

(b) Executive Order 13706.

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

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

(c) Paid sick leave. The Contractor must-

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

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

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

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

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

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

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

(e) Withholding. The Contracting Officer must, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this or any other Federal contract with the same Contractor,

so much of the accrued payments or advances as may be considered necessary to pay employees the full amount owed to compensate for any violation of the requirements of E.O. 13706, 29 CFR Part 13, or this clause, including-

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

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

(3) Liquidated damages.

(f) Payment suspension/contract termination/contractor debarment.

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

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

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

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

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

(i) Recordkeeping.

(1) The Contractor must make and maintain, for no less than three (3) years from the completion of the work on the contract, records containing the following information for each employee, which the Contractor must make available upon request for inspection, copying, and

transcription by authorized representatives of the Administrator of the Wage and Hour Division of the Department of Labor:

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

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

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

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

(v) Any deductions made.

(vi) The total wages paid (including all pay and benefits provided) each pay period.

(vii) A copy of notifications to employees of the amount of paid sick leave the employee has accrued, as required under 29 CFR 13.5(a)(2).

(viii) A copy of employees' requests to use paid sick leave, if in writing, or, if not in writing, any other records reflecting such employee requests.

(ix) Dates and amounts of paid sick leave taken by employees (unless the Contractor's paid time off policy satisfies the requirements of E.O. 13706 and 29 CFR Part 13 as described in 29 CFR 13.5(f)(5), leave must be designated in records as paid sick leave pursuant to E.O. 13706).

(x) A copy of any written responses to employees' requests to use paid sick leave, including explanations for any denials of such requests, as required under 29 CFR 13.5(d)(3).

(xi) Any records reflecting the certification and documentation the Contractor may require an employee to provide under 29 CFR 13.5(e), including copies of any certification or documentation provided by an employee.

(xii) Any other records showing any tracking of or calculations related to an employee's accrual or use of paid sick leave.

(xiii) The relevant contract.

(xiv) The regular pay and benefits provided to an employee for each use of paid sick leave.

(xv) Any financial payment made for unused paid sick leave upon a separation from employment intended, pursuant to 29 CFR 13.5(b)(5), to relieve the Contractor from the obligation to reinstate such paid sick leave as otherwise required by 29 CFR 13.5(b)(4).

(2)

(i) If the Contractor wishes to distinguish between an employee's covered and noncovered work, the Contractor must keep records or other proof reflecting such distinctions. Only if the Contractor adequately segregates the employee's time will time spent on noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. Similarly, only if the Contractor adequately segregates the employee's time may the Contractor properly refuse an employee's request to use paid sick leave on the ground that the employee was scheduled to perform noncovered work during the time he or she asked to use paid sick leave.

(ii) If the Contractor estimates covered hours worked by an employee who performs work in connection with contracts covered by the E.O. pursuant to 29 CFR 13.5(a)(1)(i) or (iii), the Contractor must keep records or other proof of the verifiable information on which such estimates are reasonably based. Only if the Contractor relies on an estimate that is reasonable and based on verifiable information will an employee's time spent in connection with noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. If the Contractor estimates the amount of time an employee spends performing in connection with contracts covered by the E.O., the Contractor must permit the employee to use his or her paid sick leave during any work time for the Contractor.

(3) In the event the Contractor is not obligated by the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, or the Fair Labor Standards Act to keep records of an employee's hours worked, such as because the employee is exempt from the Fair Labor Standards Act's minimum wage and overtime requirements, and the Contractor chooses to use the assumption permitted by 29 CFR 13.5(a)(1)(iii), the Contractor is excused from the requirement in paragraph (i)(1)(iv) of this clause and 29 CFR 13.25(a)(4) to keep records of the employee's number of daily and weekly hours worked.

(4)

(i) Records relating to medical histories or domestic violence, sexual assault, or stalking, created for purposes of E.O. 13706, whether of an employee or an employee's child, parent, spouse, domestic partner, or other individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship, must be maintained as confidential records in separate files/records from the usual personnel files.

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

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

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

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

(j) Interference/discrimination.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(m) Subcontracts. The Contractor must insert the substance of this clause, including this paragraph (m), in all subcontracts, regardless of dollar value, that are subject to the Service

Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

(End of clause)

52.222-90	Addressing DEI Discrimination by Federal Contractors. (Deviation 2026-O0040, Revision 1)	2026-04

Addressing DEI Discrimination by Federal Contractors (Apr 2026) (Deviation 2026-O0040, Revision 1)

(a) Definitions. As used in this clause-

Program participation means membership or participation in, or access or admission to: training, mentoring, or leadership development programs; educational opportunities; clubs; associations; or similar opportunities that are sponsored or established by the contractor or subcontractor.

Racially discriminatory diversity, equity, and inclusion (DEI) activities means disparate treatment based on race or ethnicity in the recruitment, employment (e.g., hiring, promotions), contracting (e.g., vendor agreements), program participation, or allocation or deployment of an entity's resources.

(b) In connection with the performance of work under this contract, the Contractor agrees as follows:

(1) The Contractor will not engage in any racially discriminatory DEI activities;

(2) The Contractor will furnish all information and reports, including providing access to books, records, and accounts, as required by the Contracting Officer, for purposes of ascertaining compliance with this clause;

(3) In the event of the Contractor's or a subcontractor's noncompliance with this clause, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor or subcontractor may be declared ineligible for further Government contracts;

(4) The Contractor will report any subcontractor's known or reasonably knowable conduct that may violate this clause to the Contracting Officer and take any appropriate remedial actions directed by the Contracting Officer; and

(5) The Contractor will inform the Contracting Officer if a subcontractor sues the Contractor and the suit puts at issue, in any way, the validity of this clause.

(6) The Contractor recognizes that compliance with the requirements of this clause are material to the Government's payment decisions for purposes of 31 U.S.C. 3729(b)(4).

(c) The Contractor must include the substance of this clause, including this paragraph (c), in subcontracts at any tier, including those for commercial products and commercial services, except those where the place of delivery or performance is outside the United States.

(End of clause)

52.223-2	Reporting of Biobased Products Under Service and Construction Contracts. (Deviation 2026-O0038)	2026-02

Reporting of Biobased Products Under Service and Construction Contracts (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Biobased product means a product determined by the U.S. Department of Agriculture (USDA) to be a commercial product or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials, or that is an intermediate ingredient or feedstock. The term

includes, with respect to forestry materials, forest products that meet biobased content requirements, notwithstanding the market share the product holds, the age of the product, or whether the market for the product is new or emerging. (7 U.S.C. 8101) (7 CFR 4270.2).

USDA-designated product category a generic grouping of biobased products that are listed by USDA in a procurement guideline (7 CFR part 4270) and for which USDA has provided minimum biobased content standards (see https://www.biopreferred.gov/resources/categories.html).

(b) Requirement. The Contractor shall-

(1) Report to https://www.sam.gov, with a copy to the Contracting Officer, on the product types and dollar value of any biobased products in USDA-designated product categories purchased by the Contractor during the previous Government fiscal year, between October 1 and September 30; and

(2) Submit this report no later than-

(i) October 31 of each year during contract performance; and

(ii) At the end of contract performance.

(End of clause)

52.223-3	Hazardous Material Identification and Safety Data. (Deviation 2026-O0038)	2026-02

Hazardous Material Identification and Safety Data (Feb 2026) (Deviation 2026-O0038)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of clause)

52.223-5	Pollution Prevention and Right-to-Know Information.	2024-05

Pollution Prevention and Right-to-Know Information (May 2024)

(a) Definitions. As used in this clause-

Toxic chemical means a chemical or chemical category listed in 40 CFR 372.65.

(b) Federal facilities are required to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050), and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

(1) The emergency planning reporting requirements of section 302 of EPCRA.

(2) The emergency notice requirements of section 304 of EPCRA.

(3) The list of Material Safety Data Sheets, required by section 311 of EPCRA.

(4) The emergency and hazardous chemical inventory forms of section 312 of EPCRA.

(5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by section 6607 of PPA.

(End of clause)

52.223-9	Estimate of Percentage of Recovered Material Content for EPA-Designated Items.	2008-05

Estimate of Percentage of Recovered Material Content for EPA-Designated Items (May 2008)

(a) Definitions. As used in this clause-

Postconsumer materialmeans a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, 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 _____[Contracting Officer complete in accordance with

agency procedures].

(End of clause)

52.223-11	Ozone-Depleting Substances. (Deviation 2026-O0038)	2026-02

Ozone-Depleting Substances (Feb 2026) (Deviation 2026-O0038)

(a) Definition. As used in this clause-

Ozone-depleting substance means any substance the Environmental Protection Agency designates in 40 CFR part 82 as-

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) Requirement. In accordance with 40 CFR 82.84(a)(5), the Contractor shall label products that contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j(b), (c), (d), and (e) and 40 CFR part 82, subpart E, as follows:

Warning: Contains (or manufactured with, if applicable) *____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

(End of clause)

52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners. (Deviation 2026-O0038)	2026-02

Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (Feb 2026) (Deviation 2026-O0038)

In accordance with 40 CFR 82.84(a)(3), the Contractor shall comply with the applicable requirements of sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

(End of clause)

52.225-9	Buy American-Construction Materials. (Deviation 2026-O0038)	2026-02

Buy American-Construction Materials (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

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

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

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

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

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

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

Cost of components means-

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

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

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

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

Domestic construction material means-

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

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

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

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

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

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

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

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

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

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel

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

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

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

(b) Domestic preference.

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

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

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

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

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

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

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

(2) For construction material that is not a COTS item and does not consist wholly or

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

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

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

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

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

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

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

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

(c) Request for determination of inapplicability of the Buy American statute.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

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

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

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

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

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

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

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

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

established in paragraph (b)(3)(i) of this clause.

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

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

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars)*
Item 1:			
Foreign construction material.	____	____	____
Domestic construction material.	____	____	____
Item 2:			
Foreign construction material.	____	____	____
Domestic construction material.	____	____	____

[* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued)].[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.][Include other applicable supporting information.]
(End of clause)

52.226-7 Drug-Free Workplace. 2024-05

Drug-Free Workplace (May 2024)

(a) Definitions. As used in this clause-

Controlled substance means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR

1308.11 - 1308.15.

Conviction means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

Criminal drug statute means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

Drug-free workplace means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

Employee means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

Individual means an offeror/contractor that has no more than one employee including the offeror /contractor.

(b) The Contractor, if other than an individual, shall-within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration-

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about-

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will-

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 26.505, render the Contractor subject to suspension of contract payments, termination of the contract

for default, and suspension or debarment.

(End of clause)

52.226-8	Encouraging Contractor Policies to Ban Text Messaging While Driving.	2024-05

Encouraging Contractor Policies to Ban Text Messaging While Driving (MAY 2024)

(a) Definitions. As used in this clause-

"Driving"-

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

Text messaging means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, dated October 1, 2009.

(c) The Contractor is encouraged to-

(1) Adopt and enforce policies that ban text messaging while driving-

(i) Company-owned or rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as-

(i) Establishment of new rules and programs or reevaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

(End of clause)

52.227-1 Authorization and Consent. 2020-06

Authorization and Consent (Jun 2020)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent-

(1) Embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract; or

(2) Used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of

this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. the entire liability to the Government for infringement of a United States patent shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts that are expected to exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation (FAR) 2.101 on the date of subcontract award. However, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, does not affect this authorization and consent.

(End of clause)

52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement.	2020-06

Notice and Assistance Regarding Patent and Copyright Infringement (Jun 2020)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in the Contractor's possession pertaining to such claim or suit. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that are expected to exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation (FAR) 2.101 on the date of subcontract award.

(End of clause)

52.228-2	Additional Bond Security.	1997-10

Additional Bond Security (Oct 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if-

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government;

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

(End of clause)

52.228-5	Insurance-Work on a Government Installation.	1997-01

Insurance-Work on a Government Installation (Jan 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective-

(1) For such period as the laws of the State in which this contract is to be performed prescribe; or

(2) Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11	Individual Surety-Pledge of Assets.	2021-02

Individual Surety-Pledge of Assets (Feb 2021)

(a)The Contractor shall obtain from each person acting as an individual surety on a performance bond or a payment bond-

(1)A pledge of assets that meets the eligibility, valuation, and security requirements described in the Federal Acquisition Regulation (FAR) 28.203-1; and

(2)Standard Form 28, Affidavit of Individual Surety.

(b)The Contracting Officer may release a portion of the security interest on the individual surety's assets based upon substantial performance of the Contractor's obligations under its performance bond. The security interest in support of a performance bond shall be maintained-

(1) Contracts for the construction, alteration, or repair of any public building or public work of the Federal Government exceeding $150,000 (40 U.S.C. 3131). Until completion of any warranty period, or for 1 year following final payment, whichever is later.

(2) Contracts subject to alternative payment protection (see FAR 28.102-1(b)(1)). For the full contract performance period plus 1 year.

(3) Other contracts not subject to the requirements of paragraph (b)(1) of this clause. Until completion of any warranty period, or for 90 days following final payment, whichever is later.

(c)A surety's assets pledged in support of a payment bond may be released to a subcontractor or supplier upon Government receipt of a Federal district court judgment, or a sworn statement by the subcontractor or supplier that the claim is correct along with a notarized authorization of the release by the surety stating that it approves of such release. The security interest on the individual surety's assets in support of a payment bond shall be maintained-

(1) Contracts for the construction, alteration, or repair of any public building or public work of the Federal Government exceeding $150,000 which require performance and payment bonds (40 U.S.C. 3131). For 1 year following final payment, or until resolution of all pending claims filed against the payment bond during the 1-year period following final payment, whichever is later.

(2) Contracts subject to alternative payment protection (see FAR 28.102-1(b)(1)). For the full contract performance period plus 1 year.

(3)Other contracts not subject to the requirements of paragraph (c)(1) of this clause. For 90 days following final payment.

(d)The Contracting Officer may allow the Contractor to substitute an individual surety, for a

performance or payment bond, after contract award. The Contractor shall comply with the requirements of paragraph (a) of this clause within the timeframe established by the Contracting Officer.

(End of clause)

52.228-12	Prospective Subcontractor Requests for Bonds.	2022-12

Prospective Subcontractor Requests for Bonds (Dec 2022)

In accordance with section 806(a)(3) of Pub. L. 102-190, as amended by sections 2091 and 8105 of Pub. L. 103-355 (10 U.S.C. 4601 note prec.), upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to 40 U.S.C. chapter 31, subchapter III, Bonds, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

52.228-14	Irrevocable Letter of Credit.	2014-11

Irrevocable Letter of Credit (Nov 2014)

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

condition the letter of credit.

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

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

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

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

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

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

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

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

(ii) For contracts not subject to 40 U.S.C. chapter 31, subchapter III, Bonds, the later of-

(A) 90 days following final payment; or

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

(d)

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

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

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

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

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

____ [Issuing Financial Institution's Letterhead or Name and Address]
Issue Date ____
Irrevocable Letter of Credit No. ____
Account party's name ____
Account party's address ____
For Solicitation No. ____ (for reference only)
To: [U.S. Government agency]
[U.S. Government agency's address]

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

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

Credit on or before the expiration date or any automatically extended expiration date.

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

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

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

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

Sincerely,

____ [Issuing financial institution]

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

[Confirming Financial Institution's Letterhead or Name and Address] ____
(Date) ____
Our Letter of Credit Advice Number ____
Beneficiary: ____ [U.S. Government agency]
Issuing Financial Institution: ____
Issuing Financial Institution's LC No.: ____

Gentlemen:

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

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

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

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

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

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

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

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

Sincerely,

____ [Confirming financial institution]

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

Sight Draft

____ [City, State]

(Date) ____

____[Name and address of financial institution]

Pay to the order of ____ [Beneficiary Agency]

the sum of United States $____←

This draft is drawn under Irrevocable Letter of Credit No. ____.

____ [Beneficiary Agency]

____ [By]

(End of clause)

52.228-17	Individual Surety-Pledge of Assets (Bid Guarantee).	2021-02

Individual Surety-Pledge of Assets (Feb 2021)

(a)Offerors shall obtain from each person acting as an individual surety on a bid guarantee-

(1)A pledge of assets that meets the eligibility, valuation, and security requirements described in the Federal Acquisition Regulation (FAR) 28.203-1; and

(2)Standard Form 28, Affidavit of Individual Surety.

(b)The Offeror shall include with its offer the information required at paragraph (a) of this provision within the timeframe specified in the provision at FAR 52.228-1, Bid Guarantee, or as otherwise established by the Contracting Officer.

(c)The Contracting Officer may release the security interest on the individual surety's assets in support of a bid guarantee based upon evidence that the offer supported by the individual surety will not result in contract award.

(End of provision)

52.229-3 Federal, State, and Local Taxes. 2013-02

Federal, State, and Local Taxes (Feb 2013)

(a) As used in this clause-

After-imposed Federal tax means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

After-relieved Federal tax means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

All applicable Federal, State, and local taxes and duties means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

Contract date means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

Local taxes includes taxes imposed by a possession or territory of the United States, Puerto Rico, or the Northern Mariana Islands, if the contract is performed wholly or partly in any of those areas.

(b)

(1) The contract price includes all applicable Federal, State, and local taxes and duties, except as provided in subparagraph (b)(2)(i) of this clause.

(2) Taxes imposed under 26 U.S.C. 5000C may not be-

(i) Included in the contract price; nor

(ii) Reimbursed.

(c) The Government will increase the contract price by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The Government will decrease the contract price by the amount of any after-relieved Federal tax.

(e) The Government will decrease the contract price by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) The Government will not adjust the contract price under this clause unless the amount of the adjustment exceeds $250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or

decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government will, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-11	Tax on Certain Foreign Procurements-Notice and Representation.	2020-06

Tax on Certain Foreign Procurements-Notice and Representation (Jun 2020)

(a) Definitions. As used in this provision-

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

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

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

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

(2) A domestic partnership;

(3) A domestic corporation;

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

(5) Any trust if-

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

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

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

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

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

(1) It [ ] is [ ] is not a foreign person; and

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

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

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

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

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

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

(End of provision)

52.232-5	Payments under Fixed-Price Construction Contracts.	2014-05

Payments under Fixed-Price Construction Contracts (May 2014)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if-

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that-

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of Chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

____ (Name)

____ (Title)

____ (Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall-

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until-

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as-

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after-

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of1940 (31 U.S.C.3727 and 41 U.S.C. 6305).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under paragraph (d)(2) of this clause shall be-

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

(End of clause)

52.232-12 Advance Payments. (Deviation 2026-O0038) 2026-02

Advance Payments (Feb 2026) (Deviation 2026-O0038)

(a) Requirements for payment. Advance payments will be made under this contract (1) upon submission of properly certified invoices or vouchers by the Contractor, and approval by the administering office, ____ [Insert the name of the office designated under agency procedures], or (2) under a letter of credit. The amount of the invoice or voucher submitted plus all advance payments previously approved shall not exceed $____ If a letter of credit is used, the Contractor shall withdraw cash only when needed for disbursements acceptable under this contract and report cash disbursements and balances as required by the administering office. The Contractor shall apply terms similar to this clause to any advance payments to subcontractors.

(b) Special account. Until (1) the Contractor has liquidated all advance payments made under the contract and related interest charges and (2) the administering office has approved in writing the release of any funds due and payable to the Contractor, all advance payments and other payments under this contract shall be made by check payable to the Contractor marked for deposit only in the Contractor's special account with the ____ [insert the name of the financial institution]. None of the funds in the special account shall be mingled with other funds of the Contractor. Withdrawals from the special account may be made only by check of the Contractor countersigned by the Contracting Officer or a Government countersigning agent designated in writing by the Contracting Officer.

(c) Use of funds. The Contractor may withdraw funds from the special account only to pay for properly allocable, allowable, and reasonable costs for direct materials, direct labor, and indirect costs. Other withdrawals require approval in writing by the administering office. Determinations of whether costs are properly allocable, allowable, and reasonable shall be in accordance with generally accepted accounting principles, subject to any applicable subparts of part 31 of the Federal Acquisition Regulation.

(d) Repayment to the Government. At any time, the Contractor may repay all or any part of the

funds advanced by the Government. Whenever requested in writing to do so by the administering office, the Contractor shall repay to the Government any part of unliquidated advance payments considered by the administering office to exceed the Contractor's current requirements or the amount specified in paragraph (a) above. If the Contractor fails to repay the amount requested by the administering office, all or any part of the unliquidated advance payments may be withdrawn from the special account by check signed by only the countersigning agent and applied to reduction of the unliquidated advance payments under this contract.

(e) Maximum payment. When the sum of all unliquidated advance payments, unpaid interest charges, and other payments exceed ____ percent of the contract price, the Government shall withhold further payments to the Contractor. On completion or termination of the contract, the Government shall deduct from the amount due to the Contractor all unliquidated advance payments and all interest charges payable. If previous payments to the Contractor exceed the amount due, the excess amount shall be paid to the Government on demand. For purposes of this paragraph, the contract price shall be considered to be the stated contract price of $____, less any subsequent price reductions under the contract, plus (1) any price increases resulting from any terms of this contract for price redetermination or escalation, and (2) any other price increases that do not, in the aggregate, exceed $____ [Insert an amount not higher than 10 percent of the stated contract amount inserted in this paragraph]. Any payments withheld under this paragraph shall be applied to reduce the unliquidated advance payments. If full liquidation has been made, payments under the contract shall resume.

(f) Interest.

(1) The Contractor shall pay interest to the Government on the daily unliquidated advance payments at the daily rate specified in subparagraph (f)(3) of this clause. Interest shall be computed at the end of each calendar month for the actual number of days involved. For the purpose of computing the interest charge-

(i) Advance payments shall be considered as increasing the unliquidated balance as of the date of the advance payment check;

(ii) Repayments by Contractor check shall be considered as decreasing the unliquidated balance as of the date on which the check is received by the Government authority designated by the Contracting Officer; and

(iii) Liquidations by deductions from Government payments to the Contractor shall be considered as decreasing the unliquidated balance as of the date of the check for the reduced

payment.

(2) Interest charges resulting from the monthly computation shall be deducted from payments, other than advance payments, due the Contractor. If the accrued interest exceeds the payment due, any excess interest shall be carried forward and deducted from subsequent payments. Interest carried forward shall not be compounded. Interest on advance payments shall cease to accrue upon satisfactory completion or termination of the contract for the convenience of the Government. The Contractor shall charge interest on advance payments to subcontractors in the manner described above and credit the interest to the Government. Interest need not be charged on advance payments to nonprofit educational or research subcontractors for experimental, developmental, or research work.

(3) If interest is required under the contract, the Contracting Officer shall determine a daily interest rate based on the higher of

(i) the published prime rate of the financial institution (depository) in which the special account is established or

(ii) the rate established by the Secretary of the Treasury under Pub. L. 92-41 (41 U.S.C. 7109 (b)). The Contracting Officer shall revise the daily interest rate during the contract period in keeping with any changes in the cited interest rates.

(4) If the full amount of interest charged under this paragraph has not been paid by deduction or otherwise upon completion or termination of this contract, the Contractor shall pay the remaining interest to the Government on demand.

(g) Financial institution agreement. Before an advance payment is made under this contract, the Contractor shall transmit to the administering office, in the form prescribed by the administering office, an agreement in triplicate from the financial institution in which the special account is established, clearly setting forth the special character of the account and the responsibilities of the financial institution under the account. The Contractor shall select a financial institution that is a member bank of the Federal Reserve System, an "insured" bank within the meaning of the Federal Deposit Insurance Corporation Act (12 U.S.C. 1811), or a credit union insured by the National Credit Union Administration.

(h) Lien on Special Bank Account. The Government shall have a lien upon any balance in the special account paramount to all other liens. The Government lien shall secure the repayment of any advance payments made under this contract and any related interest charges.

(i) Lien on property under contract.

(1) All advance payments under this contract, together with interest charges, shall be secured, when made, by a lien in favor of the Government, paramount to all other liens, on the supplies or other things covered by this contract and on all material and other property acquired for or allocated to the performance of this contract, except to the extent that the Government by virtue of any other terms of this contract, or otherwise, shall have valid title to the supplies, materials, or other property as against other creditors of the Contractor.

(2) The Contractor shall identify, by marking or segregation, all property that is subject to a lien in favor of the Government by virtue of any terms of this contract in such a way as to indicate that it is subject to a lien and that it has been acquired for or allocated to performing this contract. If, for any reason, the supplies, materials, or other property are not identified by marking or segregation, the Government shall be considered to have a lien to the extent of the Government's interest under this contract on any mass of property with which the supplies, materials, or other property are commingled. The Contractor shall maintain adequate accounting control over the property on its books and records.

(3) If, at any time during the progress of the work on the contract, it becomes necessary to deliver to a third person any items or materials on which the Government has a lien, the Contractor shall notify the third person of the lien and shall obtain from the third person a receipt in duplicate acknowledging the existence of the lien. The Contractor shall provide a copy of each receipt to the Contracting Officer.

(4) If, under the termination clause, the Contracting Officer authorizes the Contractor to sell or retain termination inventory, the approval shall constitute a release of the Government's lien to the extent that-

(i) The termination inventory is sold or retained; and

(ii) The sale proceeds or retention credits are applied to reduce any outstanding advance payments.

(j) Insurance.

(1) The Contractor shall maintain with responsible insurance carriers-

(i) Insurance on plant and equipment against fire and other hazards, to the extent that similar properties are usually insured by others operating plants and properties of similar character in

the same general locality;

(ii) Adequate insurance against liability on account of damage to persons or property; and

(iii) Adequate insurance under all applicable workers' compensation laws.

(2) Until work under this contract has been completed and all advance payments made under the contract have been liquidated, the Contractor shall-

(i) Maintain this insurance;

(ii) Maintain adequate insurance on any materials, parts, assemblies, subassemblies, supplies, equipment, and other property acquired for or allocable to this contract and subject to the Government lien under paragraph (i) of this clause; and

(iii) Furnish any evidence with respect to its insurance that the administering office may require.

(k) Default.

(1) If any of the following events occurs, the Government may, by written notice to the Contractor, withhold further withdrawals from the special account and further payments on this contract:

(i) Termination of this contract for a fault of the Contractor.

(ii) A finding by the administering office that the Contractor has failed to-

(A) Observe any of the conditions of the advance payment terms;

(B) Comply with any material term of this contract;

(C) Make progress or maintain a financial condition adequate for performance of this contract;

(D) Limit inventory allocated to this contract to reasonable requirements; or

(E) Avoid delinquency in payment of taxes or of the costs of performing this contract in the ordinary course of business.

(iii) The appointment of a trustee, receiver, or liquidator for all or a substantial part of the

Contractor's property, or the institution of proceedings by or against the Contractor for bankruptcy, reorganization, arrangement, or liquidation.

(iv) The service of any writ of attachment, levy of execution, or commencement of garnishment proceedings concerning the special account.

(v) The commission of an act of bankruptcy.

(2) If any of the events described in subparagraph (k)(1) of this clause continue for 30 days after the written notice to the Contractor, the Government may take any of the following additional actions:

(i) Withdraw by checks payable to the Treasurer of the United States, signed only by the countersigning agency, all or any part of the balance in the special account and apply the amounts to reduce outstanding advance payments and any other claims of the Government against the Contractor.

(ii) Charge interest, in the manner prescribed in paragraph (f) of this clause, on outstanding advance payments during the period of any event described in subparagraph (k)(1) of this clause.

(iii) Demand immediate repayment by the Contractor of the unliquidated balance of advance payments.

(iv) Take possession of and, with or without advertisement, sell at public or private sale all or any part of the property on which the Government has a lien under this contract and, after deducting any expenses incident to the sale, apply the net proceeds of the sale to reduce the unliquidated balance of advance payments or other Government claims against the Contractor.

(3) The Government may take any of the actions described in subparagraphs (k) (1) and (2) of this clause it considers appropriate at its discretion and without limiting any other rights of the Government.

(l) Prohibition against assignment. Notwithstanding any other terms of this contract, the Contractor shall not assign this contract, any interest therein, or any claim under the contract to any party.

(m) Information and access to records. The Contractor shall furnish to the administering office (1) monthly or at other intervals as required, signed or certified balance sheets and profit and

loss statements together with a report on the operation of the special account in the form prescribed by the administering office; and (2) if requested, other information concerning the operation of the Contractor's business. The Contractor shall provide the authorized Government representatives proper facilities for inspection of the Contractor's books, records, and accounts.

(n) Other security. The terms of this contract are considered to provide adequate security to the Government for advance payments; however, if the administering office considers the security inadequate, the Contractor shall furnish additional security satisfactory to the administering office, to the extent that the security is available.

(o) Representations. The Contractor represents the following:

(1) The balance sheet, the profit and loss statement, and any other supporting financial statements furnished to the administering office fairly reflect the financial condition of the Contractor at the date shown or the period covered, and there has been no subsequent materially adverse change in the financial condition of the Contractor.

(2) No litigation or proceedings are presently pending or threatened against the Contractor, except as shown in the financial statements.

(3) The Contractor has disclosed all contingent liabilities, except for liability resulting from the renegotiation of defense production contracts, in the financial statements furnished to the administering office.

(4) None of the terms in this clause conflict with the authority under which the Contractor is doing business or with the provision of any existing indenture or agreement of the Contractor.

(5) The Contractor has the power to enter into this contract and accept advance payments, and has taken all necessary action to authorize the acceptance under the terms of this contract.

(6) The assets of the Contractor are not subject to any lien or encumbrance of any character except for current taxes not delinquent, and except as shown in the financial statements furnished by the Contractor. There is no current assignment of claims under any contract affected by these advance payment provisions.

(7) All information furnished by the Contractor to the administering office in connection with each request for advance payments is true and correct.

(8) These representations shall be continuing and shall be considered to have been repeated

by the submission of each invoice for advance payments.

(p) Covenants. To the extent the Government considers it necessary while any advance payments made under this contract remain outstanding, the Contractor, without the prior written consent of the administering office, shall not-

(1) Mortgage, pledge, or otherwise encumber or allow to be encumbered, any of the assets of the Contractor now owned or subsequently acquired, or permit any preexisting mortgages, liens, or other encumbrances to remain on or attach to any assets of the Contractor which are allocated to performing this contract and with respect to which the Government has a lien under this contract;

(2) Sell, assign, transfer, or otherwise dispose of accounts receivable, notes, or claims for money due or to become due;

(3) Declare or pay any dividends, except dividends payable in stock of the corporation, or make any other distribution on account of any shares of its capital stock, or purchase, redeem, or otherwise acquire for value any of its stock, except as required by sinking fund or redemption arrangements reported to the administering office incident to the establishment of these advance payment provisions;

(4) Sell, convey, or lease all or a substantial part of its assets;

(5) Acquire for value the stock or other securities of any corporation, municipality, or governmental authority, except direct obligations of the United States;

(6) Make any advance or loan or incur any liability as guarantor, surety, or accommodation endorser for any party;

(7) Permit a writ of attachment or any similar process to be issued against its property without getting a release or bonding the property within 30 days after the entry of the writ of attachment or other process;

(8) Pay any remuneration in any form to its directors, officers, or key employees higher than rates provided in existing agreements of which notice has been given to the administering office; accrue excess remuneration without first obtaining an agreement subordinating it to all claims of the Government; or employ any person at a rate of compensation over $____ a year;

(9) Change substantially the management, ownership, or control of the corporation;

(10) Merge or consolidate with any other firm or corporation, change the type of business, or engage in any transaction outside the ordinary course of the Contractor's business as presently conducted;

(11) Deposit any of its funds except in a bank or trust company insured by the Federal Deposit Insurance Corporation or a credit union insured by the National Credit Union Administration;

(12) Create or incur indebtedness for advances, other than advances to be made under the terms of this contract, or for borrowings;

(13) Make or covenant for capital expenditures exceeding $____ in total;

(14) Permit its net current assets, computed in accordance with generally accepted accounting principles, to become less than $____; or

(15) Make any payments on account of the obligations listed below, except in the manner and to the extent provided in this _____[Contracting officer to list the pertinent obligations.] .

(End of clause)

52.232-17 Interest. 2014-05

Interest (May 2014)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Certified Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S. C. 7109, which is applicable to the period in which the amount becomes due, as provided in paragraph (e) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(c) Final Decisions. The Contracting Officer will issue a final decision as required by 33.211 if-

(1) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

(2) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(3) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(d) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(e) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(f) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on-

(1) The date on which the designated office receives payment from the Contractor;

(2) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(3) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(g) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

52.232-18 Availability of Funds. 1984-04

Availability of Funds (Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

52.232-23 Assignment of Claims. 2014-05

Assignment of Claims (May 2014)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C.3727, 41 U.S.C.6305 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all

unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

52.232-27	Prompt Payment for Construction Contracts.	2017-01

Prompt Payment for Construction Contracts (Jan 2017)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments-

(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.

(A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).

(A) The due date for making such payments is the later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the Contractor.

(2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.

(B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer-Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(xi) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The prompt payment regulations at 5 CFR1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on

amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(6) Additional interest penalty.

(i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if-

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)

(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall-

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) If there is no postmark or the postmark is illegible-

(1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause-

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to-

(i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and

(ii) Require each of its subcontractors to include such clauses in their subcontracts with each

lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that-

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if-

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall-

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and-

(i) Make such payment within-

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph (e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon-

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying-

(A) The amounts withheld under paragraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until-

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.

(f) Third-party deficiency reports-

(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with 40 U.S.C. 3133, asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause-

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall-

(i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying-

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the

amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

(l) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall-

(1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the-

(i) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(ii) Affected contract number and delivery order number if applicable;

(iii) Affected line item or subline item, if applicable; and

(iv) Contractor point of contact.

(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(End of clause)

52.232-32 Performance-Based Payments. 2012-04

Performance-Based Payments (Apr 2012)

(a) Amount of payments and limitations on payments. Subject to such other limitations and conditions as are specified in this contract and this clause, the amount of payments and limitations on payments shall be specified in the contract's description of the basis for payment.

(b) Contractor request for performance-based payment. The Contractor may submit requests for payment of performance-based payments not more frequently than monthly, in a form and manner acceptable to the Contracting Officer. Unless otherwise authorized by the Contracting Officer, all performance-based payments in any period for which payment is being requested shall be included in a single request, appropriately itemized and totaled. The Contractor's request shall contain the information and certification detailed in paragraphs (l) and (m) of this clause.

(c) Approval and payment of requests.

(1) The Contractor shall not be entitled to payment of a request for performance-based payment prior to successful accomplishment of the event or performance criterion for which payment is requested. The Contracting Officer shall determine whether the event or performance criterion for which payment is requested has been successfully accomplished in accordance with the terms of the contract. The Contracting Officer may, at any time, require the Contractor to substantiate the successful performance of any event or performance criterion which has been or is represented as being payable.

(2) A payment under this performance-based payment clause is a contract financing payment under the Prompt Payment clause of this contract and not subject to the interest penalty provisions of the Prompt Payment Act. The designated payment office will pay approved requests on the ____[Contracting Officer insert day as prescribed by agency head; if not prescribed, insert "30th"] day after receipt of the request for performance-based payment by the designated payment office. However, the designated payment office is not required to provide payment if the Contracting Officer requires substantiation as provided in paragraph (c)(1) of this clause, or inquires into the status of an event or performance criterion, or into any of the conditions listed in paragraph (a) of this clause, or into the Contractor certification. The payment period will not begin until the Contracting Officer approves the request.

(3) The approval by the Contracting Officer of a request for performance-based payment does not constitute an acceptance by the Government and does not excuse the Contractor from performance of obligations under this contract.

(d) Liquidation of performance-based payments.

(1) Performance-based finance amounts paid prior to payment for delivery of an item shall be liquidated by deducting a percentage or a designated dollar amount from the delivery payment. If the performance-based finance payments are on a delivery item basis, the liquidation amount for each such line item shall be the percent of that delivery item price that was previously paid under performance-based finance payments or the designated dollar amount. If the performance-based finance payments are on a whole contract basis, liquidation shall be by either predesignated liquidation amounts or a liquidation percentage.

(2) If at any time the amount of payments under this contract exceeds any limitation in this contract, the Contractor shall repay to the Government the excess. Unless otherwise determined by the Contracting Officer, such excess shall be credited as a reduction in the unliquidated performance-based payment balance(s), after adjustment of invoice payments and balances for any retroactive price adjustments.

(e) Reduction or suspension of performance-based payments. The Contracting Officer may reduce or suspend performance-based payments, liquidate performance-based payments by deduction from any payment under the contract, or take a combination of these actions after finding upon substantial evidence any of the following conditions:

(1) The Contractor failed to comply with any material requirement of this contract (which

includes paragraphs (h) and (i) of this clause).

(2) Performance of this contract is endangered by the Contractor's-

(i) Failure to make progress; or

(ii) Unsatisfactory financial condition.

(3) The Contractor is delinquent in payment of any subcontractor or supplier under this contract in the ordinary course of business.

(f) Title.

(1) Title to the property described in this paragraph (f) shall vest in the Government. Vestiture shall be immediately upon the date of the first performance-based payment under this contract, for property acquired or produced before that date. Otherwise, vestiture shall occur when the property is or should have been allocable or properly chargeable to this contract.

(2) "Property," as used in this clause, includes all of the following described items acquired or produced by the Contractor that are or should be allocable or properly chargeable to this contract under sound and generally accepted accounting principles and practices:

(i) Parts, materials, inventories, and work in process;

(ii) Special tooling and special test equipment to which the Government is to acquire title;

(iii) Nondurable (i.e., noncapital) tools, jigs, dies, fixtures, molds, patterns, taps, gauges, test equipment and other similar manufacturing aids, title to which would not be obtained as special tooling under paragraph (f)(2)(ii) of this clause; and

(iv) Drawings and technical data, to the extent the Contractor or subcontractors are required to deliver them to the Government by other clauses of this contract.

(3) Although title to property is in the Government under this clause, other applicable clauses of this contract (e.g., the termination clauses) shall determine the handling and disposition of the property.

(4) The Contractor may sell any scrap resulting from production under this contract, without requesting the Contracting Officer's approval, provided that any significant reduction in the value of the property to which the Government has title under this clause is reported in writing to the Contracting Officer.

(5) In order to acquire for its own use or dispose of property to which title is vested in the Government under this clause, the Contractor shall obtain the Contracting Officer's advance approval of the action and the terms. If approved, the basis for payment (the events or performance criteria) to which the property is related shall be deemed to be not in compliance with the terms of the contract and not payable (if the property is part of or needed for performance), and the Contractor shall refund the related performance-based payments in accordance with paragraph (d) of this clause.

(6) When the Contractor completes all of the obligations under this contract, including liquidation of all performance-based payments, title shall vest in the Contractor for all property (or the proceeds thereof) not-

(i) Delivered to, and accepted by, the Government under this contract; or

(ii) Incorporated in supplies delivered to, and accepted by, the Government under this contract and to which title is vested in the Government under this clause.

(7) The terms of this contract concerning liability for Government-furnished property shall not apply to property to which the Government acquired title solely under this clause.

(g) Risk of loss. Before delivery to and acceptance by the Government, the Contractor shall bear the risk of loss for property, the title to which vests in the Government under this clause, except to the extent the Government expressly assumes the risk. If any property is lost (see 45.101), the basis of payment (the events or performance criteria) to which the property is related shall be deemed to be not in compliance with the terms of the contract and not payable (if the property is part of or needed for performance), and the Contractor shall refund the related performance-based payments in accordance with paragraph (d) of this clause.

(h) Records and controls. The Contractor shall maintain records and controls adequate for administration of this clause. The Contractor shall have no entitlement to performance-based payments during any time the Contractor's records or controls are determined by the Contracting Officer to be inadequate for administration of this clause.

(i) Reports and Government access. The Contractor shall promptly furnish reports, certificates,

financial statements, and other pertinent information requested by the Contracting Officer for the administration of this clause and to determine that an event or other criterion prompting a financing payment has been successfully accomplished. The Contractor shall give the Government reasonable opportunity to examine and verify the Contractor's records and to examine and verify the Contractor's performance of this contract for administration of this clause.

(j) Special terms regarding default. If this contract is terminated under the Default clause, (1) the Contractor shall, on demand, repay to the Government the amount of unliquidated performance-based payments, and (2) title shall vest in the Contractor, on full liquidation of all performance-based payments, for all property for which the Government elects not to require delivery under the Default clause of this contract. The Government shall be liable for no payment except as provided by the Default clause.

(k) Reservation of rights.

(1) No payment or vesting of title under this clause shall-

(i) Excuse the Contractor from performance of obligations under this contract; or

(ii) Constitute a waiver of any of the rights or remedies of the parties under the contract.

(2) The Government's rights and remedies under this clause-

(i) Shall not be exclusive, but rather shall be in addition to any other rights and remedies provided by law or this contract; and

(ii) Shall not be affected by delayed, partial, or omitted exercise of any right, remedy, power, or privilege, nor shall such exercise or any single exercise preclude or impair any further exercise under this clause or the exercise of any other right, power, or privilege of the Government.

(l) Content of Contractor's request for performance-based payment. The Contractor's request for performance-based payment shall contain the following:

(1) The name and address of the Contractor;

(2) The date of the request for performance-based payment;

(3) The contract number and/or other identifier of the contract or order under which the request is made;

(4) Such information and documentation as is required by the contract's description of the basis for payment; and

(5) A certification by a Contractor official authorized to bind the Contractor, as specified in paragraph (m) of this clause.

(m) Content of Contractor's certification. As required in paragraph (l)(5) of this clause, the Contractor shall make the following certification in each request for performance-based payment:

I certify to the best of my knowledge and belief that-

(1) This request for performance-based payment is true and correct; this request (and attachments) has been prepared from the books and records of the Contractor, in accordance with the contract and the instructions of the Contracting Officer;

(2) (Except as reported in writing on ____), all payments to subcontractors and suppliers under this contract have been paid, or will be paid, currently, when due in the ordinary course of business;

(3) There are no encumbrances (except as reported in writing on ____) against the property acquired or produced for, and allocated or properly chargeable to, the contract which would affect or impair the Government's title;

(4) There has been no materially adverse change in the financial condition of the Contractor since the submission by the Contractor to the Government of the most recent written information dated ____; and

(5) After the making of this requested performance-based payment, the amount of all payments for each deliverable item for which performance-based payments have been requested will not exceed any limitation in the contract, and the amount of all payments under the contract will not exceed any limitation in the contract.

(End of clause)

52.232-33	Payment by Electronic Funds Transfer-System for Award Management.	2018-10

Payment by Electronic Funds Transfer-System for Award Management (Oct 2018)

(a) Method of payment.

(1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either-

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the System for Award Management (SAM). In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to SAM.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in SAM is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into SAM; and any invoice or contract financing request shall be deemed

not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers.

(1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for-

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and-

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in SAM and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a

financial institution properly recognized under an assignment of claims pursuant to subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(i) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in SAM.

(End of clause)

52.232-39	Unenforceability of Unauthorized Obligations.	2013-06

Unenforceability of Unauthorized Obligations (Jun 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(End of clause)

52.232-40	Providing Accelerated Payments to Small Business Subcontractors.	2023-03

Providing Accelerated Payments to Small Business Subcontractors (Mar 2023)

(a)

(1) In accordance with 31 U.S.C. 3903 and 10 U.S.C. 3801, within 15 days after receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

(2) The Contractor agrees to make such payments to its small business subcontractors without

any further consideration from or fees charged to the subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial products or commercial services.

(End of clause)

52.233-1	Disputes. (Deviation 2026-O0038)	2026-02

Disputes (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Claim means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under 41 U.S.C. chapter 71 until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under 41 U.S.C. chapter 71. The submission may be converted to a claim under 41 U.S.C. chapter 71, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

Defective certification means a certification that alters or otherwise deviates from the language in paragraph (d)(2)(iii) of this clause or which is not executed by a person authorized to bind the contractor with respect to the claim. Failure to certify must not be deemed to be a defective certification.

(b) This contract is subject to 41 U.S.C. chapter 71, Contract Disputes.

(c) Except as provided in 41 U.S.C. chapter 71, all disputes arising under or relating to this contract must be resolved under this clause.

(d)

(1) A claim by the Contractor must be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor must be subject to a written decision by the Contracting Officer.

(2)

(i) The Contractor must provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding $100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification must state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision must be final unless the Contractor appeals or files a suit as provided in 41 U.S.C. chapter 71.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor

must inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h)

(1) The Government must pay interest on the amount found due and unpaid from the date that-

(i) The Contracting Officer receives the claim (certified, if required); or

(ii) Payment otherwise would be due, if that date is later, until the date of payment.

(2) For claims having defective certifications, interest must be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims must be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which applies to the period during which the Contracting Officer receives the claim and then at the rate that applies for each 6-month period as fixed by the Treasury Secretary while the claim is pending.

(i) The Contractor must proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract. The Contractor must comply with any decision of the Contracting Officer.

(End of clause)

52.233-1	Disputes. (Deviation 2026-O0038) (Alternate I)	2026-02	Alternate I	2026-02

Alternate I (Feb 2026) (Deviation 2026-O0038). As prescribed in 33.205-9(a), substitute the following paragraph (i) for paragraph (i) of the basic clause:

(i) The Contractor must proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

52.233-3 Protest after Award. (Deviation 2026-O0038) 2026-02

Protest after Award (Feb 2026) (Deviation 2026-O0038)

(a) Upon receipt of a stop-work order, the Contractor must immediately comply with its terms and take all reasonable steps to minimize incurring costs allocable to the work covered by the order during the period of work stoppage. After receiving the final decision in the protest, the Contracting Officer must either-

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor must resume work. The Contracting Officer must make an equitable adjustment in the delivery schedule or contract price, or both, and the contract must be modified, in writing, accordingly, if-

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer must allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer must allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

(End of clause)

52.233-4	Applicable Law for Breach of Contract Claim. (Deviation 2026-O0038)	2026-02

Applicable Law for Breach of Contract Claim (Feb 2026) (Deviation 2026-O0038)

United States law will apply to resolve any claim of breach of this contract.

(End of clause)

52.236-2	Differing Site Conditions. (Deviation 2026-O0038)	2026-02

Differing Site Conditions (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) Latent physical conditions or subsurface conditions at the site which differ materially from those indicated in this contract; or

(2) Unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

(b)

(1) The Contracting Officer will investigate the site conditions promptly after receiving such a notice.

(2) If the conditions materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract an equitable adjustment must be made under this clause.

(c) No request for an equitable adjustment to the contract under this clause will be allowed, unless the Contractor has given the written notice required.

(d) No request for an equitable adjustment to the contract for differing site conditions will be allowed if made after final payment under this contract.

(End of clause)

52.236-3	Site Investigation and Conditions Affecting the Work. (Deviation 2026-O0038)	2026-02

Site Investigation and Conditions Affecting the Work (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the

nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including-

(1) Conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) The availability of labor, water, electric power, and roads;

(3) Uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) The conformation and conditions of the ground; and

(5) The character of equipment and facilities needed preliminary to and during work performance.

(b) The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(c) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

52.236-5	Material and Workmanship. (Deviation 2026-O0038)	2026-02

Material and Workmanship (Feb 2026) (Deviation 2026-O0038)

(a)

(1) Equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract.

(2) References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

(3) The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery, mechanical, and other equipment to be incorporated into the work.

(1) When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment.

(2) When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work.

(i) When requesting approval, the Contractor shall provide appropriate and required information concerning the material or articles.

(ii) When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval are installed or used at the risk of subsequent rejection.

(c) Work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any

employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(End of clause)

52.236-6	Superintendence by the Contractor. (Deviation 2026-O0038)	2026-02

Superintendence by the Contractor (Feb 2026) (Deviation 2026-O0038)

During performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on site a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)

52.236-7	Permits and Responsibilities. (Deviation 2026-O0038)	2026-02

Permits and Responsibilities (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work.

(b) The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence.

(c) The Contractor shall be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

52.236-8	Other Contracts. (Deviation 2026-O0038)	2026-02

Other Contracts (Feb 2026) (Deviation 2026-O0038)

(a) The Government may award other contracts for work at or near the site of the work under this contract. The Contractor shall cooperate and coordinate with-

(1) Other contractors; and

(2) Government employees.

(b) The Contractor shall adapt scheduling and performance of the work under this contract to accommodate the performance of other contractors. The Contractor's scheduling and performance shall not delay or interfere with the performance of work by other contractors or Government employees.

(End of clause)

52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements. (Deviation 2026-O0038)	2026-02

Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall preserve and protect structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed, and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so. If any limbs or branches of trees are broken during contract performance, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage and, in the event of damage resulting from non-compliance with this contract or failure to exercise reasonable care in performing the work, shall promptly repair existing improvements and utilities at or near the work site, on adjacent property of a third party, and on or near transportation paths and routes. The Contractor shall repair any damage, including those that are the property of a third party.

(c) If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

52.236-10	Operations and Storage Areas. (Deviation 2026-O0038)	2026-02

Operations and Storage Areas (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall confine all activities and operations on site to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b)

(1) Temporary buildings (e.g., storage sheds, shops, offices) and utilities-

(i) May be erected by the Contractor only with the approval of the Contracting Officer; and

(ii) Shall only be built with labor and materials furnished by the Contractor without additional expense to the Government.

(2) The temporary buildings and utilities are the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work.

(3) The temporary buildings and utilities may be abandoned and need not be removed, with written consent of the Contracting Officer.

(c) The Contractor shall, as prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation.

(End of clause)

52.236-11	Use and Possession Prior to Completion. (Deviation 2026-O0038)	2026-02

Use and Possession Prior to Completion (Feb 2026) (Deviation 2026-O0038)

(a) The Government has the right to take possession of or use any completed or partially completed part of the work.

(1) Before taking possession of or using any work, the Contracting Officer will furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of

the work that the Government intends to take possession of or use.

(2) Failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract.

(3) The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b)

(1) While the Government has such possession or use, the Contractor is relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities".

(2) If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

52.236-12	Cleaning Up. (Deviation 2026-O0038)	2026-02

Cleaning Up (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall keep the work area, including storage areas, in a clean, neat, orderly condition, and free from accumulations of waste materials.

(b) Before completing the work, the Contractor shall remove from the site any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government.

(End of clause)

52.236-13	Accident Prevention. (Deviation 2026-O0038)	2026-02

Accident Prevention (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall provide and maintain work environments and procedures that-

(1) Safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) Avoid interruptions of Government operations and delays in project completion dates; and

(3) Control costs in the performance of this contract.

(b) In addition, for contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR part 1926 and 29 CFR part 1910 ; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d)

(1) If the Contracting Officer becomes aware of any noncompliance with these requirements or any condition that poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer will notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action.

(2) This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required.

(3) After receiving the notice, the Contractor shall immediately take corrective action.

(4) If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken.

(5) The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop-work order issued under this clause.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e), in subcontracts.

(End of clause)

52.236-14	Availability and Use of Utility Services. (Deviation 2026-O0038)	2026-02

Availability and Use of Utility Services (Feb 2026) (Deviation 2026-O0038)

(a) The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract.

(b) Unless otherwise provided in the contract, the Contractor shall pay for all utility costs.

(c) The Contractor, at its expense and in a workmanlike manner, shall install and maintain all

necessary temporary connections, distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges.

(d) Before final acceptance by the Government, the Contractor shall remove the temporary connections, distribution lines, meters, and associated paraphernalia.

(End of clause)

52.236-15	Schedules for Construction Contracts. (Deviation 2026-O0038)	2026-02

Schedules for Construction Contracts (Feb 2026) (Deviation 2026-O0038)

(a)

(1) Within five days after the work commences on the contract or another period of time determined by the Contracting Officer, the Contractor shall prepare and submit to the Contracting Officer for approval a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the work (including acquiring materials, plant, and equipment).

(2) The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period.

(3) If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall continually update the actual progress in the schedule and shall submit it to the Contracting Officer by the means prescribed in the contract for transmittals or as directed by the Contracting Officer.

(c)

(1) If the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to recover lost time and execute in accordance with the approved schedule, without additional cost to the Government.

(2) Such steps may include increasing the number of shifts, overtime operations, days of work, and/or the amount of construction plant.

(3) The Contractor shall submit, for approval, supplementary schedule(s) that demonstrate how the lost time will be recovered.

(d) If the Contractor does not recover the lost time, the Contracting Officer may determine that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

52.236-16	Quantity Surveys. (Deviation 2026-O0038)	2026-02

Quantity Surveys (Feb 2026) (Deviation 2026-O0038)

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(1) The Government will conduct the original and final surveys and make the computations based on them.

(2)

(i) The Contractor shall conduct the surveys for any periods for which progress payments are

requested and shall make the computations based on these surveys.

(ii) All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.

(b) Upon completing a survey, the Contractor shall promptly provide the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, which may be used by the Contracting Officer to determine the amount of progress payments.

(c) The Contractor shall retain copies of all such material furnished to the Contracting Officer.

(End of clause)

52.236-17	Layout of Work. (Deviation 2026-O0038)	2026-02

Layout of Work (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall lay out its work from Government-established base lines and benchmarks provided on the drawings.

(b) The Contractor shall be responsible for all measurements in connection with the layout.

(c) The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required for the layout.

(d) The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer.

(e)

(1) The Contractor shall be responsible for maintaining and preserving all stakes and other

marks established by the Contracting Officer until authorized to remove them.

(2) If such marks are destroyed by the Contractor, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(End of clause)

52.236-21	Specifications and Drawings for Construction. (Deviation 2026-O0038)	2026-02

Specifications and Drawings for Construction (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall keep at the site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto.

(b) Anything mentioned in the specifications and not shown on the drawings or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both.

(1) In case of difference between drawings and specifications, the specifications shall govern.

(2) In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing.

(3) Any adjustment by the Contractor without such a determination shall be at its own risk and expense.

(c) The Contracting Officer will furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(d)

(1) Words, such as, "directed", "required", "ordered", "designated", "prescribed", or words of like import when used, in the specifications or on the drawings are intended to mean the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer.

(2) Words, such as, "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or 'acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(e) Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place", that is "furnished and installed".

(f) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i. e., form, fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(g)

(1) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review.

(2) Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission.

(h) The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor.

(1) Any work done before such approval shall be at the Contractor's risk.

(2) Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the

requirements of this contract, except with respect to variations described and approved in accordance with paragraph (i) of this clause.

(i)

(1) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission.

(2) If the Contracting Officer approves any such variation, the Contracting Officer will issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(j) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

(End of clause)

52.242-5	Payments to Small Business Subcontractors.	2017-01

Payments to Small Business Subcontractors (Jan 2017)

(a) Definitions. As used in this clause-

Reduced payment means a payment that is for less than the amount agreed upon in a subcontract in accordance with its terms and conditions, for supplies and services for which the Government has paid the prime contractor.

Untimely payment means a payment that is more than 90 days past due under the terms and conditions of a subcontract, for supplies and services for which the Government has paid the prime contractor.

(b) Notice. The Contractor shall notify the Contracting Officer, in writing, not later than 14 days after-

(1) A small business subcontractor was entitled to payment under the terms and conditions of the subcontract; and

(2) The Contractor-

(i) Made a reduced or untimely payment to the small business subcontractor; or

(ii) Failed to make a payment, which is now untimely.

(c) Content of notice. The Contractor shall include the reason(s) for making the reduced or untimely payment in any notice required under paragraph (b) of this clause.

(End of clause)

52.242-13 Bankruptcy. 1995-07

Bankruptcy (July 1995)

In the event the contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the contracting officer responsible for administering the contract. This notification shall be furnished within fivedays of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of government contract numbers and contracting offices for all government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 Suspension of Work. 1984-04

Suspension of Work (Apr 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1)by an act of the Contracting Officer in the administration of this contract, or (2)by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract.

(c) A claim under this clause shall not be allowed-

(1) For any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and

(2) Unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

52.243-4	Changes. (Deviation 2026-O0038)	2026-02

Changes (Feb 2026) (Deviation 2026-O0038)

(a)

(1) At any time, the Contracting Officer may issue a written order, identified as a change order, to make changes in the work within the scope of the contract, including changes-

(i) In the specifications (including drawings and designs);

(ii) In the method or manner of performance of the work;

(iii) In the Government-furnished property or services; or

(iv) Directing acceleration in the performance of the work.

(2) If there are any sureties, the Contracting Officer does not need to notify them of a written order.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating-

(1) The date, circumstances, and source of the order; and

(2) That the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or

not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e)

(1) The Contractor must assert its right to an adjustment under this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of proposal within 30 days, unless this period is extended by the Government, after-

(i) Receipt of a written change order under paragraph (a) of this clause; or

(ii) The furnishing of a written notice under paragraph (b) of this clause.

(2) The statement of proposal for adjustment may be included in the notice under paragraph (b) of this clause.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

52.243-5	Changes and Changed Conditions. (Deviation 2026-O0038)	2026-02

Changes and Changed Conditions (Feb 2026) (Deviation 2026-O0038)

(a) The Contracting Officer may order changes in the drawings and specifications within the scope of the contract in writing.

(b) The Contractor shall promptly notify the Contracting Officer, in writing, of subsurface or latent physical conditions differing materially from those indicated in this contract or unknown unusual physical conditions at the site before proceeding with the work.

(c) If changes under paragraph (a) of this clause or conditions under paragraph (b) of this clause increase or decrease the cost of, or time required for performing the work, the Contracting Officer shall make an equitable adjustment (see paragraph (d) of this clause) upon submittal of a proposal for adjustment (hereafter referred to as proposal) by the Contractor before final payment under the contract.

(d) The Contracting Officer shall not make an equitable adjustment under paragraph (b) of this clause unless-

(1) The Contractor has submitted the required written notice and the Contracting Officer has received the notice; or

(2) The Contracting Officer waives the requirement for written notice.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause.

(End of clause)

52.244-5 Competition in Subcontracting. 2024-08

Competition in Subcontracting (Aug 2024)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the DoD Mentor-Protégé Program (10 U.S.C. 4902), the Contractor may award subcontracts under this contract on a noncompetitive basis to its protégés.

(End of clause)

52.244-6	Subcontracts for Commercial Products and Commercial Services. (Deviation 2026-O0038)	2026-04

Subcontracts for Commercial Products and Commercial Services (Apr 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Commercial product, commercial service and nondevelopmental item have the meanings contained in Federal Acquisition Regulation (FAR) 2.101.

Subcontract has the meaning at FAR 44.401

(b) Requirements.

(1) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial products, commercial services, or non-developmental items as components of items to be supplied under this contract.

(2) If a clause in the following table is included in the contract, the Contractor shall insert the clause in subcontracts for commercial products or commercial services and must flow down the requirements of the clause to subcontracts as indicated in the specific clause:

Number	Title	Date
52.203-13	Contractor Code of Business Ethics and Conduct	NOV 2021
52.203-17	Contractor Employee Whistleblower Rights	NOV 2023
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	JAN 2017
52.204-9	Personal Identity Verification of Contractor Personnel	

JAN 2011

52.219-8 * Utilization of Small Business Concerns JAN 2025

52.222-35 Equal Opportunity for Veterans JUN 2020

52.222-36 Equal Opportunity for Workers with Disabilities JUN 2020

52.222-37 Employment Reports on Veterans JUN 2020

52.222-40 Notification of Employee Rights Under the National Labor Relations Act DEC 2010

52.222-41 Service Contract Labor Standards AUG 2018

52.222-50 Combating Trafficking in Persons NOV 2021

52.222-50 with Alt I Combating Trafficking in Persons, with its Alternate I MAR 2015

52.222-51 Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements MAY 2014

52.222-53 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements MAY 2014

52.222-54 Employment Eligibility Verification JAN 2025

52.222-62 Paid Sick Leave Under Executive Order 13706 JAN 2022

52.222-90 Addressing DEI Discrimination by Federal Contractors APR 2026

52.224-3 Privacy Training JAN 2017

52.224-3 with Alt I Privacy Training, with Alternate I JAN 2017

52.225-26 Contractors Performing Private Security Functions Outside the United States OCT 2016

52.232-40 Providing Accelerated Payments to Small Business Subcontractors MAR 2023

52.240-91 Security Prohibitions and Exclusions DATE

52.240-91 with Alt I Security Prohibitions and Exclusions, with its Alternate I DATE

52.240-92 Security Requirements DATE

52.240-92 with Alt II Security Requirements, with its Alternate II DATE

52.247-64 Preference for Privately Owned U.S.-Flag Commercial Vessels NOV 2021

* Include only if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds the applicable threshold specified in FAR 19.109(a) on the date of subcontract award, the subcontractor must include 52.219-8 in

lower tier subcontracts that offer subcontracting opportunities.

(c) Subcontracts. The Contractor shall include the terms of this clause, including this paragraph (c), in subcontracts awarded under this contract.

(End of clause)

52.246-12 Inspection of Construction. 1996-08

Inspection of Construction (Aug 1996)

(a) Definition."Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not-

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this- section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from

any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may-

(1) By contract or otherwise, replace or correct the work and charge the cost to the Contractor; or

(2) Terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

(End of clause)

52.246-13	Inspection-Dismantling, Demolition, or Removal of Improvements.	1996-08

Inspection-Dismantling, Demolition, or Removal of Improvements (Aug 1996)

(a) Unless otherwise designated by the specifications, all workmanship performed under the contract is subject to Government inspection at all times and places where dismantling or demolition work is being performed. The Contractor shall furnish promptly, and at no increase in contract price, all reasonable facilities, labor, and materials necessary for safe and convenient inspection by the Government. The Government shall perform inspections in a manner that will not unduly delay the work.

(b) The Contractor is responsible for damage to property caused by defective workmanship. The Contractor shall promptly segregate and remove from the premises any unsatisfactory facilities, materials, and equipment used in contract performance, and promptly replace them with satisfactory items. If the Contractor fails to proceed at once in a workmanlike manner with performance of the work or with the correction of defective workmanship, the Government may-

(1) By contract or otherwise, replace the facilities, materials, and equipment or correct the workmanship and charge the cost to the Contractor; and

(2) Terminate for default the Contractor's right to proceed. The Contractor and any surety shall be liable, to the extent specified in the contract for any damage or cost of repair or replacement.

(End of clause)

52.246-21	Warranty of Construction.	1994-03

Warranty of Construction (Mar 1994)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of clause)

52.248-3 Value Engineering-Construction. 2025-10

Value Engineering-Construction (Oct 2025)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) of this clause.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

Collateral savings, as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

Contractor's development and implementation costs, as used in this clause, means those costs

the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

Government costs, as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

Instant contract savings, as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) of this clause).

Value engineering change proposal (VECP) means a proposal that-

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change-

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in paragraphs (c)(1) through (7) of this clause. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) of this clause.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action.

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a

modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing-

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by-

(i) 45 percent for fixed-price contracts; or

(ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to-

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or $100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of $90,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) of this clause, the Contractor's allowable development and implementation costs shall include any subcontractor's

allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering-Construction clause of contract ____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in part 27 of the Federal Acquisition Regulation.)

(End of clause)

52.249-2	Termination for Convenience of the Government (Fixed-Price). (Alternate I)	2012-04	Alternate I	1996-09

Alternate I (Sept 1996). If the contract is for construction, substitute the following paragraph (g) for paragraph (g) of the basic clause:

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under

paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of-

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(1)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

52.249-2	Termination for Convenience of the Government (Fixed-Price).	2012-04

Termination for Convenience of the Government (Fixed-Price) (Apr 2012)

(a) The Government may terminate performance of work under this contract in whole or, from

time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government-

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property

of the types referred to in paragraph (b)(6) of this clause; provided, however, that the Contractor (i)is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in paragraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be

agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under paragraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of-

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under paragraph (g)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly

assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value as determined by the Contracting Officer, for the loss of the Government property.

(i) The cost principles and procedures of part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted-

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)

(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App.1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

(End of clause)

52.249-10	Default (Fixed-Price Construction).	1984-04

Default (Fixed-Price Construction) (Apr 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's

right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the- work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if-

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include-

(i) Acts of God or of the public enemy,

(ii) Acts of the Government in either its sovereign or contractual capacity,

(iii) Acts of another Contractor in the performance of a contract with the Government,

(iv) Fires,

(v) Floods,

(vi) Epidemics,

(vii) Quarantine restrictions,

(viii) Strikes,

(ix) Freight embargoes,

(x) Unusually severe weather, or

(xi) Delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

(d) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.249-14 Excusable Delays. 1984-04

Excusable Delays (Apr 1984)

(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default,- unless-

(1) The subcontracted supplies or services were obtainable from other sources;

(2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and

(3) The Contractor failed to comply reasonably with this order.

(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract.

(End of clause)

52.252-2	Clauses Incorporated by Reference.	1998-02

Clauses Incorporated By Reference (Feb 1998)

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

Revolutionary Federal Acquisition Regulation Overhaul (RFO):

https://www.acquisition.gov/far-overhaul

Department of Defense FAR Supplement (DFARS) RFO Class Deviations:

https://www.acq.osd.mil/dpap/dars/dfars_far_overhaul_class_deviations.html

USACE Acquisition Instruction (UAI):

https://www.usace.army.mil/Business-With-Us/Contracting/Resources/

(End of clause)

52.252-4	Alterations in Contract.	1984-04

Alterations in Contract (Apr 1984)

Portions of this contract are altered as follows:

____ ____ ____

(End of clause)

52.252-6 Authorized Deviations in Clauses. 2020-11

Authorized Deviations in Clauses (Nov 2020)

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

(b) The use in this solicitation or contract of any **RFO/DFARS Overhaul** (48 CFR **2**) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

DFARS Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.201-7000	Contracting Officer's Representative.	1991-12		

CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) Definition. "Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7000	Requirements Relating to Compensation of Former DoD Officials.	2011-09

REQUIREMENTS RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2011)

(a) Definition. "Covered DoD official," as used in this clause, means an individual that-

(1) Leaves or left DoD service on or after January 28, 2008; and

(2)(i) Participated personally and substantially in an acquisition as defined in 41 U.S.C. 131 with a value in excess of $10 million, and serves or served-

(A) In an Executive Schedule position under subchapter II of chapter 53 of Title 5, United States Code;

(B) In a position in the Senior Executive Service under subchapter VIII of chapter 53 of Title 5, United States Code; or

(C) In a general or flag officer position compensated at a rate of pay for grade O-7 or above

under section 201 of Title 37, United States Code; or

(ii) Serves or served in DoD in one of the following positions: program manager, deputy program manager, procuring contracting officer, administrative contracting officer, source selection authority, member of the source selection evaluation board, or chief of a financial or technical evaluation team for a contract in an amount in excess of $10 million.

(b) The Contractor shall not knowingly provide compensation to a covered DoD official within 2 years after the official leaves DoD service, without first determining that the official has sought and received, or has not received after 30 days of seeking, a written opinion from the appropriate DoD ethics counselor regarding the applicability of post-employment restrictions to the activities that the official is expected to undertake on behalf of the Contractor.

(c) Failure by the Contractor to comply with paragraph (b) of this clause may subject the Contractor to rescission of this contract, suspension, or debarment in accordance with 41 U.S. C. 2105(c).

(End of clause)

252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies.	2023-01

PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE- CONTRACT-RELATED FELONIES (JAN 2023)

(a) Definitions. As used in this clause-

(1) "Arising out of a contract with the DoD" means any act in connection with-

(i) Attempting to obtain;

(ii) Obtaining; or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nolo contendere, for which sentence has been imposed.

(3) "Date of conviction" means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988 , of fraud or any other felony arising out of a contract with the DoD is prohibited from serving-

(1) In a management or supervisory capacity on this contract;

(2) On the board of directors of the Contractor;

(3) As a consultant, agent, or representative for the Contractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of the Contractor with regard to this contract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 4656 provides that the Contractor shall be subject to a criminal penalty of not more than $500,000 if convicted of knowingly-

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 4656, the Government may consider other available remedies, such as-

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify-

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and

(4) An explanation of why a waiver is in the interest of national security.

(g) Subcontracts. The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial products, commercial services, or commercial components.

(h) Pursuant to 10 U.S.C. 4656(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone 301-937-1542; www.ojp.usdoj.gov/BJA/grant/DPFC.html.

(End of clause)

252.203-7002	Requirement to Inform Employees of Whistleblower Rights.	2022-12

REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS

(DEC 2022)

(a) The Contractor shall inform its employees in writing, in the predominant native language of the workforce, of contractor employee whistleblower rights and protections under 10 U.S.C. 4701, as described in subpart 203.9 of the Defense Federal Acquisition Regulation Supplement.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts.

(End of clause)

252.203-7003	Agency Office of the Inspector General.	2019-08

203.1004
AGENCY OFFICE OF THE INSPECTOR GENERAL (AUG 2019)

The agency office of the Inspector General referenced in paragraphs (c) and (d) of FAR clause 52.203-13, Contractor Code of Business Ethics and Conduct, is the DoD Office of Inspector General at the following address:

Department of Defense Office of Inspector General Administrative Investigations Contractor Disclosure Program 4800 Mark Center Drive, Suite 14L25 Alexandria, VA 22350-1500
https://www.dodig.mil/Programs/Contractor-Disclosure-Program/
(End of clause)

252.203-7004	Display of Hotline Posters.	2023-01

203.1004
DISPLAY OF HOTLINE POSTERS (JAN 2023)

(a) Definition. As used in this clause-

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

(b) Display of hotline poster(s).

(1)(i) The Contractor shall display prominently the DoD fraud, waste, and abuse hotline poster prepared by the DoD Office of the Inspector General, in effect at time of contract award, in common work areas within business segments performing work under Department of Defense (DoD) contracts.

(ii) For contracts performed outside the United States, when security concerns can be appropriately demonstrated, the contracting officer may provide the contractor the option to publicize the program to contractor personnel in a manner other than public display of the poster, such as private employee written instructions and briefings.

(2) If the contract is funded, in whole or in part, by Department of Homeland Security (DHS) disaster relief funds and the work is to be performed in the United States, the DHS fraud hotline poster shall be displayed in addition to the DoD hotline poster. If a display of a DHS fraud hotline poster is required, the Contractor may obtain such poster from-

(i) DHS Office of Inspector General/MAIL STOP 0305, Attn: Office of Investigations - Hotline, 245 Murray Lane SW, Washington, DC 20528-0305; or

(ii) Via the internet at https://www.oig.dhs.gov/assets/Hotline/DHS_OIG_Hotline-optimized.jpg.

(c)(1) The DoD hotline poster may be obtained from: Defense Hotline, The Pentagon, Washington, D.C. 20301-1900, or is also available via the internet at https://www.dodig.mil /Resources/Posters-and-Brochures/.

(2) If a significant portion of the employee workforce does not speak English, then the poster is to be displayed in the foreign languages that a significant portion of the employees speak.

(3) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the required poster at the website.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed the threshold specified in Defense Federal Acquisition Regulation Supplement 203.1004(b)(2)(ii) on the date of subcontract award, except

when the subcontract is for the acquisition of a commercial product or commercial service.

(End of clause)

252.204-7003	Control of Government Personnel Work Product.	1992-04

CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the Contractor.

(End of clause)

252.204-7004	Antiterrorism Awareness Training for Contractors.	2023-01

ANTITERRORISM AWARENESS TRAINING FOR CONTRACTORS (JAN 2023)

(a) Definition. As used in this clause-

"Military installation" means a base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a military department or, in the case of an activity in a foreign country, under the operational control of the Secretary of a military department or the Secretary of Defense (see 10 U.S.C. 2801(c)(4)).

(b) Training. Contractor personnel who require routine physical access to a Federally-controlled

facility or military installation shall complete Level I antiterrorism awareness training within 30 days of requiring access and annually thereafter. In accordance with Department of Defense Instruction O-2000.16 Volume 1, DoD Antiterrorism (AT) Program Implementation: DoD AT Standards, Level I antiterrorism awareness training shall be completed-

(1) Through a DoD-sponsored and certified computer or web-based distance learning instruction for Level I antiterrorism awareness; or

(2) Under the instruction of a Level I antiterrorism awareness instructor.

(c) Additional information. Information and guidance pertaining to DoD antiterrorism awareness training is available at https://jko.jten.mil/ or as otherwise identified in the performance work statement.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts, including subcontracts for commercial products and commercial services, when subcontractor performance requires routine physical access to a Federally-controlled facility or military installation.

(End of clause)

252.204-7009	Limitations on the Use or Disclosure of Third-Party Contractor Reported Cyber Incident Information.	2023-01

LIMITATIONS ON THE USE OR DISCLOSURE OF THIRD-PARTY CONTRACTOR REPORTED CYBER INCIDENT INFORMATION (JAN 2023)

(a) Definitions. As used in this clause-

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

media may have occurred.

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

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

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

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

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

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

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

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

(b) Restrictions. The Contractor agrees that the following conditions apply to any information it receives or creates in the performance of this contract that is information obtained from a third-party's reporting of a cyber incident pursuant to DFARS clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting (or derived from such information obtained under that clause):

(1) The Contractor shall access and use the information only for the purpose of furnishing advice or technical assistance directly to the Government in support of the Government's activities related to clause 252.204-7012, and shall not be used for any other purpose.

(2) The Contractor shall protect the information against unauthorized release or disclosure.

(3) The Contractor shall ensure that its employees are subject to use and non-disclosure obligations consistent with this clause prior to the employees being provided access to or use of the information.

(4) The third-party contractor that reported the cyber incident is a third-party beneficiary of the non-disclosure agreement between the Government and Contractor, as required by paragraph (b)(3) of this clause.

(5) A breach of these obligations or restrictions may subject the Contractor to-

(i) Criminal, civil, administrative, and contractual actions in law and equity for penalties, damages, and other appropriate remedies by the United States; and

(ii) Civil actions for damages and other appropriate remedies by the third party that reported the cyber incident, as a third party beneficiary of this clause.

(c) Subcontracts. The Contractor shall include this clause, including this paragraph (c), in subcontracts, or similar contractual instruments, for services that include support for the Government's activities related to safeguarding covered defense information and cyber incident reporting, including subcontracts for commercial products and commercial services, without alteration, except to identify the parties.

(End of clause)

252.204-7018	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services.	2023-01

PROHIBITION ON THE ACQUISITION OF COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES (JAN 2023)

(a) Definitions. As used in this clause-

"Covered defense telecommunications equipment or services" means-

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

(2) Telecommunications services provided by such entities or using such equipment; or

(3) Telecommunications equipment or services produced or provided by an entity that the Secretary of Defense reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

"Covered foreign country" means-

(1) The People's Republic of China; or

(2) The Russian Federation.

"Covered missions" means-

(1) The nuclear deterrence mission of DoD, including with respect to nuclear command, control, and communications, integrated tactical warning and attack assessment, and continuity of Government; or

(2) The homeland defense mission of DoD, including with respect to ballistic missile defense.

"Critical technology" means-

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

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

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

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

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

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

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

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

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

(b) Prohibition. In accordance with section 1656 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91), the contractor shall not provide to the Government any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless the covered defense telecommunication equipment or services are covered by a waiver described in Defense Federal Acquisition Regulation Supplement 204.2104.

(c) Procedures. The Contractor shall review the list of excluded parties in the System for Award

Management (SAM) at https://www.sam.gov for entities that are excluded when providing any equipment, system, or service, to carry out covered missions, that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless a waiver is granted.

(d) Reporting.

(1) In the event the Contractor identifies covered defense telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, the Contractor shall report at https://dibnet.dod.mil the information in paragraph (d)(2) of this clause.

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

(i) Within 3 business days from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 30 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered defense telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

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

(End of clause)

252.204-7020	NIST SP 800-171 DoD Assessment Requirements.	2023-11

NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (NOV 2023)

(a) Definitions.

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

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

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

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

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

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

(1) Consists of-

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

(ii) A thorough document review;

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

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

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

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

(1) Consists of-

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

(ii) A thorough document review; and

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

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

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

(c) Requirements. The Contractor shall provide access to its facilities, systems, and personnel necessary for the Government to conduct a Medium or High NIST SP 800-171 DoD Assessment, as described in NIST SP 800-171 DoD Assessment Methodology at https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf, if necessary.

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

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

(i) The email shall include the following information:

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

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

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

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

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

(D) Date the assessment was completed

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

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

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

System Security Plan CAGE Codes supported by this plan Brief description of the plan architecture Date of assessment Total Score Date score of 110 will achieved

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

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

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

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

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

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

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

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

(e) Rebuttals.

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

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

(f) Accessibility.

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

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

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

(g) Subcontracts.

(1) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services (excluding commercially available off-the-shelf items).

(2) The Contractor shall not award a subcontract or other contractual instrument, that is subject to the implementation of NIST SP 800-171 security requirements, in accordance with DFARS clause 252.204-7012 of this contract, unless the subcontractor has completed, within the last 3 years, at least a Basic NIST SP 800-171 DoD Assessment, as described in https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf, for all covered contractor information systems relevant to its offer that are not part of an information technology service or system operated on behalf of the Government.

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

(End of clause)

252.204-7021	Contractor Compliance with the Cybersecurity Maturity Model Certification Level Requirements.	2025-11

CONTRACTOR COMPLIANCE WITH THE CYBERSECURITY MATURITY MODEL CERTIFICATION LEVEL REQUIREMENTS (NOV 2025)

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

"Controlled unclassified information" means information the Government creates or possesses, or information an entity creates or possesses for or on behalf of the Government, that a law, regulation, or Governmentwide policy requires or permits an agency to handle using safeguarding or dissemination controls (32 CFR 2002.4(h)).

"Current" means-

(1) With regard to Conditional Cybersecurity Maturity Model Certification (CMMC) Status-

(i) Not older than 180 days for Conditional Level 2 (Self) assessments and Conditional Level 2 (certified third-party assessment organization (C3PAO)) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Conditional CMMC Status date (see 32 CFR 170.16 and 170.17); and

(B) A corresponding affirmation of continuous compliance by an affirming official (see 32 CFR 170.4); and

(ii) Not older than 180 days for Conditional Level 3 (Defense Industrial Base Cybersecurity Assessment Center (DIBCAC)) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Conditional CMMC Status date (see 32 CFR 170.18); and

(B) A corresponding affirmation of continuous compliance by an affirming official;

(2) With regard to Final CMMC Status-

(i) Not older than 1 year for Final Level 1 (Self), with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Final CMMC Status date (see 32 CFR 170.15); and

(B) A corresponding affirmation of continuous compliance, not older than 1 year, by an affirming official;

(ii) Not older than 3 years for Final Level 2 (Self) assessments and Final Level 2 (C3PAO) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Final CMMC Status date (see 32 CFR 170.16 and 170.17); and

(B) A corresponding affirmation of continuous compliance, not older than 1 year, by an affirming official; and

(iii) Not older than 3 years for Final Level 3 (DIBCAC) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Final CMMC Status date (see 32 CFR 170.18); and

(B) A corresponding affirmation of continuous compliance, not older than 1 year, by an affirming official; and

(3) With regard to affirmation of continuous compliance (32 CFR 170.22), not older than 1 year with no changes in compliance with the requirements at 32 CFR part 170.

"Cybersecurity Maturity Model Certification (CMMC) status" means the result of meeting or exceeding the minimum required score for the corresponding assessment. The potential statuses are as follows:

(1) Final Level 1 (Self).

(2) Conditional Level 2 (Self).

(3) Final Level 2 (Self).

(4) Conditional Level 2 (C3PAO).

(5) Final Level 2 (C3PAO).

(6) Conditional Level 3 (DIBCAC).

(7) Final Level 3 (DIBCAC).

"Cybersecurity Maturity Model Certification unique identifier (CMMC UID)" means 10 alpha-numeric characters assigned to each CMMC assessment and reflected in the Supplier Performance Risk System (SPRS) for each contractor information system.

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

"Plan of action and milestones" means a document that identifies tasks to be accomplished. It details resources required to accomplish the elements of the plan, any milestones in meeting the tasks, and scheduled completion dates for the milestones, as defined in National Institute of Standards and Technology Special Publication 800-115 (32 CFR 170.21).

(b) *Framework*. The Cybersecurity Maturity Model Certification (CMMC) is a framework for assessing a contractor's compliance with applicable information security protections (see 32 CFR part 170).

(c) *Duplication*. The CMMC assessments will not duplicate efforts from any other comparable DoD assessment, except for rare circumstances when a reassessment may be necessary, for example, when there are indications of issues with cybersecurity and/or compliance with CMMC requirements.

(d) *Requirements*. The Contractor shall-

(1)(i) Have and maintain for the duration of the contract a current CMMC status at the following CMMC level, or higher: ***CMMC Level 1 (Self)*** for all information systems used in performance of the contract, task order, or delivery order that process, store, or transmit FCI or CUI; and

(ii) Consult 32 CFR 170.23 related to the flowdown of the CMMC requirements, and flow down the correct CMMC level to subcontracts and other contractual instruments;

(2) Only process, store, or transmit FCI or CUI on contractor information systems that have a CMMC status at the CMMC level required in paragraph (d)(1) of this clause, or higher;

(3) Complete on an annual basis, and maintain as current, an affirmation, by the affirming official (see 32 CFR 170.4), of continuous compliance with the requirements associated with the CMMC level required in paragraph (d)(1) of this clause in the Supplier Performance Risk System (SPRS) (*https://piee.eb.mil*) for each CMMC UID applicable to each of the contractor information systems that process, store, or transmit FCI or CUI and that are used in performance of the contract;

(4) Ensure all subcontractors and suppliers complete prior to subcontract award, and maintain on an annual basis, an affirmation, by the affirming official (see 32 CFR 170.4), of continuous compliance with the requirements associated with the CMMC level required for the subcontract or other contractual instrument for each of the subcontractor information systems that process, store, or transmit FCI or CUI and that are used in performance of the subcontract; and

(5) If the Contractor has a CMMC Status of Conditional, successfully close out a valid plan of action and milestones (32 CFR 170.21) to achieve a CMMC Status of Final.

(e) *Reporting*. The Contractor shall-

(1) Submit to the Contracting Officer-

(i) The CMMC UID(s) issued by SPRS for contractor information systems that will process, store, or transmit FCI or CUI during performance of the contract; and

(ii) Any changes in the CMMC UIDs generated in SPRS throughout the life of the contract, task order, or delivery order, if applicable;

(2) Enter into SPRS the results of a current self-assessment for each CMMC UID, not covered by a C3PAO assessment or DIBCAC assessment, applicable to each of the contractor information systems that process, store, or transmit FCI or CUI and that are used in performance of the contract; and

(3) Complete in SPRS on an annual basis and maintain as current an affirmation of continuous compliance by the affirming official (see 32 CFR 170.4) for each self-assessment, C3PAO assessment, or DIBCAC assessment required under the contract in SPRS.

(f) *Subcontracts*. The Contractor shall-

(1) Insert the substance of this clause, including this paragraph (f) and excluding paragraph (e)(1), in subcontracts and other contractual instruments, including those for the acquisition of commercial products or commercial services, excluding commercially available off-the-shelf items, if the subcontract or other contractual instrument will contain a requirement to process, store, or transmit FCI or CUI; and

(2) Prior to awarding a subcontract or other contractual instrument, ensure that the subcontractor has a current CMMC certificate or current CMMC status at the CMMC level that is appropriate for the information that is being flowed down to the subcontractor based on the requirements at 32 CFR 170.23.

(End of clause)

252.205-7000	Provision of Information to Cooperative Agreement Holders.	2024-10

PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (OCT 2024)

(a) Definition. As used in this clause-

"Cooperative agreement holder" means a State or local government; a nonprofit organization; a tribal organization (as defined in section 4(c) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304(l)); or an economic enterprise (as defined in section 3(e) of the Indian Financing Act of 1974 (25 U.S.C. 1452(e))) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Under Secretary of Defense for Acquisition and Sustainment to furnish procurement technical assistance to business entities (as defined in 10 U.S.C. 4951).

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

252.209-7004	Subcontracting with Firms that are Owned or Controlled by the Government of a Country that is a State Sponsor of Terrorism.	2019-05

SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A COUNTRY THAT IS A STATE SPONSOR OF TERRORISM (MAY 2019)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of the threshold specified in Federal Acquisition Regulation 9.405-2(b) on the date of subcontract award with a firm, or a subsidiary of a firm, that is identified in the Exclusions section of the System for Award Management (SAM Exclusions) as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a country that is a state sponsor of terrorism.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, in SAM Exclusions, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a country that is a state sponsor of terrorism. The notice must include the name of the proposed subcontractor and the compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion in SAM Exclusions.

(End of clause)

252.215-7002	Cost Estimating System	2025-01

Requirements.

COST ESTIMATING SYSTEM REQUIREMENTS (JAN 2025)

(a) Definitions.

"Acceptable estimating system" means an estimating system that complies with the system criteria in paragraph (d) of this clause, and provides for a system that-

(1) Is maintained, reliable, and consistently applied;

(2) Produces verifiable, supportable, documented, and timely cost estimates that are an acceptable basis for negotiation of fair and reasonable prices;

(3) Is consistent with and integrated with the Contractor's related management systems; and

(4) Is subject to applicable financial control systems.

"Estimating system" means the Contractor's policies, procedures, and practices for budgeting and planning controls, and generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards. Estimating system includes the Contractor's-

(1) Organizational structure;

(2) Established lines of authority, duties, and responsibilities;

(3) Internal controls and managerial reviews;

(4) Flow of work, coordination, and communication; and

(5) Budgeting, planning, estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.

"Material weakness" means a deficiency or combination of deficiencies in the internal control over information in contractor business systems, such that there is a reasonable possibility that

a material misstatement of such information will not be prevented, or detected and corrected, on a timely basis. A reasonable possibility exists when the likelihood of an event occurring is-

(1) Probable; or

(2) More than remote but less than likely (section 806 of Pub. L. 116-283).

(b) General. The Contractor shall establish, maintain, and comply with an acceptable estimating system.

(c) Applicability. Paragraphs (d) and (e) of this clause apply if the Contractor is a large business and either-

(1) In its fiscal year preceding award of this contract, received Department of Defense (DoD) prime contracts or subcontracts, totaling $50 million or more for which certified cost or pricing data were required; or

(2) In its fiscal year preceding award of this contract-

(i) Received DoD prime contracts or subcontracts totaling $10 million or more (but less than $50 million) for which certified cost or pricing data were required; and

(ii) Was notified, in writing, by the Contracting Officer that paragraphs (d) and (e) of this clause apply.

(d) System requirements.

(1) The Contractor shall disclose its estimating system to the Administrative Contracting Officer (ACO), in writing. If the Contractor wishes the Government to protect the data and information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission.

(2) An estimating system disclosure is acceptable when the Contractor has provided the ACO with documentation that-

(i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and

(ii) Provides sufficient detail for the Government to reasonably make an informed judgment

regarding the acceptability of the Contractor's estimating practices.

(3) The Contractor shall-

(i) Comply with its disclosed estimating system; and

(ii) Disclose significant changes to the cost estimating system to the ACO on a timely basis.

(4) The Contractor's estimating system shall provide for the use of appropriate source data, utilize sound estimating techniques and good judgment, maintain a consistent approach, and adhere to established policies and procedures. An acceptable estimating system shall accomplish the following functions:

(i) Establish clear responsibility for preparation, review, and approval of cost estimates and budgets.

(ii) Provide a written description of the organization and duties of the personnel responsible for preparing, reviewing, and approving cost estimates and budgets.

(iii) Ensure that relevant personnel have sufficient training, experience, and guidance to perform estimating and budgeting tasks in accordance with the Contractor's established procedures.

(iv) Identify and document the sources of data and the estimating methods and rationale used in developing cost estimates and budgets.

(v) Provide for adequate supervision throughout the estimating and budgeting process.

(vi) Provide for consistent application of estimating and budgeting techniques.

(vii) Provide for detection and timely correction of errors.

(viii) Protect against cost duplication and omissions.

(ix) Provide for the use of historical experience, including historical vendor pricing data, where appropriate.

(x) Require use of appropriate analytical methods.

(xi) Integrate data and information available from other management systems.

(xii) Require management review, including verification of compliance with the company's estimating and budgeting policies, procedures, and practices.

(xiii) Provide for internal review of, and accountability for, the acceptability of the estimating system, including the budgetary data supporting indirect cost estimates and comparisons of projected results to actual results, and an analysis of any differences.

(xiv) Provide procedures to update cost estimates and notify the Contracting Officer in a timely manner throughout the negotiation process.

(xv) Provide procedures that ensure subcontract prices are reasonable based on a documented review and analysis provided with the prime proposal, when practicable.

(xvi) Provide estimating and budgeting practices that consistently generate sound proposals that are compliant with the provisions of the solicitation and are adequate to serve as a basis to reach a fair and reasonable price.

(xvii) Have an adequate system description, including policies, procedures, and estimating and budgeting practices, that comply with the Federal Acquisition Regulation and Defense Federal Acquisition Regulation Supplement.

(e) Material weaknesses.

(1) The Contracting Officer will provide an initial determination to the Contractor, in writing, of any material weaknesses. The initial determination will describe the underlying deficiency in sufficient detail to allow the Contractor to understand the weakness or deficiency.

(2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies material weaknesses in the Contractor's estimating system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing.

(3) The Contracting Officer will evaluate the Contractor's response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning-

(i) Remaining material weaknesses;

(ii) The adequacy of any proposed or completed corrective action; and

(iii) System disapproval, if the Contracting Officer determines that one or more material weaknesses remain.

(f) If the Contractor receives the Contracting Officer's final determination of material weaknesses, the Contractor shall, within 45 days of receipt of the final determination, either correct the material weaknesses or submit an acceptable corrective action plan showing milestones and actions to eliminate the material weaknesses.

(g) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's estimating system, and the contract includes the clause at 252.242-7005, Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

(End of clause)

252.222-7006	Restrictions on the Use of Mandatory Arbitration Agreements.	2023-01

RESTRICTIONS ON THE USE OF MANDATORY ARBITRATION AGREEMENTS (JAN 2023)

(a) Definitions. As used in this clause-

"Covered subcontractor" means any entity that has a subcontract valued in excess of $1 million, except a subcontract for the acquisition of commercial products or commercial services, including commercially available off-the-shelf items.

"Subcontract" means any contract, as defined in Federal Acquisition Regulation subpart 2.1, to furnish supplies or services for performance of this contract or a higher-tier subcontract thereunder.

(b) The Contractor-

(1) Agrees not to-

(i) Enter into any agreement with any of its employees or independent contractors that requires, as a condition of employment, that the employee or independent contractor agree to resolve through arbitration-

(A) Any claim under title VII of the Civil Rights Act of 1964; or

(B) Any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; or

(ii) Take any action to enforce any provision of an existing agreement with an employee or independent contractor that mandates that the employee or independent contractor resolve through arbitration-

(A) Any claim under title VII of the Civil Rights Act of 1964; or

(B) Any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; and

(2) Certifies, by signature of the contract, that it requires each covered subcontractor to agree not to enter into, and not to take any action to enforce, any provision of any existing agreements, as described in paragraph (b)(1) of this clause, with respect to any employee or independent contractor performing work related to such subcontract.

(c) The prohibitions of this clause do not apply with respect to a contractor's or subcontractor's agreements with employees or independent contractors that may not be enforced in a court of the United States.

(d) The Secretary of Defense may waive the applicability of the restrictions of paragraph (b) of this clause in accordance with Defense Federal Acquisition Regulation Supplement 222.7404.

(End of clause)

252.223-7001 Hazard Warning Labels. 1991-12

HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labelling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labelled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")	ACT
____	____
____	____
____	____

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror

shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7006	Prohibition on Storage, Treatment, and Disposal of Toxic or Hazardous Materials.	2014-09

PROHIBITION ON STORAGE, TREATMENT, AND DISPOSAL OF TOXIC OR HAZARDOUS MATERIALS-BASIC (SEP 2014)

(a) Definitions. As used in this clause-

"Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

"Toxic or hazardous materials" means-

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR Part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing, treating, or disposing of toxic or hazardous materials not owned by DoD on a DoD installation, except to the

extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense. A charge may be assessed for any storage or disposal authorized under any of the exceptions to 10 U.S.C. 2692. If a charge is to be assessed, then such assessment shall be identified elsewhere in the contract with payment to the Government on a reimbursable cost basis.

(c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that require, may require, or permit a subcontractor access to a DoD installation, at any subcontract tier.

(End of clause)

252.223-7008	Prohibition of Hexavalent Chromium.	2023-01

PROHIBITION OF HEXAVALENT CHROMIUM (JAN 2023)

(a) Definitions. As used in this clause-

"Homogeneous material" means a material that cannot be mechanically disjointed into different materials and is of uniform composition throughout.

(1) Examples of homogeneous materials include individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins, and surface coatings.

(2) Homogeneous material does not include conversion coatings that chemically modify the substrate.

"Mechanically disjointed" means that the materials can, in principle, be separated by mechanical actions such as unscrewing, cutting, crushing, grinding, and abrasive processes.

(b) Prohibition.

(1) Unless otherwise specified by the Contracting Officer, the Contractor shall not provide any

deliverable or construction material under this contract that-

(i) Contains hexavalent chromium in a concentration greater than 0.1 percent by weight in any homogenous material; or

(ii) Requires the removal or reapplication of hexavalent chromium materials during subsequent sustainment phases of the deliverable or construction material.

(2) This prohibition does not apply to hexavalent chromium produced as a by-product of manufacturing processes.

(c) If authorization for incorporation of hexavalent chromium in a deliverable or construction material is required, the Contractor shall submit a request to the Contracting Officer.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for commercial products or commercial services, that are for supplies, maintenance and repair services, or construction materials.

(End of clause)

252.223-7998	Prohibition on Procurement of Certain Items Containing Perfluorooctane Sulfonate or Perfluorooctanoic Acid. (Deviation 2022-O0010)	2023-04	Deviation 2022-O0010	2023-04

PROHIBITION ON PROCUREMENT OF CERTAIN ITEMS CONTAINING PERFLUOROOCTANE SULFONATE OR PERFLUOROOCTANOIC ACID (DEVIATION 2022-O0010) (APR 2023)

(a) Effective April 1, 2023, in accordance with section 333 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116-283), the Department of Defense may not procure any covered items that contain perfluorooctane sulfonate (PFOS) or

perfluorooctanoic acid (PFOA).

(b) A covered item means the following:

(1) Nonstick cookware or cooking utensils for use in galleys or dining facilities.

(2) Upholstered furniture, carpets, and rugs that have been treated with stain-resistant coatings.

(c) The Contractor shall not provide any covered items containing PFOS or PFOA in performance of this contract, task order, delivery order, or blanket purchase agreement order.

(d) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts for any covered item, including subcontracts for commercial products (including commercially available off-the-shelf items) and commercial services.

(End of clause)

252.225-7012	Preference for Certain Domestic Commodities.	2022-04

PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (APR 2022)

(a) Definitions. As used in this clause-

"Component" means any item supplied to the Government as part of an end product or of another component.

"End product" means supplies delivered under a line item of this contract.

"Qualifying country" means a country with a reciprocal defense procurement memorandum of understanding or international agreement with the United States in which both countries agree to remove barriers to purchases of supplies produced in the other country or services performed by sources of the other country, and the memorandum or agreement complies, where applicable, with the requirements of section 36 of the Arms Export Control Act (22 U.S.C. 2776)

and with 10 U.S.C. 2457. Accordingly, the following are qualifying countries:

Australia

Austria

Belgium

Canada

Czech Republic

Denmark

Egypt

Estonia

Finland

France

Germany

Greece

Israel

Italy

Japan

Latvia

Lithuania

Luxembourg

Netherlands

Norway

Poland

Portugal

Slovenia

Spain

Sweden

Switzerland

Turkey

United Kingdom of Great Britain and Northern Ireland.

"Structural component of a tent"-

(1) Means a component that contributes to the form and stability of the tent (e.g., poles, frames, flooring, guy ropes, pegs); and

(2) Does not include equipment such as heating, cooling, or lighting.

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

"U.S.-flag vessel" means a vessel of the United States or belonging to the United States , including any vessel registered or having national status under the laws of the United States .

(b) The Contractor shall deliver under this contract only such of the following items, either as end products or components, that have been grown, reprocessed, reused, or produced in the United States :

(1) Food.

(2) Clothing and the materials and components thereof, other than sensors, electronics, or other items added to, and not normally associated with, clothing and the materials components

thereof. Clothing includes items such as outerwear, headwear, underwear, nightwear. footwear, hosiery, handwear, belts, badges, and insignia.

(3)(i) Tents and structural components of tents;

(ii) Tarpaulins; or

(iii) Covers.

(4) Cotton and other natural fiber products.

(5) Woven silk or woven silk blends.

(6) Spun silk yarn for cartridge cloth.

(7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics.

(8) Canvas products.

(9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles).

(10) Any item of individual equipment (Federal Supply Class 8465) manufactured from or containing fibers, yarns, fabrics, or materials listed in this paragraph (b).

(c) This clause does not apply-

(1) To items listed in section 25.104(a) of the Federal Acquisition Regulation, or other items for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;

(2) To incidental amounts of cotton, other natural fibers, or wool incorporated in an end product, for which the estimated value of the cotton, other natural fibers, or wool-

(i) Is not more than 10 percent of the total price of the end product; and

(ii) Does not exceed the threshold at Defense Federal Acquisition Regulation Supplement 225.7002-2(a);

(3) To waste and byproducts of cotton or wool fiber for use in the production of propellants and explosives;

(4) To foods, other than fish, shellfish, or seafood, that have been manufactured or processed in the United States , regardless of where the foods (and any component if applicable) were grown or produced. Fish, shellfish, or seafood manufactured or processed in the United States and fish, shellfish, or seafood contained in foods manufactured or processed in the United States shall be provided in accordance with paragraph (d) of this clause;

(5) To chemical warfare protective clothing produced in a qualifying country; or

(6) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if-

(i) The fabric is to be used as a component of an end product that is not a textile product. Examples of textile products, made in whole or in part of fabric, include-

(A) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);

(B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs /apparel/findings/tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;

(C) Upholstered seats (whether for household, office, or other use); and

(D) Parachutes (Federal Supply Class 1670); or

(ii) The fibers and yarns are para-aramid fibers and continuous filament para-aramid yarns manufactured in a qualifying country.

(d)(1) Fish, shellfish, and seafood delivered under this contract, or contained in foods delivered under this contract-

(i) Shall be taken from the sea by U.S.-flag vessels; or

(ii) If not taken from the sea, shall be obtained from fishing within the United States ; and

(2) Any processing or manufacturing of the fish, shellfish, or seafood shall be performed on a U. S.-flag vessel or in the United States .

(End of clause)

252.225-7013 Duty-Free Entry. 2025-08

DUTY-FREE ENTRY (AUG 2025)

(a) Definitions. As used in this clause-

"Component," means any item supplied to the Government as part of an end product or of another component.

"Customs territory of the United States" means the 50 States, the District of Columbia, and Puerto Rico.

"Eligible product" means-

(1) "Designated country end product," as defined in the Trade Agreements (either basic or alternate) clause of this contract;

(2) "Free Trade Agreement country end product," other than a "Bahraini end product," a "Moroccan end product," a Panamanian end product," or a "Peruvian end product," as defined in the Buy American-Free Trade Agreements-Balance of Payments Program (either basic or alternate II) clause of this contract, basic or its Alternate II; or

(3) "Free Trade Agreement country end product" other than a "Bahraini end product," "Korean end product," "Moroccan end product," "Panamanian end product," or "Peruvian end product," as defined in of the Buy American-Free Trade Agreements-Balance of Payments Program (either alternate IV or alternate V) clause of this contract.

"Qualifying country" and "qualifying country end product" have the meanings given in the Trade Agreements clause, the Buy American and Balance of Payments Program clause, or the Buy

American-Free Trade Agreements-Balance of Payments Program clause of this contract, basic or alternate.

(b) Except as provided in paragraph (i) of this clause, or unless supplies were imported into the customs territory of the United States before the date of this contract or the applicable subcontract, the price of this contract shall not include any amount for duty on-

(1) End items that are eligible products or qualifying country end products;

(2) Components (including, without limitation, raw materials and intermediate assemblies) produced or made in qualifying countries, that are to be incorporated in U.S.- made end products to be delivered under this contract; or

(3) Other supplies for which the Contractor estimates that duty will exceed $300 per shipment into the customs territory of the United States .

(c) The Contractor shall-

(1) Claim duty-free entry only for supplies that the Contractor intends to deliver to the Government under this contract, either as end items or components of end items; and

(2) Pay duty on supplies, or any portion thereof, that are diverted to nongovernmental use, other than-

(i) Scrap or salvage; or

(ii) Competitive sale made, directed, or authorized by the Contracting Officer.

(d) Except as the Contractor may otherwise agree, the Government will execute duty-free entry certificates and will afford such assistance as appropriate to obtain the duty-free entry of supplies-

(1) For which no duty is included in the contract price in accordance with paragraph (b) of this clause; and

(2) For which shipping documents bear the notation specified in paragraph (e) of this clause.

(e) For foreign supplies for which the Government will issue duty-free entry certificates in accordance with this clause, shipping documents submitted to Customs shall-

(1) Consign the shipments to the appropriate-

(i) Military department in care of the Contractor, including the Contractor's delivery address; or

(ii) Military installation; and

(2) Include the following information:

(i) Prime contract number and, if applicable, delivery order number.

(ii) Number of the subcontract for foreign supplies, if applicable.

(iii) Identification of the carrier.

(iv)(A) For direct shipments to a U.S. military installation, the notation: "UNITED STATES GOVERNMENT, DEPARTMENT OF DEFENSE Duty-Free Entry to be claimed pursuant to Section XXII, Chapter 98, Subchapter VIII, Item 9808.00.30 of the Harmonized Tariff Schedule of the United States. Upon arrival of shipment at the appropriate port of entry, District Director of Customs, please release shipment under 19 CFR Part 142 and notify Defense Contract Management Agency (DCMA) St. Louis, St. Louis, MO, ATTN: Duty Free Entry Team, 1222 Spruce Street, Room 9.300, St. Louis, MO 63103-2812, for execution of Customs Form 7501, 7501A, or 7506 and any required duty-free entry certificates."

(B) If the shipment will be consigned to other than a military installation, e.g., a domestic contractor's plant, the shipping document notation shall be altered to include the name and address of the contractor, agent, or broker who will notify DCMA St. Louis, Duty Free Entry Team, for execution of the duty-free entry certificate. (If the shipment will be consigned to a contractor's plant and no duty-free entry certificate is required due to a trade agreement, the Contractor shall claim duty-free entry under the applicable trade agreement and shall comply with the U.S. Customs Service requirements. No notification to DCMA St. Louis, Duty Free Entry Team, is required.)

(v) Gross weight in pounds (if freight is based on space tonnage, state cubic feet in addition to gross shipping weight).

(vi) Estimated value in U.S. dollars.

(vii) Activity address number of the contract administration office administering the prime

contract, e.g., for DCMA Dayton, S3605A.

(f) Preparation of customs forms.

(1)(i) Except for shipments consigned to a military installation, the Contractor shall-

(A) Prepare any customs forms required for the entry of foreign supplies into the customs territory of the United States in connection with this contract; and

(B) Submit the completed customs forms to the District Director of Customs, with a copy to DCMA St. Louis , Duty Free Entry Team for execution of any required duty-free entry certificates.

(ii) Shipments consigned directly to a military installation will be released in accordance with sections 10.101 and 10.102 of the U.S. Customs regulations.

(2) For shipments containing both supplies that are to be accorded duty-free entry and supplies that are not, the Contractor shall identify on the customs forms those items that are eligible for duty-free entry.

(g) The Contractor shall-

(1) Prepare (if the Contractor is a foreign supplier), or shall instruct the foreign supplier to prepare, a sufficient number of copies of the bill of lading (or other shipping document) so that at least two of the copies accompanying the shipment will be available for use by the District Director of Customs at the port of entry;

(2) Consign the shipment as specified in paragraph (e) of this clause; and

(3) Mark on the exterior of all packages--

(i) "UNITED STATES GOVERNMENT, DEPARTMENT OF DEFENSE"; and

(ii) The activity address number of the contract administration office administering the prime contract.

(h) The Contractor shall notify the Administrative Contracting Officer (ACO) in writing of any purchase of eligible products or qualifying country supplies to be accorded duty-free entry, that are to be imported into the customs territory of the United States for delivery to the Government

or for incorporation in end items to be delivered to the Government. The Contractor shall furnish the notice to the ACO immediately upon award to the supplier and shall include in the notice-

(1) The Contractor's name, address, and Commercial and Government Entity (CAGE) code;

(2) Prime contract number and, if applicable, delivery order number;

(3) Total dollar value of the prime contract or delivery order;

(4) Date of the last scheduled delivery under the prime contract or delivery order;

(5) Foreign supplier's name and address;

(6) Number of the subcontract for foreign supplies;

(7) Total dollar value of the subcontract for foreign supplies;

(8) Date of the last scheduled delivery under the subcontract for foreign supplies;

(9) List of items purchased;

(10) An agreement that the Contractor will pay duty on supplies, or any portion thereof, that are diverted to nongovernmental use other than-

(i) Scrap or salvage; or

(ii) Competitive sale made, directed, or authorized by the Contracting Officer;

(11) Country of origin; and

(12) Scheduled delivery date(s).

(i) This clause does not apply to purchases of eligible products or qualifying country supplies in connection with this contract if-

(1) The supplies are identical in nature to supplies purchased by the Contractor or any subcontractor in connection with its commercial business; and

(2) It is not economical or feasible to account for such supplies so as to ensure that the amount

of the supplies for which duty-free entry is claimed does not exceed the amount purchased in connection with this contract.

(j) The Contractor shall-

(1) Insert the substance of this clause, including this paragraph (j), in all subcontracts for-

(i) Qualifying country components; or

(ii) Nonqualifying country components for which the Contractor estimates that duty will exceed $200 per unit;

(2) Require subcontractors to include the number of this contract on all shipping documents submitted to Customs for supplies for which duty-free entry is claimed pursuant to this clause; and

(3) Include in applicable subcontracts-

(i) The name and address of the ACO for this contract;

(ii) The name, address, and activity address number of the contract administration office specified in this contract; and

(iii) The information required by paragraphs (h)(1), (2), and (3) of this clause.

(End of clause)

252.225-7048 Export-Controlled Items. 2013-06

EXPORT CONTROLLED ITEMS (JUNE 2013)

(a) Definition. "Export-controlled items," as used in this clause, means items subject to the Export Administration Regulations (EAR) (15 CFR Parts 730-774) or the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130). The term includes:

(1) "Defense items," defined in the Arms Export Control Act, 22 U.S.C. 2778(j)(4)(A), as defense articles, defense services, and related technical data, and further defined in the ITAR, 22 CFR Part 120.

(2) "Items," defined in the EAR as "commodities", "software", and "technology," terms that are also defined in the EAR, 15 CFR 772.1.

(b) The Contractor shall comply with all applicable laws and regulations regarding export-controlled items, including, but not limited to, the requirement for contractors to register with the Department of State in accordance with the ITAR. The Contractor shall consult with the Department of State regarding any questions relating to compliance with the ITAR and shall consult with the Department of Commerce regarding any questions relating to compliance with the EAR.

(c) The Contractor's responsibility to comply with all applicable laws and regulations regarding export-controlled items exists independent of, and is not established or limited by, the information provided by this clause.

(d) Nothing in the terms of this contract adds, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive orders, and regulations, including but not limited to-

(1) The Export Administration Act of 1979, as amended (50 U.S.C. App. 2401, et seq.);

(2) The Arms Export Control Act (22 U.S.C. 2751, et seq.);

(3) The International Emergency Economic Powers Act (50 U.S.C. 1701, et seq.);

(4) The Export Administration Regulations (15 CFR Parts 730-774);

(5) The International Traffic in Arms Regulations (22 CFR Parts 120-130); and

(6) Executive Order 13222, as extended.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts.

(End of clause)

252.225-7056	Prohibition Regarding Business Operations with the Maduro Regime.	2023-01

PROHIBITION REGARDING BUSINESS OPERATIONS WITH THE MADURO REGIME (JAN 2023)

(a) Definitions. As used in this clause-

"Agency or instrumentality of the government of Venezuela" means an agency or instrumentality of a foreign state as defined in 28 U.S.C. 1603(b), with each reference in section 1603(b) to a foreign state deemed to be a reference to Venezuela.

"Business operations" means engaging in commerce in any form, including acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other apparatus of business or commerce.

"Government of Venezuela" means the government of any political subdivision of Venezuela, and any agency or instrumentality of the government of Venezuela.

"Person" means-

(1) A natural person, corporation, company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group;

(2) Any governmental entity or instrumentality of a government, including a multilateral development institution (as defined in section 1701(c)(3) of the International Financial Institutions Act (22 U.S.C. 262r(c)(3)); and

(3) Any successor, subunit, parent entity, or subsidiary of, or any entity under common ownership or control with, any entity described in paragraph (1) or (2) of this definition.

(b) Prohibition. In accordance with section 890 of the National Defense Authorization Act for Fiscal Year 2020 (Pub. L. 116-92), DoD is prohibited from entering into a contract for the procurement of products or services with any person that has business operations with an authority of the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government, unless the person has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.

(c) The Contractor shall-

(1) Not have any business operations with an authority of the Maduro regime or the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government; or

(2) Have a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for the acquisition of commercial products.

(End of clause)

252.225-7058	Postaward Disclosure of Employment of Individuals Who Work in the People's Republic of China.	2023-01

POSTAWARD DISCLOSURE OF EMPLOYMENT OF INDIVIDUALS WHO WORK IN THE PEOPLE'S REPUBLIC OF CHINA (JAN 2023)

(a) Definitions. As used in this clause-

"Covered contract" means any DoD contract or subcontract with a value in excess of $5 million, not including contracts for commercial products and commercial services.

"Covered entity" means any corporation, company, limited liability company, limited partnership, business trust, business association, or other similar entity, including any subsidiary thereof, performing work on a covered contract in the People's Republic of China, including by leasing or owning real property used in the performance of the covered contract in the People's Republic of China.

(b) Disclosure requirement.

(1) In accordance with section 855 of the National Defense Authorization Act for Fiscal Year 2022 (Pub. L. 117-81, 10 U.S.C. 4651 note prec.), DoD may not award, extend, or exercise an option on a covered contract with a covered entity unless such covered entity submits each required disclosure of its use of workforce and facilities in the People's Republic of China, if it employs one or more individuals who perform work in the People's Republic of China on a covered contract.

(2) If the Contractor is a covered entity, the Contractor shall disclose for the Government's fiscal years 2023 and 2024, the Contractor's employment of one or more individuals who perform work in the People's Republic of China on any covered contract. The disclosures shall include-

(i) The total number of such individuals who perform work in the People's Republic of China on the covered contracts funded by DoD; and

(ii) A description of the physical presence, including street address or addresses in the People's Republic of China, where work on the covered contract is performed.

(c) Subcontracts. The Contractor shall insert this clause, including this paragraph (c), without alteration other than to identify the appropriate parties, in all subcontracts that meet the definition of a covered contract.

(End of clause)

252.225-7060	Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region.	2023-06

PROHIBITION ON CERTAIN PROCUREMENTS FROM THE XINJIANG UYGHUR AUTONOMOUS REGION (JUN 2023)

(a) Definitions. As used in this clause-

"Forced labor" means any work or service that is exacted from any person under the menace of any penalty for nonperformance and that the worker does not offer to perform (10 U.S.C. 2496).

"XUAR" means the Xinjiang Uyghur Autonomous Region of the People's Republic of China (10 U.S.C. 2496).

(b) Prohibition. In accordance with 10 U.S.C. 4661, none of the funds appropriated or otherwise made available for DoD may be used to knowingly procure any products mined, produced, or manufactured wholly or in part by forced labor from XUAR or from an entity that has used labor from within or transferred from XUAR. The Contractor shall make a good faith effort to determine that forced labor from XUAR will not be used in the performance of this contract (section 855, Pub. L. 117-263).

(c) Subcontracts. The Contractor shall insert this clause, including this paragraph (c), without alteration other than to identify the appropriate parties, in subcontracts including subcontracts for commercial products, commercial services, and commercially available off-the-shelf items.

(End of clause)

252.226-7001	Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns.	2023-01

UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES,

AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS

(JAN 2023)

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

"Indian" means-

(1) Any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c); and

(2) Any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C. Chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1452(c).

"Interested party" means a contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

"Native Hawaiian small business concern" means an entity that is-

(1) A small business concern as defined in Section 3 of the Small Business Act (15 U.S.C. 632) and relevant implementing regulations; and

(2) Owned and controlled by a Native Hawaiian as defined in 25 U.S.C. 4221(9).

(b) The Contractor shall use its best efforts to give Indian organizations, Indian-owned

economic enterprises, and Native Hawaiian small business concerns the maximum practicable opportunity to participate in the subcontracts it awards, to the fullest extent consistent with efficient performance of the contract.

(c) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status.

(d) In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to-

(1)(i) For matters relating to Indian organizations or Indian-owned economic enterprises:

U.S. U.S. Department of the Interior

Bureau of Indian Affairs

Attn: Bureau Procurement Chief

12220 Sunrise Valley Drive

Reston , VA 20191

Phone: 703-390-6433

Website: https://www.bia.gov/

The BIA will determine the eligibility and will notify the Contracting Officer.

(2)(i) For matters relating to Native Hawaiian small business concerns:

Department of Hawaiian Home Lands

PO Box 1879

Honolulu , HI 96805

Phone: 808-620-9500

Website: http://dhhl.hawaii.gov/

The Department of Hawaiian Home Lands will determine the eligibility and will notify the Contracting Officer.

(e) No incentive payment will be made-

(1) While a challenge is pending; or

(2) If a subcontractor is determined to be an ineligible participant.

(f)(1) The Contractor, on its own behalf or on behalf of a subcontractor at any tier, may request an incentive payment in accordance with this clause.

(2) The incentive amount that may be requested is 5 percent of the estimated cost, target cost, or fixed price included in the subcontract at the time of award to the Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(3) In the case of a subcontract for commercial products or commercial services, the Contractor may receive an incentive payment only if the subcontracted items are produced or manufactured in whole or in part by an Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(4) The Contractor has the burden of proving the amount claimed and shall assert its request for an incentive payment prior to completion of contract performance.

(5) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the estimated cost, target cost, or fixed price included in the subcontract awarded to the Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(6) If the Contractor requests and receives an incentive payment on behalf of a subcontractor, the Contractor is obligated to pay the subcontractor the incentive amount.

(g) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts exceeding $500,000.

(End of clause)

252.232-7003	Electronic Submission of Payment Requests and Receiving Reports.	2018-12

ELECTRONIC SUBMISSION OF PAYMENT REQUESTS AND RECEIVING REPORTS (DEC 2018)

(a) Definitions. As used in this clause-

"Contract financing payment" means an authorized Government disbursement of monies to a contractor prior to acceptance of supplies or services by the Government.

(1) Contract financing payments include-

(i) Advance payments;

(ii) Performance-based payments;

(iii) Commercial advance and interim payments;

(iv) Progress payments based on cost under the clause at Federal Acquisition Regulation (FAR) 52.232-16, Progress Payments;

(v) Progress payments based on a percentage or stage of completion (see FAR 32.102(e)), except those made under the clause at FAR 52.232-5, Payments Under Fixed-Price Construction Contracts, or the clause at FAR 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts; and

(vi) Interim payments under a cost reimbursement contract, except for a cost reimbursement contract for services when Alternate I of the clause at FAR 52.232-25, Prompt Payment, is used.

(2) Contract financing payments do not include-

(i) Invoice payments;

(ii) Payments for partial deliveries; or

(iii) Lease and rental payments.

"Electronic form" means any automated system that transmits information electronically from the initiating system to affected systems.

"Invoice payment" means a Government disbursement of monies to a contractor under a contract or other authorization for supplies or services accepted by the Government.

(1) Invoice payments include-

(i) Payments for partial deliveries that have been accepted by the Government;

(ii) Final cost or fee payments where amounts owed have been settled between the Government and the contractor;

(iii) For purposes of subpart 32.9 only, all payments made under the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, and the clause at 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts; and

(iv) Interim payments under a cost-reimbursement contract for services when Alternate I of the clause at 52.232-25, Prompt Payment, is used.

(2) Invoice payments do not include contract financing payments.

"Payment request" means any request for contract financing payment or invoice payment submitted by the Contractor under this contract or task or delivery order.

"Receiving report" means the data prepared in the manner and to the extent required by Appendix F, Material Inspection and Receiving Report, of the Defense Federal Acquisition Regulation Supplement.

(b) Except as provided in paragraph (d) of this clause, the Contractor shall submit payment requests and receiving reports in electronic form using Wide Area WorkFlow (WAWF). The Contractor shall prepare and furnish to the Government a receiving report at the time of each

delivery of supplies or services under this contract or task or delivery order. .

(c) Submit payment requests and receiving reports to WAWF in one of the following electronic formats:

(1) Electronic Data Interchange.

(2) Secure File Transfer Protocol.

(3) Direct input through the WAWF website.

(d) The Contractor may submit a payment request and receiving report using methods other than WAWF only when-

(1) The Contractor has requested permission in writing to do so, and the Contracting Officer has provided instructions for a temporary alternative method of submission of payment requests and receiving reports in the contract administration data section of this contract or task or delivery order;

(2) DoD makes payment for commercial transportation services provided under a Government rate tender or a contract for transportation services using a DoD-approved electronic third party payment system or other exempted vendor payment/invoicing system (e.g., PowerTrack, Transportation Financial Management System, and Cargo and Billing System);

(3) DoD makes payment on a contract or task or delivery order for rendered health care services using the TRICARE Encounter Data System; or

(4) The Governmentwide commercial purchase card is used as the method of payment, in which case submission of only the receiving report in WAWF is required.

(e) Information regarding WAWF is available at https://wawf.eb.mil/.

(f) In addition to the requirements of this clause, the Contractor shall meet the requirements of the appropriate payment clauses in this contract when submitting payment requests.

(End of clause)

252.232-7007	Limitation of Government's Obligation.	2014-04

LIMITATION OF GOVERNMENT'S OBLIGATION (APR 2014)

(a) Contract line item(s) ____[Contracting Officer insert after negotiations] is/are incrementally funded. For this/these item(s), the sum of $ ____[Contracting Officer insert after negotiations] of the total price is presently available for payment and allotted to this contract. An allotment schedule is set forth in paragraph (j) of this clause.

(b) For item(s) identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those item(s) for the Government's convenience, approximates the total amount currently allotted to the contract. The Contractor is not authorized to continue work on those item(s) beyond that point. The Government will not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for those item(s) regardless of anything to the contrary in the clause entitled "Termination for Convenience of the Government." As used in this clause, the total amount payable by the Government in the event of termination of applicable contract line item(s) for convenience includes costs, profit, and estimated termination settlement costs for those item(s).

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (j) of this clause, the Contractor will notify the Contracting Officer in writing at least ninety days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount then allotted to the contract for performance of the applicable item(s). The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of applicable line items up to the next scheduled date for allotment of funds identified in paragraph (j) of this clause, or to a mutually agreed upon substitute date. The notification will also advise the Contracting Officer of the estimated amount of additional funds that will be required for the timely performance of the item(s) funded pursuant to this clause, for a subsequent period as may be specified in the allotment schedule in paragraph (j) of this clause or otherwise agreed to by the parties. If after such notification additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause

of this contract entitled "Termination for Convenience of the Government."

(d) When additional funds are allotted for continued performance of the contract line item(s) identified in paragraph (a) of this clause, the parties will agree as to the period of contract performance which will be covered by the funds. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and agreed substitute date, and the contract will be modified accordingly.

(e) If, solely by reason of failure of the Government to allot additional funds, by the dates indicated below, in amounts sufficient for timely performance of the contract line item(s) identified in paragraph (a) of this clause, the Contractor incurs additional costs or is delayed in the performance of the work under this contract and if additional funds are allotted, an equitable adjustment will be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the item(s), or in the time of delivery, or both. Failure to agree to any such equitable adjustment hereunder will be a dispute concerning a question of fact within the meaning of the clause entitled "Disputes."

(f) The Government may at any time prior to termination allot additional funds for the performance of the contract line item(s) identified in paragraph (a) of this clause.

(g) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default." The provisions of this clause are limited to the work and allotment of funds for the contract line item(s) set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded except with regard to the rights or obligations of the parties concerning equitable adjustments negotiated under paragraphs (d) and (e) of this clause.

(h) Nothing in this clause affects the right of the Government to terminate this contract pursuant to the clause of this contract entitled "Termination for Convenience of the Government."

(i) Nothing in this clause shall be construed as authorization of voluntary services whose acceptance is otherwise prohibited under 31 U.S.C. 1342.

(j) The parties contemplate that the Government will allot funds to this contract in accordance with the following schedule:

On execution of contract	$ ____
(month) (day), (year) ____	$ ____
(month) (day), (year) ____	$ ____

(month) (day), (year) ____ $ ____
(End of clause)

252.232-7010 Levies on Contract Payments. 2006-12

LEVIES ON CONTRACT PAYMENTS (DEC 2006)

(a) 26 U.S.C. 6331(h) authorizes the Internal Revenue Service (IRS) to continuously levy up to 100 percent of contract payments, up to the amount of tax debt.

(b) When a levy is imposed on a payment under this contract and the Contractor believes that the levy may result in an inability to perform the contract, the Contractor shall promptly notify the Procuring Contracting Officer in writing, with a copy to the Administrative Contracting Officer, and shall provide-

(1) The total dollar amount of the levy;

(2) A statement that the Contractor believes that the levy may result in an inability to perform the contract, including rationale and adequate supporting documentation; and

(3) Advice as to whether the inability to perform may adversely affect national security, including rationale and adequate supporting documentation.

(c) DoD shall promptly review the Contractor's assessment, and the Procuring Contracting Officer shall provide a written notification to the Contractor including-

(1) A statement as to whether DoD agrees that the levy may result in an inability to perform the contract; and

(2)(i) If the levy may result in an inability to perform the contract and the lack of performance will adversely affect national security, the total amount of the monies collected that should be returned to the Contractor; or

(ii) If the levy may result in an inability to perform the contract but will not impact national

security, a recommendation that the Contractor promptly notify the IRS to attempt to resolve the tax situation.

(d) Any DoD determination under this clause is not subject to appeal under the Contract Disputes Act.

(End of clause)

252.232-7012	Performance-Based Payments-Whole-Contract Basis.	2022-12

PERFORMANCE-BASED PAYMENTS-WHOLE-CONTRACT BASIS (DEC 2022)

(a) Performance-based payments shall form the basis for the contract financing payments provided under this contract, and shall apply to the whole contract. The performance-based payments schedule (Contract Attachment ____) describes the basis for payment, to include identification of the individual payment events, evidence of completion, and amount of payment due upon completion of each event.

(b) In accordance with 10 U.S.C. 3802(c), the Contractor's financial statements shall be in compliance with Generally Accepted Accounting Principles in order to receive performance-based payments.

(c)(1) The Contractor shall, in addition to providing the information required by FAR 52.232-32, submit information for all payment requests using the following format:

Current performance-based payment(s) event(s) addressed by this request:
Contractor shall identify- Amount Totals
(1a) Negotiated value of all previously completed performance-based payment(s) event(s); ____ ____
(1b) Negotiated value of the current performance-based payment(s) event (s); ____ ____
(1c) Cumulative negotiated value of performance-based payment(s) events completed to date (1a) + (1b); and ____ ____

(2) Total costs incurred to date. ____ ____

(2) Incurred cost is determined by the Contractor's accounting books and records, to which the Contractor shall provide access upon request of the Contracting Officer. An acceptable accounting system in accordance with DFARS 252.242-7006 is not required for reporting of incurred costs under this clause. If the Contractor's accounting system is not capable of tracking costs on a job order basis, the Contractor shall provide a realistic approximation of the allocation of incurred costs attributable to this contract in accordance with the Contractor's accounting system. FAR 52.232-32(m) does not require certification of incurred costs.

(d) Security for financing.

(1) Title to the property described in paragraph (f) of the clause at FAR 52.232-32, Performance-Based Payments, is the preferred security for receipt of performance-based payments.

(2)(i) If the Contractor's accounting system is not capable of identifying and tracking through the build cycle the property that is allocable and properly chargeable to this contract, the Contracting Officer may consider acceptance of one or a combination of the following alternative forms of security sufficient to constitute adequate security for the performance-based payments and so specify in the contract, consistent with FAR 32.202-4:

(A) A paramount lien on assets.

(B) An irrevocable letter of credit from a federally insured financial institution.

(C) A bond from a surety, acceptable in accordance with FAR part 28.

(D) A guarantee of repayment from a person or corporation of demonstrated liquid net worth, connected by significant ownership interest to the Contractor.

(E) Title to identified Contractor assets of adequate worth.

(ii) Paragraph (f) of the clause at FAR 52.232-32 does not apply to the extent that the Contractor and the Contracting Officer agree on alternative forms of security. In the event the Contractor fails to provide adequate security, as required in this contract, no financing payment will be made under this contract. Upon receipt of adequate security, financing payments will be made, including all previous payments to which the Contractor is entitled, in accordance with the terms of the provisions for contract financing. If at any time the Contracting Officer determines that the security provided by the Contractor is insufficient, the Contractor shall

promptly provide such additional security as the Contracting Officer determines necessary. In the event the Contractor fails to provide such additional security, the Contracting Officer may collect or liquidate such security that has been provided and suspend further payments to the Contractor; and the Contractor shall repay to the Government the amount of unliquidated financing payments as the Contracting Officer at his sole discretion deems repayable.

(End of clause)

252.236-7000	Modification Proposals--Price Breakdown.	1991-12

MODIFICATION PROPOSALS--PRICE BREAKDOWN (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown-

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for-

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for

subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

(End of clause)

252.236-7001	Contract Drawings and Specifications.	2000-08

CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

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

(b) The Contractor shall-

(1) Check all drawings furnished immediately upon receipt;

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

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

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

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

(c) In general--

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

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

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
see plans and specifications	____	____
____	____	____
____	____	____
____	____	____
____	____	____

(End of clause)

252.236-7005 Airfield Safety Precautions. 1991-12

AIRFIELD SAFETY PRECAUTIONS (DEC 1991)

(a) Definitions. As used in this clause-

(1) "Landing areas" means-

(i) The primary surfaces, comprising the surface of the runway, runway shoulders, and lateral safety zones. The length of each primary surface is the same as the runway length. The width of each primary surface is 2,000 feet (1,000 feet on each side of the runway centerline);

(ii) The "clear zone" beyond the ends of each runway, i.e., the extension of the primary surface for a distance of 1,000 feet beyond each end of each runway;

(iii) All taxiways, plus the lateral clearance zones along each side for the length of the taxiways

(the outer edge of each lateral clearance zone is laterally 250 feet from the far or opposite edge of the taxiway, e.g., a 75-foot-wide taxiway would have a combined width of taxiway and lateral clearance zones of 425 feet); and

(iv) All aircraft parking aprons, plus the area 125 feet in width extending beyond each edge all around the aprons.

(2) "Safety precaution areas" means those portions of approach-departure clearance zones and transitional zones where placement of objects incident to contract performance might result in vertical projections at or above the approach-departure clearance, or the transitional surface.

(i) The "approach-departure clearance surface" is an extension of the primary surface and the clear zone at each end of each runway, for a distance of 50,000 feet, first along an inclined (glide angle) and then along a horizontal plane, both flaring symmetrically about the runway centerline extended.

(A) The inclined plane (glide angle) begins in the clear zone 200 feet past the end of the runway (and primary surface) at the same elevation as the end of the runway. It continues upward at a slope of 50:1 (1 foot vertically for each 50 feet horizontally) to an elevation of 500 feet above the established airfield elevation. At that point the plane becomes horizontal, continuing at that same uniform elevation to a point 50,000 feet longitudinally from the beginning of the inclined plane (glide angle) and ending there.

(B) The width of the surface at the beginning of the inclined plane (glide angle) is the same as the width of the clear zone. It then flares uniformly, reaching the maximum width of 16,000 feet at the end.

(ii) The "approach-departure clearance zone" is the ground area under the approach-departure clearance surface.

(iii) The "transitional surface" is a sideways extension of all primary surfaces, clear zones, and approach-departure clearance surfaces along inclined planes.

(A) The inclined plane in each case begins at the edge of the surface.

(B) The slope of the incline plane is 7:1 (1 foot vertically for each

7 feet horizontally). It continues to the point of intersection with the-

(1) Inner horizontal surface (which is the horizontal plane

150 feet above the established airfield elevation); or

(2) Outer horizontal surface (which is the horizontal plane

500 feet above the established airfield elevation), whichever is applicable.

(iv) The "transitional zone" is the ground area under the transitional surface. (It adjoins the primary surface, clear zone, and approach-departure clearance zone.)

(b) General.

(1) The Contractor shall comply with the requirements of this clause while-

(i) Operating all ground equipment (mobile or stationary);

(ii) Placing all materials; and

(iii) Performing all work, upon and around all airfields.

(2) The requirements of this clause are in addition to any other safety requirements of this contract.

(c) The Contractor shall-

(1) Report to the Contracting Officer before initiating any work;

(2) Notify the Contracting Officer of proposed changes to locations and operations;

(3) Not permit either its equipment or personnel to use any runway for purposes other than aircraft operation without permission of the Contracting Officer, unless the runway is-

(i) Closed by order of the Contracting Officer; and

(ii) Marked as provided in paragraph (d)(2) of this clause;

(4) Keep all paved surfaces, such as runways, taxiways, and hardstands, clean at all times and, specifically, free from small stones which might damage aircraft propellers or jet aircraft;

(5) Operate mobile equipment according to the safety provisions of this clause, while actually performing work on the airfield. At all other times, the Contractor shall remove all mobile equipment to locations-

(i) Approved by the Contracting Officer;

(ii) At a distance of at least 750 feet from the runway centerline, plus any additional distance; and

(iii) Necessary to ensure compliance with the other provisions of this clause; and

(6) Not open a trench unless material is on hand and ready for placing in the trench. As soon as practicable after material has been placed and work approved, the Contractor shall backfill and compact trenches as required by the contract. Meanwhile, all hazardous conditions shall be marked and lighted in accordance with the other provisions of this clause.

(d) Landing areas. The Contractor shall-

(1) Place nothing upon the landing areas without the authorization of the Contracting Officer;

(2) Outline those landing areas hazardous to aircraft, using (unless otherwise authorized by the Contracting Officer) red flags by day, and electric, battery-operated low-intensity red flasher lights by night;

(3) Obtain, at an airfield where flying is controlled, additional permission from the control tower operator every time before entering any landing area, unless the landing area is marked as hazardous in accordance with paragraph (d)(2) of this clause;

(4) Identify all vehicles it operates in landing areas by means of a flag on a staff attached to, and flying above, the vehicle. The flag shall be three feet square, and consist of a checkered pattern of international orange and white squares of 1 foot on each side (except that the flag may vary up to ten percent from each of these dimensions);

(5) Mark all other equipment and materials in the landing areas, using the same marking devices as in paragraph (d)(2) of this clause; and

(6) Perform work so as to leave that portion of the landing area which is available to aircraft free from hazards, holes, piles of material, and projecting shoulders that might damage an

airplane tire.

(e) Safety precaution areas. The Contractor shall-

(1) Place nothing upon the safety precaution areas without authorization of the Contracting Officer;

(2) Mark all equipment and materials in safety precaution areas, using (unless otherwise authorized by the Contracting Officer) red flags by day, and electric, battery-operated, low-intensity red flasher lights by night; and

(3) Provide all objects placed in safety precaution areas with a red light or red lantern at night, if the objects project above the approach-departure clearance surface or above the transitional surface.

(End of clause)

252.236-7013	Requirement for Competition Opportunity for American Steel Producers, Fabricators, and Manufacturers.	2023-01

REQUIREMENT FOR COMPETITION OPPORTUNITY FOR AMERICAN STEEL PRODUCERS, FABRICATORS, AND MANUFACTURERS (JAN 2023)

(a) Definition. "Construction material," as used in this clause, means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work.

(b) The Contractor shall provide American steel producers, fabricators, and manufacturers the opportunity to compete when acquiring steel as a construction material (e.g., steel beams, rods, cables, plates).

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in any

subcontract that involves the acquisition of steel as a construction material, including subcontracts for the acquisition of commercial products.

(End of clause)

252.243-7001	Pricing of Contract Modifications.	1991-12

PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR Part 31 and DFARS Part 231, in effect on the date of this contract, apply.

(End of clause)

252.243-7002	Requests for Equitable Adjustment.	2022-12

REQUESTS FOR EQUITABLE ADJUSTMENT (DEC 2022)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 3862(a), any request for equitable adjustment to contract

terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including-

(1) Certified cost or pricing data, if required, in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Data other than certified cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if certified cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to-

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustments under an incentive provision of the contract.

(End of clause)

252.246-7004	Safety of Facilities, Infrastructure, and Equipment for Military Operations.	2010-10

SAFETY OF FACILITIES, INFRASTRUCTURE, AND EQUIPMENT FOR MILITARY OPERATIONS (OCT 2010)

(a) Definitions. Discipline Working Group," as used in this clause, means representatives from the DoD Components, as defined in MIL-STD-3007F, who are responsible for the unification and maintenance of the Unified Facilities Criteria (UFC) documents for a particular discipline area.

(b) The Contractor shall ensure, consistent with the requirements of the applicable inspection clause in this contract, that the facilities, infrastructure, and equipment acquired, constructed, installed, repaired, maintained, or operated under this contract comply with Unified Facilities Criteria (UFC) 1-200-01 for-

(1) Fire protection;

(2) Structural integrity;

(3) Electrical systems;

(4) Plumbing;

(5) Water treatment;

(6) Waste disposal; and

(7) Telecommunications networks.

(c) The Contractor may apply a standard equivalent to or more stringent than UFC 1-200-01 upon a written determination of the acceptability of the standard by the Contracting Officer with the concurrence of the relevant Discipline Working Group.

(End of clause)

252.249-7000 Special Termination Costs. 1991-12

SPECIAL TERMINATION COSTS (DEC 1991)

(a) Definition. "Special termination costs," as used in this clause, means only costs in the following categories as defined in Part 31 of the Federal Acquisition Regulation (FAR)-

(1) Severance pay, as provided in FAR 31.205-6(g);

(2) Reasonable costs continuing after termination, as provided in FAR 31.205-42(b);

(3) Settlement of expenses, as provided in FAR 31.205-42(g);

(4) Costs of return of field service personnel from sites, as provided in FAR 31.205-35 and FAR 31.205-46(c); and

(5) Costs in paragraphs (a)(1), (2), (3), and (4) of this clause to which subcontractors may be entitled in the event of termination.

(b) Notwithstanding the Limitation of Cost/Limitation of Funds clause of this contract, the Contractor shall not include in its estimate of costs incurred or to be incurred, any amount for special termination costs to which the Contractor may be entitled in the event this contract is terminated for the convenience of the Government.

(c) The Contractor agrees to perform this contract in such a manner that the Contractor's claim for special termination costs will not exceed $____. The Government shall have no obligation to pay the Contractor any amount for the special termination costs in excess of this amount.

(d) In the event of termination for the convenience of the Government, this clause shall not be construed as affecting the allowability of special termination costs in any manner other than limiting the maximum amount of the costs payable by the Government.

(e) This clause shall remain in full force and effect until this contract is fully funded.

(End of clause)

Section 00 73 00 - Supplementary Conditions

Special Contract Requirements:

1) RFO provision 52.229-11 and RFO clause 52.229-12

RFO provision 52.229-11 and RFO clause 52.229-12 are included in this solicitation. This provision and clause concern the imposition of a 2 percent Federal excise tax withholding on any resultant contract award or payment request. This rule applies to Federal Government contracts for goods or services that are awarded to foreign persons - such as foreign contractors. It implements the Department of the Treasury's final regulations published in the Federal Register at 81 FR 55133 on August 18, 2016, under section 5000C of the Internal Revenue Code relating to the 2 percent tax on payments made by the U.S. Government to foreign persons pursuant to certain contracts.

Pursuant to the RFO 52.229-3 Federal, State, and Local Taxes, taxes imposed under 26 U.S.C. 5000 C may not be included in the contract price or reimbursed.

Exemptions from this excise tax must be claimed by an Offeror when it submits, with its offer, a U. S. Department of Treasury Internal Revenue Service (IRS) Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available via the internet at www.irs. gov/W14. If not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent on each contract payment. Failure to submit an IRS Form W-14 with each payment request will also result in an automatic withholding of 2 percent from the payment request.

When filling out the IRS Form W-14 the following information may be used to complete Part I, Lines 6 and 7.

Line 6 Contract/reference number: *W9126G26RA087*
Line 7 "Name and address of the acquiring agency":
Fort Worth District
819 Taylor Street, Rm 2A17
Fort Worth, TX 76102-033

Any exemption claimed and self-certified is subject to audit by the IRS. Any disputes concerning this tax are adjudicated by the IRS because the Section 5000C tax is a tax matter not a contract issue.

Offerors are encouraged to seek guidance from their own tax professionals for advice concerning the provision, clause, and exclusions exclusion/submission of IRS Form W-14. Additional information is also available at:

Notwithstanding the above, the USACE does not have a means of withholding this excise tax at this time. As a result, contractors are expected to comply with the instructions above and to properly complete and return the W-14 at proposal submission, and with each pay

application. Whether the contractor sets the money aside for future payment to the IRS, or makes payment to the IRS, is the contractor's discretion, based on its analysis of the regulations regarding the excise tax. In the event that USACE is able to withhold during contract performance, it will notify the contractor and make such a withholding (including any catch up withholdings); no advance notice is required to the contractor prior to the withholding. Under no circumstances is USACE liable for any tax not paid by the contractor. The contractor is liable for the tax, to the extent required by law, regardless of whether USACE makes a withholding.

RFO 29.204 expressly states that "[a]gencies merely withhold the tax (section 5000C tax) for the Internal Revenue Service (IRS). All substantive issues regarding the underlying section 5000C tax, e.g., the imposition of, and exemption from the tax, are matters under the jurisdiction of the IRS." Therefore, we cannot help you determine how the tax law applies to you. We strongly recommend that you contact the IRS and/or a tax professional should you have any questions of this nature. To be clear, this information does not constitute tax advice or a representation of your tax liability. Furnishing this information does not create liability for the USACE for any Federal, state, or local taxes applicable to the above-referenced contract or any other contract.

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For submission requirements and basis of evaluation:

Executed RFO Provision 52.229-11.

Completed IRS Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, if applicable. **If not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent on each payment**.

*** END OF NARRATIVE ***

DAVIS-BACON ACT (DBA) WAGE DETERMINATION

APPLICATION OF WAGE DECISIONS

Solicitation Number: W9126G26RA087
Project: B90176 Hangar Door Expansion (HADES)
Location: Ft Hood, Texas.
County, State: Bell County, Texas

Davis-Bacon Construction Wage Rate Requirements TX20260230, Building (does not include single family homes or apartments up to and including 4 stories). **Building Construction** includes the construction, alteration, or repair of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies and the associated installation of utilities and equipment, as well as incidental grading and paving.

Davis-Bacon Construction Wage Rate Requirements TX20260291, Highway (excluding tunnels, building structures in rest area projects and railroad construction; bascule, suspension and spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges). **Highway Construction** includes the construction, alteration, or repair of roads, streets, highways, runways, parking areas and most other paving work not incidental to building, residential, or heavy construction.

Davis-Bacon Construction Wage Rate Requirements TX20260007, Heavy, includes projects that cannot be classified as Building, Residential, or Highway. Heavy Construction is often further distinguished on the basis of the characteristic of particular projects, such as dredging, water and sewer lines, dams, major bridges, and flood control projects.

NOTE:

Payroll records are required, under the Davis-Bacon Act, to be submitted to the U.S. Army Corps of Engineers for all construction work performed.

The Wage Decision Number applicable to the work performed is to be shown on all certified payroll records submitted. If multiple wage decisions are utilized within a pay period, so annotate clearly those work hours and rates-of-pay per the applicable wage decision under which the work was performed.

"General Decision Number: TX20260230 05/18/2026

State: Texas

Construction Types: Building

Counties: Texas Counties of
Bell

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

BOIL0074-003 01/01/2025

	Rates	Fringes
BOILERMAKER	$ 33.17	24.92

ENGI0178-005 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR ((3) HYDRAULIC CRANES 59 TONS AND UNDER)	$ 32.35	13.10
POWER EQUIPMENT OPERATOR ((1) TOWER CRANE)	$ 32.85	13.10

IRON0084-011 06/01/2024

	Rates	Fringes
IRONWORKER: ORNAMENTAL	$ 28.26	8.13

PLUM0286-011 09/01/2025

	Rates	Fringes
PIPEFITTER (EXCLUDES HVAC PIPE INSTALLATION)	$ 37.15	16.92

SUTX2014-005 07/21/2014

	Rates	Fringes
TRUCK DRIVER: WATER TRUCK	$ 12.00	4.11
TRUCK DRIVER: SEMI-TRAILER TRUCK	$ 12.50	0.00
TRUCK DRIVER: FLATBED TRUCK	$ 19.65	8.57
TRUCK DRIVER: DUMP TRUCK	$ 11.50	1.10
TILE SETTER	$ 14.74	0.00
TILE FINISHER	$ 11.22	0.00
SPRINKLER FITTER (FIRE SPRINKLERS)	$ 15.46	0.00
SHEET METAL WORKER, EXCLUDES HVAC DUCT INSTALLATION	$ 14.89	1.55
SHEET METAL WORKER (HVAC DUCT INSTALLATION ONLY)	$ 18.71	4.90
ROOFER	$ 13.75	0.00
PLUMBER, EXCLUDES HVAC PIPE INSTALLATION	$ 21.18	7.57
PAINTER: BRUSH, ROLLER, AND SPRAY	$ 15.00	0.81
OPERATOR: ROLLER	$ 13.11	0.00
OPERATOR: PAVER (ASPHALT, AGGREGATE, AND CONCRETE)	$ 16.03	0.00
OPERATOR: MECHANIC	$ 17.52	3.33
OPERATOR: LOADER	$ 13.88	0.44

OPERATOR: GRADER/BLADE	$ 14.34	1.68
OPERATOR: FORKLIFT	$ 14.00	0.00
OPERATOR: DRILL	$ 16.22	0.34
OPERATOR: BULLDOZER	$ 18.29	1.31
OPERATOR: BOBCAT/SKID STEER/SKID LOADER	$ 13.93	0.00
OPERATOR: BACKHOE/EXCAVATOR/TRACKHOE	$ 13.10	1.24
LABORER: ROOF TEAROFF	$ 11.28	0.00
LABORER: PIPELAYER	$ 12.49	2.13
LABORER: MASON TENDER - CEMENT/CONCRETE	$ 9.93	0.00
LABORER: MASON TENDER - BRICK	$ 9.98	0.00
LABORER: COMMON OR GENERAL	$ 10.53	0.00
IRONWORKER, STRUCTURAL	$ 18.35	4.90
IRONWORKER, REINFORCING	$ 13.35	0.00
INSULATOR - MECHANICAL (DUCT, PIPE & MECHANICAL SYSTEM INSULATION)	$ 19.77	7.13
HVAC MECHANIC (INSTALLATION OF HVAC UNIT ONLY)	$ 16.01	1.56
HVAC MECHANIC (HVAC PIPE INSTALLATION ONLY)	$ 15.50	0.00
ELECTRICIAN, EXCLUDES LOW VOLTAGE WIRING	$ 20.50	2.71
ELECTRICIAN (LOW VOLTAGE WIRING ONLY)	$ 28.28	2.44
DRYWALL HANGER AND METAL STUD INSTALLER	$ 14.59	0.00
CEMENT MASON/CONCRETE FINISHER	$ 14.00	0.00
CARPENTER, EXCLUDES DRYWALL HANGING, AND METAL STUD INSTALLATION	$ 17.28	1.71
BRICKLAYER	$ 19.09	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ⿰SU⿰, ⿰UAVG⿰, ⿰SA⿰, or ⿰SC⿰ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ⿰SU⿰ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative

Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

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"General Decision Number: TX20260291 05/18/2026

State: Texas

Construction Types: Highway

Counties: Texas Counties of
Atascosa, Bandera, Bastrop, Bell, Bexar,
Brazos, Burleson, Caldwell, Comal,
Coryell, Guadalupe, Hays, Kendall,
Lampasas, McLennan, Medina, Robertson,
Travis, Williamson and Wilson

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SATX2025-004 11/15/2023

	Rates	Fringes
WORK ZONE BARRICADE SERVICER	$ 17.75	0.00
WELDER	$ 23.38	0.00
TRUCK DRIVER, TANDEM AXLE TRACTOR WITH SEMI TRAILER	$ 21.71	0.00
TRUCK DRIVER, SINGLE OR TANDEM AXLE DUMP TRUCK	$ 20.91	0.00
TRUCK DRIVER, SINGLE AXLE	$ 19.70	0.00
TRUCK DRIVER LOWBOY FLOAT	$ 25.96	0.00
TRAFFIC SIGNAL/LIGHT POLE WORKER	$ 21.99	0.00
SPREADER BOX OPERATOR	$ 19.31	0.00
SIGN ERECTOR	$ 17.52	0.00
SERVICER	$ 23.75	0.00
SCRAPER OPERATOR	$ 17.52	0.00
ROLLER OPERATOR, OTHER	$ 17.52	0.00
ROLLER OPERATOR, ASPHALT	$ 20.24	0.00
REINFORCING STEEL WORKER	$ 22.46	0.00
RECLAIMER/PULVERIZER OPERATOR	$ 19.05	0.00
PIPELAYER	$ 19.23	0.00
PAVEMENT MARKING MACHINE OPERATOR	$ 22.00	0.00
PAINTER, STRUCTURES	$ 23.76	0.00
OFF ROAD HAULER	$ 17.52	0.00
MOTOR GRADER OPERATOR, ROUGH	$ 22.95	0.00
MOTOR GRADER OPERATOR, FINE GRADE	$ 26.56	0.00
MILLING MACHINE OPERATOR	$ 21.73	0.00
MECHANIC	$ 26.15	0.00
LOADER/BACKHOE OPERATOR	$ 20.32	0.00
LABORER, UTILITY	$ 19.05	0.00
LABORER, COMMON	$ 17.52	0.00
FRONT END LOADER OPERATOR, OVER 3 CY	$ 20.20	0.00
FRONT END LOADER OPERATOR, 3 CY OR LESS	$ 20.33	0.00
FOUNDATION DRILL OPERATOR, TRUCK MOUNTED	$ 24.28	0.00
FORM SETTER, PAVING & CURB	$ 19.18	0.00
FORM BUILDER/SETTER, STRUCTURES	$ 20.63	0.00
FLAGGER	$ 15.52	0.00
EXCAVATOR OPERATOR, OVER 50,000 POUNDS	$ 22.90	0.00
EXCAVATOR OPERATOR, 50,000 POUNDS OR LESS	$ 22.93	0.00
ELECTRICIAN	$ 30.54	0.00

DIRECTIONAL DRILLING OPERATOR.....$ 25.19 0.00
DIRECTIONAL DRILLING LOCATOR.....$ 21.39 0.00
CRAWLER TRACTOR OPERATOR.....$ 20.92 0.00
CRANE OPERATOR, LATTICE BOOM OVER 80 TONS.....$ 28.87 0.00
CRANE OPERATOR, LATTICE BOOM 80 TONS OR LESS.....$ 26.47 0.00
CRANE OPERATOR, HYDRAULIC 80 TONS OR LESS.....$ 29.24 0.00
CONCRETE SAW OPERATOR.....$ 25.97 0.00
CONCRETE PAVEMENT FINISHING MACHINE OPERATOR.....$ 22.81 0.00
CONCRETE FINISHER, PAVING AND STRUCTURES.....$ 20.61 0.00
BROOM OR SWEEPER OPERATOR.....$ 18.09 0.00
BOOM TRUCK OPERATOR.....$ 27.82 0.00
ASPHALT RAKER.....$ 19.40 0.00
ASPHALT PAVING MACHINE OPERATOR.....$ 22.12 0.00
ASPHALT DISTRIBUTOR OPERATOR.....$ 24.07 0.00
AGRICULTURAL TRACTOR OPERATOR.....$ 19.14 0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular

rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ⿰SU⿱, ⿰UAVG⿱, ⿰SA⿱, or ⿰SC⿱ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ⿰SU⿱ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

⿰SU⿱ wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ⿰SA⿱ identifier indicates that the classifications and

prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ⍰SA⍰ identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

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"General Decision Number: TX20260007 05/18/2026

State: Texas

Construction Types: Heavy

Counties: Texas Counties of
Atascosa, Bandera, Bastrop, Bell, Bexar,
Brazos, Burleson, Caldwell, Comal,
Coryell, Guadalupe, Hays, Kendall,
Lampasas, McLennan, Medina, Robertson,
Travis, Williamson and Wilson

HEAVY (excluding tunnels and dams, not to be used for work on Sewage or Water Treatment Plants or Lift / Pump Stations in Bell, Coryell, McLennan and Willi

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SUTX2011-006 08/03/2011

	Rates	Fringes
WELDER	$ 15.97	0.00
TRUCK DRIVER: TANDEM AXLE TRACTOR W/SEMI TRAILER	$ 12.81	0.00
TRUCK DRIVER: SINGLE OR TANDEM AXLE DUMP TRUCK	$ 11.68	0.00
TRUCK DRIVER (SINGLE AXLE)	$ 11.79	0.00
TRUCK DRIVER (OFF ROAD HAULER)	$ 11.88	0.00
TRUCK DRIVER (LOWBOY-FLOAT)	$ 15.66	0.00
TRAFFIC SIGNALIZATION: TRAFFIC SIGNAL INSTALLATION, (TRAFFIC SIGNAL/LIGHT POLE WORKER)	$ 16.00	0.00
STEEL WORKER (STRUCTURAL)	$ 19.29	0.00
STEEL WORKER (REINFORCING)	$ 14.00	0.00
SERVICER	$ 14.51	0.00
POWER EQUIPMENT OPERATOR: SCRAPER	$ 12.27	0.00
POWER EQUIPMENT OPERATOR: MOTOR GRADER, ROUGH	$ 14.63	0.00
POWER EQUIPMENT OPERATOR: MOTOR GRADER, FINE GRADE	$ 18.51	0.00
POWER EQUIPMENT OPERATOR: MECHANIC	$ 17.10	0.00
POWER EQUIPMENT OPERATOR: FRONT END LOADER, 3 CY OR LESS	$ 13.04	0.00
POWER EQUIPMENT OPERATOR: FOUNDATION DRILL, TRUCK MOUNTED	$ 16.93	0.00
POWER EQUIPMENT OPERATOR: CRAWLER TRACTOR	$ 15.67	0.00
POWER EQUIPMENT OPERATOR: BROOM OR SWEEPER	$ 11.04	0.00
POWER EQUIPMENT OPERATOR: BOOM TRUCK	$ 18.36	0.00
POWER EQUIPMENT OPERATOR: ASPHALT DISTRIBUTOR	$ 15.55	0.00
POWER EQUIPMENT OPERATOR: (TRENCHING MACHINE, HEAVY)	$ 18.48	0.00
POWER EQUIPMENT OPERATOR: (SPREADER BOX)	$ 14.04	0.00
POWER EQUIPMENT OPERATOR: (ROLLER, OTHER)	$ 10.50	0.00
POWER EQUIPMENT OPERATOR: (ROLLER, ASPHALT)	$ 12.78	0.00
POWER EQUIPMENT OPERATOR: (RECLAIMER/PULVERIZER)	$ 12.88	0.00
POWER EQUIPMENT OPERATOR: (PAVEMENT MARKING MACHINE)	$ 19.17	0.00
POWER EQUIPMENT OPERATOR: (MILLING MACHINE)	$ 14.18	0.00
POWER EQUIPMENT OPERATOR: (LOADER/BACKHOE)	$ 14.12	0.00
POWER EQUIPMENT OPERATOR: (FRONT END LOADER, OVER 3 CY)	$ 13.21	0.00
POWER EQUIPMENT OPERATOR: (EXCAVATOR OVER 50,000 LBS)	$ 17.71	0.00
POWER EQUIPMENT OPERATOR: (EXCAVATOR 50,000 LBS OR LESS)	$ 12.88	0.00
POWER EQUIPMENT OPERATOR: (DIRECTIONAL DRILLING OPERATOR)	$ 17.24	0.00
POWER EQUIPMENT OPERATOR: (DIRECTIONAL DRILLING LOCATOR)	$ 11.67	0.00
POWER EQUIPMENT OPERATOR: (CRANE, LATTICE BOOM OVER 80 TONS)	$ 19.38	0.00
POWER EQUIPMENT OPERATOR: (CRANE, LATTICE BOOM 80 TONS OR LESS)	$ 15.87	0.00
POWER EQUIPMENT OPERATOR: (CRANE, HYDRAULIC 80 TONS OR LESS)	$ 18.36	0.00
POWER EQUIPMENT OPERATOR: (CONCRETE PAVEMENT FINISHING MACHINE)	$ 15.48	0.00
POWER EQUIPMENT OPERATOR: (ASPHALT PAVING MACHINE)	$ 14.36	0.00
POWER EQUIPMENT OPERATOR: (AGRICULTURAL TRACTOR)	$ 12.69	0.00
PAINTER (STRUCTURES)	$ 18.34	0.00
LABORER: PIPELAYER	$ 12.79	0.00
LABORER: ASPHALT RAKER	$ 12.12	0.00
LABORER (WORK ZONE BARRICADE SERVICER)	$ 11.85	0.00
LABORER (LABORER, UTILITY)	$ 12.27	0.00
LABORER (LABORER, COMMON)	$ 10.50	0.00
LABORER (FLAGGER)	$ 9.45	0.00
FORM BUILDER/FORM SETTER (STRUCTURES)	$ 12.87	0.00
FORM BUILDER/FORM SETTER (PAVING & CURB)	$ 12.94	0.00
ELECTRICIAN	$ 26.35	0.00
CEMENT MASON/CONCRETE FINISHER (PAVING AND STRUCTURES)	$ 12.56	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ⁄SU⁄, ⁄UAVG⁄, ⁄SA⁄, or ⁄SC⁄ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ⁄SU⁄ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that

classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the SA identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

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SECTION 01 00 00.00 44

CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.1 SCHEDULE

Commence, prosecute, and complete the work under this contract in accordance with the following schedule:

	Item of Work	Commencement of Work (Calendar days)	Completion of Work (Calendar days)	Liquidated Damages per calendar days
(1)	All work for Hangar Door Expansion, including O&M Manuals and Final Record Drawings.	Upon receipt of Notice to Proceed.	336	$ 1,390.38

NOTE: All work on this project shall be completed within the number of calendar days stated in Item of Work (1) above, inclusive of all review periods and Government phasing requirements specified. If the Government accepts a proposal for a completion period of lesser duration, and such proposal alters the time periods for review and phasing, the Contract shall be read to include the original periods for review and phasing. If a completion period of lesser duration is proposed and accepted by the Government, the accepted completion period will replace the original construction schedule listed above in the Schedule. If an alternate completion period is proposed, the Bid Schedule must reflect pricing information for the alternate proposed completion period. The liquidated damages stated above will be applied for each calendar day the Contractor exceeds the Contract scheduled duration.

Operation and Maintenance Manuals: See Section 01 78 00 CLOSEOUT SUBMITTALS, paragraph OPERATION AND MAINTENANCE MANUALS for requirements and to ensure completion of O&M Manuals.

Record Drawings: See Section 01 78 00 CLOSEOUT SUBMITTALS, paragraph titled RECORD DRAWINGS for requirements and to ensure completion of record drawings.

Section 00 21 00 - Instructions

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.204-7	System for Award Management-Registration. (Deviation 2026-O0038)	2026-02		

System for Award Management-Registration (Feb 2026) (Deviation 2026-O0038)

The Offeror shall have an active Federal Government contracts registration in the System for Award Management (SAM) when submitting an offer or quotation in response to this solicitation and at the time of award. As part of the SAM registration process, the Government collects information, as described in paragraphs (b) through (d) of this provision, that is necessary to identify the Offeror and for the Offeror to be awarded Federal Government contracts. To register in SAM, go to https://www.sam.gov. Allow for processing time when registering in SAM. If the Offeror is not registered in SAM, it should register immediately after receiving this solicitation.

(a) Definitions. As used in this provision-

Commercial and Government Entity (CAGE) code has the meaning provided in the clause at the Federal Acquisition Regulation (FAR) 52.204-13, System for Award Management-Maintenance, of this solicitation.

Electronic Funds Transfer (EFT) indicator means a bank account identifier to establish additional System for Award Management records for identifying alternative EFT accounts (see part 32) for the same entity.

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

Immediate owner means an entity, other than the offeror, that has direct control of the offeror. Indicators of control include, but are not limited to, one or more of the following: ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees. There may be more than one immediate owner (e.g., joint ventures).

Predecessor means an entity whose assets were acquired by the offeror or another entity (most often through merger or acquisition) and whose affairs are now carried out by the offeror or the other entity under a new name.

Taxpayer identification number means the number required by the Internal Revenue Service (IRS) to be used by the offeror to report income tax and other returns. It may be either a Social Security Number or an Employer Identification Number.

Unique entity identifier (UEI) has the meaning provided in the clause at FAR 52.204-13, System for Award Management-Maintenance, of this solicitation.

(b) Identifiers. The Offeror shall obtain and provide the following identifying information:

(1) Unique entity identifier (UEI).

(i) The Offeror shall obtain a UEI to register in SAM. The Government will independently validate the existence and uniqueness of the Offeror before assigning a UEI to the Offeror. Go to https://www.sam.gov for instructions on obtaining a UEI.

(ii) The Offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "Unique Entity Identifier" followed by the UEI that identifies the Offeror's name and address exactly as stated in the offer. The Offeror shall also enter its EFT indicator, if applicable.

(iii) The Contracting Officer will use the UEI to verify that the Offeror has an active Federal Government contracts registration in SAM.

(2) Taxpayer identification number (TIN).

(i) The Offeror shall provide its TIN or related information to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d); reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M; and implementing regulations issued by the IRS. The Offeror shall consent for TIN validation; and

(3) Commercial and Government Entity (CAGE) code.

(i) The Offeror shall provide a CAGE code and legal business name (Do not use a "doing business as" name) for-

(A) Itself;

(B) Its immediate owner(s), if any;

(C) Its highest-level owner, if any; and

(D) Any predecessor(s), or predecessor of an Offeror's predecessor, that held a Federal contract or grant within the last three years.

(ii) If the Offeror is in the United States or its outlying areas and does not already have a CAGE code assigned, the DLA CAGE Branch will assign a CAGE code to the Offeror as a part of the SAM registration process. For information on obtaining a CAGE code go to https://cage.dla.mil/.

(iii) The Offeror shall get from any immediate and/or highest-level owner(s) their respective CAGE code(s) to provide the code(s) as part of the registration (FAR 52.204-7(b)(3)(i)).

(iv) If the Offeror is located outside of the United States or its outlying areas, and does not already have a CAGE code assigned, the Offeror may obtain a CAGE code as indicated in the following table.

If the Offeror is…	Then…
Located in a country that is a member of the North Atlantic Treaty Organization (NATO) or a sponsored nation	Contact the appropriate National Codification Bureau (https://www.nato.int/structur/ac/135/about/contacts)
Located in a country that is not a member of NATO or a sponsored nation	Contact the NATO Support and Procurement Agency (NSPA) (https://eportal.nspa.nato.int/AC135Public/scage/CageList.aspx)

(c) Representations and certifications.

(1) The following FAR solicitation provisions contain entity-level representations and certifications that the Offeror shall submit as part of their Federal Government contracts registration in SAM:

Provision Title Date
52.204-5 Women-Owned Business (Other Than Small Business) Oct 2014
52.209-2 Prohibition on Contracting with Inverted Domestic Corporations-Representation Nov 2015
52.209-5 Certification Regarding Responsibility Matters Aug 2020
52.209-11 Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law Feb 2016
52.219-1 Small Business Program Representations Feb 2024
52.219-1 Alt I Small Business Program Representations, with its Alternate I Feb 2024
52.219-1 Alt II Small Business Program Representations, with its Alternate II Mar 2023
52.226-2 Historically Black College or University and Minority Institution Representation Oct 2014
(2) By submitting its offer, the Offeror verifies that, as of the date of its offer, its representations and certifications posted electronically in SAM for the provisions listed in paragraph (c)(1) of this provision are current, accurate, and complete. The Offeror's representations and certifications in SAM are hereby incorporated by reference into its offer.

(d) Other information. The Offeror shall provide more information on its business operations and type that is necessary to be considered for award of certain contracts and financial information necessary to receive payment under contracts.

(End of provision)

52.211-14 Notice of Priority Rating for National Defense, Emergency Preparedness, and Energy Program Use. 2008-04

Notice of Priority Rating for National Defense, Emergency Preparedness, and Energy Program Use (Apr 2008)

Any contract awarded as a result of this solicitation will be **DO-C2** rated order; DO rated order certified for national defense, emergency preparedness, and energy program use under the Defense Priorities and Allocations System (DPAS) (15 CFR700), and the Contractor will be required to follow all of the requirements of this regulation.

(End of provision)

52.215-1	Instructions to Offerors-Competitive Acquisition. (Deviation 2026-O0038)	2026-02

Instructions to Offerors-Competitive Acquisition (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

In writing, writing, or written means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

Proposal modification is a change made to a proposal before the request for proposal closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision is a change to material elements of a proposal made after the request for proposal closing date, at the request of or as allowed by a Contracting Officer, as the result of negotiations.

Time, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) Amendments to requests for proposals. If this request for proposal (RFP) is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this RFP by the date and time specified in the amendment(s).

(c) Submission, modification, revision, and withdrawal of proposals.

(1)

(i) Proposals and modifications to proposals shall be-

(A) Submitted using the method and the format specified in the RFP;

(B) Addressed to the office specified in the RFP; and

(C) Showing the time and date specified for receipt, the RFP number, and the name and address of the offeror.

(ii) Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i)(B) and (C) of this provision.

(2) The first page of the proposal must show-

(i) The RFP number;

(ii) The name, address, and telephone number of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the RFP and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone number (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this RFP; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3)

(i) Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the Government office designated in the RFP by the time specified in the RFP. If no time is specified in the RFP, the time for receipt is 4:30 p.m., local time, for the designated

Government office on the date that proposal or revision is due.

(ii)

(A) Any proposal, modification, or revision received at the Government office designated in the RFP after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and-

(1) If it was transmitted through an electronic commerce method authorized by the RFP, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the RFP, and urgent Government requirements preclude amendment of the RFP, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the RFP on the first work day on which normal Government processes resume.

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral RFPs may be withdrawn orally. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the RFP, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this RFP in English, unless otherwise permitted by the RFP, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the RFP.

(6) Offerors may submit modifications to their proposals at any time before the RFP closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) Offer expiration date. Proposals in response to this RFP will be valid for the number of days specified on the RFP cover sheet (unless a different period is proposed by the offeror).

(e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall-

(1) Mark the title page with the following legend:

Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award.

(1) The Government intends to award a contract or contracts resulting from this RFP to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the RFP.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without negotiations with offerors (except clarifications as described in FAR 15.202(b)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct negotiations if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly evaluated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(8) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(9) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further

action by either party.

(10) If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(i) The agency's evaluation of the significant weaknesses or deficiencies in the debriefed offeror's offer.

(ii) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.

(iii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(iv) A summary of the rationale for award.

(v) For acquisitions of commercial products, the make and model of the product to be delivered by the successful offeror.

(vi) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the RFP, applicable regulations, and other applicable authorities were followed by the agency.

(vii) For DoD contracts in excess of $10 million but not in excess of $100 million with a small business or nontraditional defense contractor (10 U.S.C. 3014), an option for the contractor to request disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(viii) For award of a DoD contract in excess of $100 million, disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(End of provision)

52.215-1	Instructions to Offerors-Competitive Acquisition.	2026-02	Alternate I	2026-02

(Deviation 2026-O0038)
(Alternate I)

Alternate I-(Feb 2026) (Deviation 2026-O0038). As prescribed in 15.110(a)(1), substitute the following paragraph (f)(4) for paragraph (f)(4) of the provision:

(f)(4) The Government intends to evaluate proposals and award a contract after conducting negotiations with offerors whose proposals have been determined to be within the competitive range. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals. Therefore, the offeror's initial proposal should contain the offeror's best terms from a price and technical standpoint.

52.215-16 Facilities Capital Cost of Money. 2003-06

Facilities Capital Cost of Money (June 2003)

(a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in FAR 31.205-10(b) are met. One of the allowability criteria requires the prospective Contractor to propose facilities capital cost of money in its offer.

(b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

(End of provision)

52.215-22	Limitations on Pass-Through Charges-Identification of Subcontract Effort. (Deviation 2026-O0038)	2026-02

Limitations on Pass-Through Charges-Identification of Subcontract Effort (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. Added value, excessive pass-through charge, subcontract, and subcontractor, as used in this provision, are defined in the clause of this request for proposals entitled "Limitations on Pass-Through Charges" (FAR 52.215-23).

(b) General. The offeror's proposal shall exclude excessive pass-through charges.

(c) Performance of work by the Contractor or a subcontractor.

(1) The offeror shall identify in its proposal the total cost of the work to be performed by the offeror, and the total cost of the work to be performed by each subcontractor, under the contract, task order, or delivery order.

(2) If the offeror intends to subcontract more than 70 percent of the total cost of work to be performed under the contract, task order, or delivery order, the offeror shall identify in its proposal-

(i) The amount of the offeror's indirect costs and profit/fee applicable to the work to be performed by the subcontractor(s); and

(ii) A description of the added value provided by the offeror as related to the work to be performed by the subcontractor(s).

(3) If any subcontractor proposed under the contract, task order, or delivery order intends to subcontract to a lower-tier subcontractor more than 70 percent of the total cost of work to be performed under its subcontract, the offeror shall identify in its proposal-

(i) The amount of the subcontractor's indirect costs and profit/fee applicable to the work to be performed by the lower-tier subcontractor(s); and

(ii) A description of the added value provided by the subcontractor as related to the work to be performed by the lower-tier subcontractor(s).

(End of provision)

52.216-1	Type of Contract. (Deviation 2026-O0038)	2026-02

Type of Contract (Feb 2026) (Deviation 2026-O0038)

The Government contemplates award of a **Firm-Fixed-Price (F-F-P)** contract resulting from this solicitation.

(End of provision)

52.222-5	Construction Wage Rate Requirements-Secondary Site of the Work. (Deviation 2026-O0038)	2026-02

Construction Wage Rate Requirements-Secondary Site of the Work (Feb 2026) (Deviation 2026-O0038)

(a)

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

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

(b)

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

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

(End of provision)

52.225-10	Notice of Buy American Requirement-Construction Materials.	2014-05

Notice of Buy American Requirement-Construction Materials (May 2014)

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

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

(c) Evaluation of offers.

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

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

(d) Alternate offers.

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

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

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

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

(ii) May be accepted if revised during negotiations.

(End of provision)

52.228-1 Bid Guarantee. 1996-09

Bid Guarantee (Sept 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, *e.g.,* bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds-

(1) To unsuccessful bidders as soon as practicable after the opening of bids; and

(2) To the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be **20%** of the bid price or **$3,000,000.00,** whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of clause)

52.232-28 Invitation to Propose Performance-Based Payments. 2000-03

Invitation to Propose Performance-Based Payments (Mar 2000)

(a) The Government invites the offeror to propose terms under which the Government will make performance-based contract financing payments during contract performance. The Government

will consider performance-based payment financing terms proposed by the offeror in the evaluation of the offeror's proposal. The Contracting Officer will incorporate the financing terms of the successful offeror and the FARclause, Performance-Based Payments, at FAR 52.232-32, in any resulting contract.

(b) In the event of any conflict between the terms proposed by the offeror and the terms in the clause at FAR 52.232-32, Performance-Based Payments, the terms of the clause at FAR 52.232-32 shall govern.

(c) The Contracting Officer will not accept the offeror's proposed performance-based payment financing if the financing does not conform to the following limitations:

(1) The Government will make delivery payments only for supplies delivered and accepted, or services rendered and accepted in accordance with the payment terms of this contract.

(2) The terms and conditions of the performance-based payments must-

(i) Comply with FAR 32.1004;

(ii) Be reasonable and consistent with all other technical and cost information included in the offeror's proposal; and

(iii) Their total shall not exceed 90 percent of the contract price if on a whole contract basis, or 90 percent of the delivery item price if on a delivery item basis.

(3) The terms and conditions of the performance-based financing must be in the best interests of the Government.

(d) The offeror's proposal of performance-based payment financing shall include the following:

(1) The proposed contractual language describing the performance-based payments (see FAR 32.1004 for appropriate criteria for establishing performance bases and performance-based finance payment amounts).

(2) A listing of-

(i) The projected performance-based payment dates and the projected payment amounts; and

(ii) The projected delivery date and the projected payment amount.

(3) Information addressing the Contractor's investment in the contract.

(e) Evaluation of the offeror's proposed prices and financing terms will include whether the offeror's proposed performance-based payment events and payment amounts are reasonable and consistent with all other terms and conditions of the offeror's proposal.

(End of Provision)

52.233-2	Service of Protest. (Deviation 2026-O0038)	2026-02

Service of Protest (Feb 2026) (Deviation 2026-O0038)

(a) Protests, (as defined in FAR 33.102), that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), must be served on the Contracting Officer identified in the solicitation by obtaining written and dated acknowledgment of receipt from them.

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

US Army Corps of Engineers

ATTN: CESWF-CT, Shayla J. Lucas

819 Taylor Street, Rm# 2A17

Fort. Worth, TX 76102-0300

Email: SWF-Protest@usace.army.mil

(End of provision)

52.252-1	Solicitation Provisions Incorporated by Reference.	1998-02

Solicitation Provisions Incorporated by Reference (Feb 1998)

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

Revolutionary Federal Acquisition Regulation Overhaul (RFO):

https://www.acquisition.gov/far-overhaul

Department of Defense FAR Supplement (DFARS) RFO Class Deviations:

https://www.acq.osd.mil/dpap/dars/dfars_far_overhaul_class_deviations.html

USACE Acquisition Instruction (UAI):

https://www.usace.army.mil/Business-With-Us/Contracting/Resources/

(End of provision)

52.252-3	Alterations in Solicitation.	1984-04

Alterations in Solicitation (Apr 1984)

Portions of this solicitation are altered as follows:

____ ____ ____

(End of clause)

52.252-5	Authorized Deviations in Provisions.	2020-11

Authorized Deviations in Provisions (Nov 2020)

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

(b) The use in this solicitation of any **RFO/DFARS overhaul** (48 CFR Chapter **2**) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of provision)

DFARS Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.204-7019	Notice of NIST SP 800-171 DoD Assessment Requirements.	2023-11		

NOTICE OF NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (NOV 2023)

(a) Definitions.

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

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

(b) Requirement. In order to be considered for award, if the Offeror is required to implement NIST SP 800-171, the Offeror shall have a current assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) (see 252.204-7020) for each covered contractor information system that is relevant to the offer, contract, task order, or delivery order. The Basic, Medium, and High NIST SP 800-171 DoD Assessments are described in the NIST

SP 800-171 DoD Assessment Methodology located at https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf.

(c) Procedures.

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

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

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

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

(i) The email shall include the following information:

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

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

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

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

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

(D) Date the assessment was completed.

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

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

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

System Security Plan CAGE Codes supported by this plan
Brief description of the plan architecture Date of assessment Total
Score Date score of 110 will achieved

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

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

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

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

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

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

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

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

(3) Accessibility.

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

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

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

(End of provision)

252.204-7024	Notice on the Use of the Supplier Performance Risk System.	2023-03

NOTICE ON THE USE OF THE SUPPLIER PERFORMANCE RISK SYSTEM (MAR 2023)

(a) Definitions. As used in this provision-

"Item risk" means the probability that a product, based on intended use, will introduce performance risk resulting in safety issues, mission degradation, or monetary loss.

"Price risk" means a measure of whether a proposed price for a product or service is consistent with historical prices paid for that item or service.

"Supplier risk" means the probability that an award may subject the procurement to the risk of unsuccessful performance or to supply chain risk (see Defense Federal Acquisition Regulation

Supplement 239.7301).

(b) The Supplier Performance Risk System (SPRS), available at https://piee.eb.mil/, will be used in the evaluation of the Quoter or Offeror's performance. SPRS retrieves item, price, quality, delivery, and contractor information on contracts from Government reporting systems in order to develop risk assessments.

(c) The Contracting Officer will consider SPRS risk assessments during the evaluation of quotations or offers received in response to this solicitation as follows:

(1) Item risk will be considered to determine whether the procurement represents a high performance risk to the Government.

(2) Price risk will be considered in determining if a proposed price is consistent with historical prices paid for a product or a service or otherwise creates a risk to the Government.

(3) Supplier risk, including but not limited to quality and delivery, will be considered to assess the risk of unsuccessful performance and supply chain risk.

(d) SPRS risk assessments are generated daily. Quoters or Offerors are able to access their risk assessments by following the access instructions in the SPRS user's guide available at https://www.sprs.csd.disa.mil/reference.htm. Quoters and Offerors are granted access to SPRS for their own risk assessment classifications only. SPRS reporting procedures and risk assessment methodology are detailed in the SPRS user's guide. The method to challenge a rating generated by SPRS is also provided in the user's guide. SPRS evaluation criteria are available at https://www.sprs.csd.disa.mil/pdf/SPRS_DataEvaluationCriteria.pdf.

(e) The Contracting Officer may consider any other available and relevant information when evaluating a quotation or an offer.

(End of provision)

252.204-7025	Notice of Cybersecurity Maturity Model Certification Level Requirements.	2025-11

NOTICE OF CYBERSECURITY MATURITY MODEL CERTIFICATION LEVEL REQUIREMENTS (NOV 2025)

(a) *Definitions*. As used in this provision, "controlled unclassified information (CUI)," "current," "Cybersecurity Maturity Model Certification (CMMC) status," "Cybersecurity Maturity Model Certification unique identifier (CMMC UID)," "Federal contract information (FCI)", and "plan of action and milestones" have the meaning given in the Defense Federal Acquisition Regulation Supplement 252.204-7021, Contractor Compliance With the Cybersecurity Maturity Model Certification Level Requirements, clause of this solicitation.

(b)(1) *Cybersecurity Maturity Model Certification (CMMC) level*. The CMMC level required by this solicitation is: ***CMMC Level 1 (Self)***. This CMMC level, or higher (see 32 CFR part 170), is required prior to award for each contractor information system that will process, store, or transmit Federal contract information (FCI) or controlled unclassified information (CUI) during performance of the contract.

(2) The Offeror will not be eligible for award of a contract, task order, or delivery order resulting from this solicitation if the Offeror does not have, for each of the contractor information systems that will process, store, or transmit FCI or CUI and that will be used in performance of a contract resulting from this solicitation-

(i) The current CMMC status entered in the Supplier Performance Risk System (SPRS) (*https://piee.eb.mil*) at the CMMC level required by paragraph (b)(1) of this provision; and

(ii) A current affirmation of continuous compliance with the security requirements identified at 32 CFR part 170 in SPRS.

(c) *Plan of action and milestones*. If the Offeror has a CMMC Status of Conditional, the Offeror shall successfully close out a valid plan of action and milestones (32 CFR 170.21) to achieve a CMMC Status of Final.

(d) *CMMC unique identifiers*. The Offeror shall provide, in the proposal, the CMMC unique identifier(s) (CMMC UIDs) issued by SPRS for each contractor information system that will process, store, or transmit FCI or CUI during performance of a contract, task order, or delivery order resulting from this solicitation. The Offeror also shall update the list when new CMMC UIDs are generated in SPRS. The CMMC UIDs are provided in SPRS after the Offeror enters the results of self-assessment(s) for each such information system.

(End of provision)

252.215-7012	Requirements for Submission of Proposals via Electronic Media.	2018-01

REQUIREMENTS FOR SUBMISSION OF PROPOSALS VIA ELECTRONIC MEDIA (JAN 2018)

The Offeror shall submit the cost portion of the proposal via the following electronic media: ____ [Insert media format, e.g., electronic spreadsheet format, electronic mail, etc.]

(End of provision)

252.215-7013	Supplies and Services Provided by Nontraditional Defense Contractors.	2023-01

SUPPLIES AND SERVICES PROVIDED BY NONTRADITIONAL DEFENSE CONTRACTORS (JAN 2023)

Offerors are advised that in accordance with 10 U.S.C. 3457, supplies and services provided by a nontraditional defense contractor, as defined in DFARS 202.101, may be treated as commercial products or commercial services. The decision to apply commercial product or commercial service procedures to the procurement of supplies and services from a nontraditional defense contractor does not require a commercial product or commercial service determination and does not mean the supplies or services are commercial.

(End of provision)

SECTION 00 21 16
INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

1. GENERAL DESCRIPTION OF WORK

This construction project is for the expansion of hangar doors at Facility B90176, Fort Hood, Texas, to support the HADES mission and accommodate the ME-11B (Bombardier Global 6500) aircraft. The project includes replacing two existing hangar doors each with a single 120-foot-wide rolling sectional door of equal height vertical fabric door with two sections of increased height, requiring structural modifications to the pre-engineered metal building (PEMB).

Exterior improvements involve extending the trench drain and adjusting adjacent man-doors and wall mounted utility lines. Interior work consists of installing higher-capacity motors for the new door, refinishing and restriping affected areas of the hangar floor, making minor partitions and finish modifications to support new flight group requirements

2. OFFEROR'S QUESTIONS AND COMMENTS

a. All questions and/or comments are to be submitted via ProjNet at http://www.projnet.org/projnet. To submit and review bid inquiry items, bidders will need to be a current registered user or self-register into system. To self-register go to web page, enter email and bidder inquiry key, click Quick Add link, select agency USAGE, enter Key for this solicitation listed below, and your e-mail address, click Continue. Fill in all required information and click Add User. Verify that information on next screen is correct and click continue. From this page you may view all bidder inquiries or add inquiry. Bidders will receive an acknowledgement of their question via email, followed by an answer to their question after it has been processed by our technical team.

b. The Solicitation Number is: **W9126G26RA087**
The Bidder Inquiry Key is: **95NKA6-GDCFPI**

c. Last day to submit ProjNet questions is seven calendar days prior to bid closure date in order to ensure adequate time is allotted to form an appropriate response and amend the solicitation, if necessary. If the system is not closed in a timely manner, an inquiry posted within seven calendar days of the receipt of proposals will still be regarded as untimely and may not be afforded a substantive response.

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d. Offerors are requested to ask only one question per inquiry. If multiple questions are included, only the first one will be answered.

e. Oral explanations or instructions are not binding. Any information given to an offeror, whether oral or through ProjNet, that impacts the solicitation and/or offer will not be binding unless given in the form of a written amendment to the solicitation.

f. Offerors are requested to review the specification in its entirety, review the Bidder Inquiry System for answers to questions prior to submission of a new inquiry. The call center operates weekdays from 8AM to 5PM U.S. Central Standard Time Zone (Chicago). The telephone number for the Call Center is 833-389-1097 and 217-367- 3273.

3. PROPOSAL EXPENSES AND PRE-CONTRACT COSTS

This solicitation does not commit the Government to pay as a direct charge any costs incurred by the Offeror in the preparation and submission of its proposal or revisions. A stipend is not authorized.

4. NEGOTIATIONS

The Government intends to evaluate proposals and award a contract without negotiations with offerors (except clarifications as described in RFO 15.202(a)(2)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The concept of a simultaneous competitive range and a common cut-off date for Final Proposal Revisions does not apply to this acquisition methodology.

5. HIGHEST TECHNICALLY RATED WITH A FAIR AND REASONABLE PRICE (HTR-FRP) APPROACH

Award will be made to the responsible Offeror with the highest technically rated proposal found to have a fair and reasonable price. The HTR-FRP approach prioritizes technical merit and forbids the tradeoff between non-price factors and price. This approach prioritizes the best possible performance, provided the price is determined to be fair and reasonable. Here, all proposals are initially evaluated based solely on the non-price factors specified in the RFP. Only the price of the highest-ranked technical proposal is then evaluated to ensure it is fair and reasonable. Price is not an evaluation factor for the purpose of ranking proposals; it will be evaluated for fairness and reasonableness for the highest technically rated proposal in accordance with RFO 15.103-3.

6. SITE VISIT

Pursuant to Contract Clause "RFO 52.236-3, Site Investigation and Conditions Affecting the Work," prospective offerors will be permitted to inspect the site where services are to be performed and to satisfy themselves as to all general and local conditions that may affect the cost of performance of the Contract to the extent such information is reasonably obtainable. Offerors are urged and expected to inspect the site where the work will be performed. See the site visit information below:

Date: 22 June 2026
Time: 10:00am, CST
Location: Central Texas Area Office (CTAO) at Fort Hood

Bldg. 4617 72nd St and Sante Fe Avenue
Ft. Hood, TX 76544
POC: Brad D. Butts
EMAIL: brad.d.butts@usace.army.mil
Phone: (254)220-2126

Note: Offerors and subcontractors wishing to participate must submit a complete listing of all personnel to attend the preproposal site visit, via encrypted email, to the referenced Base Access POC, a minimum of five (5) business days prior to the preproposal site visit.

7. PROPOSAL SUBMISSION

a. GUIDING PRINCIPLES FOR PROPOSAL SUBMISSION & REVIEW

This section outlines the foundational principles governing the submission and evaluation of all proposals. Adherence to these principles is mandatory.

(1) Completeness and Accuracy: Proposals must be submitted with all required information. Assumptions made by an offeror in place of required data may render the proposal non-compliant. If specific information is unavailable, this must be explicitly stated and explained.

(2) Regulatory Adherence and Citation: All submissions are reviewed for strict adherence to the current Revolutionary Federal Acquisition Regulation (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), Army Federal Acquisition Regulation Supplement (AFARS), USACE Acquisition Instructions (UAI), and all related policies, including all changes from the Revolutionary FAR Overhaul (RFO).

(3) Currency of Information: Offerors are solely responsible for ensuring their proposals comply with all regulations and amendments in effect at the time of solicitation.

(4) Mandatory Submission Requirements: Failure to provide the following documentation with the proposal may eliminate it from further consideration.

b. PROPOSAL SUBMISSION REQUIREMENTS

(1) Each volume shall be submitted electronically via the Procurement Integrated Enterprise Environment (PIEE) Solicitation module; no hard copies will be accepted. Any portion of the proposal that is changed (as a result of negotiations or proposal revisions) should be annotated and dated. Each volume shall be clearly labeled with its Title and Volume number. Each paragraph should be single spaced and shall be separated by at least one blank line. All narratives shall be in Adobe PDF format and shall be on 8 ½ x 11 size pages and a standard, 12-point minimum font size applies. Schedule Diagram, Drawings shall be in Adobe PDF format and shall be on 11 x 17 size pages. Where page limitations are specified, 11 x 17 size

pages will be considered as one (1) page. Arial or New Times Roman fonts are required.

Page limitations, where specified in the RFP, shall be considered a maximum. Pages that exceed the required page limitations will not be evaluated. Additional pages over the maximum allowed will be removed or not read and will not be evaluated by the Government. Tables and illustrations may use a reduced font size no less than 8-point and may be produced in landscape mode. All volumes of the proposal must be received by the closing date and time set for receipt of proposals. Offerors may use compressions utility software such as WinZip or PKZip to reduce file size and facilitate transmission.

Offerors are advised to follow the PIEE instructions for uploading files. Additional instructions/guidance can be found at https://pieetraining.eb.mil/wbt/sol/Posting_Offer.pdf

Interested parties shall submit responses no later than the date specified on the solicitation document. The time & date of proposal receipt will be the delivery time & date recorded within PIEE suite at https://piee.eb.mil/. Do not assume that electronic submission will occur instantaneously. Large files may take some time to upload.

Offerors should time their upload effort with prudence by not waiting until the last few minutes—this will allow for unexpected delays in the transmittal process and troubleshooting. It is the offeror's responsibility to obtain written confirmation of receipt of all electronic files of the full proposal by the Fort Worth District Contracting office. In the event that the Solicitation Module is down, an alternate method for proposal submission will be provided only after obtaining approval from the Contracting Officer **shayla.j.lucas@usace.army.mil** to use an alternate submission method. Offerors are responsible for ensuring electronic copies are virus-free and shall run an anti-virus scan before submission.

(2) The following volumes of material shall be submitted:

Volume	Title	Digital Copies	Maximum Pages
I	TECHNICAL PROPOSAL	1	20 Pages
II	PRICE PROPOSAL	1	No page limitation

(3) Proposal Formats/Sections:

(a) The first page of the proposal for each volume must include the elements found at 52.215-1(c)(2).

(b) Table of Contents. Each volume of the proposal shall contain a detailed table
of contents and must be bookmarked. If more than one Adobe PDF file is used for a volume, the complete table of contents shall be included in each. The offerors shall not submit any materials not required by this solicitation.

(c) Do not cross-reference similar material in the Past Performance/Technical Proposal with the Price Proposal. **No dollar amounts from Volume II shall be included in Volume I.**

(d) As this is a competitive negotiation acquisition, there is no public bid opening, and no information will be given out as to the number of offerors or the results of the competition until all awards are made.

(e) Bonds Format: Offerors shall submit bid bonds (Standard Form 24) in electronic format. Electronic copies of bid bonds shall be included in Volume II: Offerors Certifications and Price. Hard copies of bid bonds with the raised seal are no longer required to be mailed in at this time and are not to be sent to the contracting office. Verification of Bid Bonds with sureties will be completed during the evaluation process and before award. Bid bond submissions shall be due by the proposal due date and time. Offerors are responsible for the accurate submission of the Bid Bonds with all signatures and seals applied.

(4) Joint Venture and LLC Proposal Requirements:

(a) For Joint Ventures:

- Joint Venture Agreement: A complete copy of the JV agreement and any addendum must be submitted with the proposal. For 8(a), HUBZone, or Mentor-Protege JVs, the agreement must comply with **13 CFR Part 124**, **13 CFR Part 126**, and **13 CFR Part 125**, respectively.
- Representations and Certifications: A small business JV offeror must submit the representation required in Section 00 45 00 and RFO solicitation provision 52.219-1, Small Business Program Representations, for all applicable small business categories (Small, SDVOSB, WOSB, EDWOSB, HUBZone).

(b) Limited Liability Companies (LLCs):

- Proof of Signature Authority: The offeror must submit a copy of the operating agreement or other documentation that clearly demonstrates the authority of the signatory to bind the LLC to the contract.

(c) Core Joint Venture (JV) Agreement Provisions:

The submitted JV Agreement should, at a minimum, contain the following provisions to be considered compliant. If the JV Agreement is general and does not address the resources and responsibilities specific to the proposed work, this must be addressed in an addendum.

- **Purpose & Management:** The agreement must state the specific purpose of the JV and designate the small business partner as the "managing venturer."
- **Ownership & Profit:** For a separate legal entity JV, the small business must own at least 51%. It must also state that profits will be distributed commensurately with the work performed by each partner.
- **Bank Account:** The agreement must provide for a special bank account in the name of the JV, requiring consent from all parties for any withdrawals.
- **Resources & Responsibilities:** The agreement must itemize the resources to be provided by each partner and specify each party's responsibilities for contract performance. For Mentor-Protégé JVs, reference 13 CFR 125.8(b)(vi) and (vii), for 8(a), reference 13 CFR 124.513(c)(6) and (7), and for HUBZone, reference 13 CFR 126.616(c)(6) and (7).
- **Performance & Records:** This agreement binds all parties, jointly and severally, to uphold the terms and guarantee the full performance of all contractual duties. All official records pertaining to this agreement shall be securely maintained at the designated office of the managing venturer.

(d) Performance of Work Requirements:

- **JV Work Share:** The joint venture as a whole must perform the applicable percentage of work required by the prime contract's limitation on subcontracting clause.
- **Small Business Work Share:** The small business partner(s) must perform at least 40% of the work done by the joint venture itself. This work must be substantive and not just administrative in nature. If the small business partner is not expected to exceed the 40% workshare on this project individually, the JV must submit the workshare (in dollars) between each partner on all other projects to support that the workshare for this contract will result in compliance with the 40% requirement for the aggregate workshare across all contracts.

c. <u>PROPOSAL FILES</u>

(1) Format. The submission shall be clearly indexed and logically assembled. Each volume shall be clearly identified and shall begin at the top of a page. All pages of each volume shall be appropriately numbered and identified by the complete company name, date and solicitation number in the header and/or footer.

(2) File Naming Convention:

Files submitted to PIEE shall be named as follows:

W9126G26RA087_COMPANY_NAME_VOLUME I
W9126G26RA087_COMPANY_NAME_VOLUME II

(3) Content Requirement.

(a) Each offeror must submit a TECHNICAL PROPOSAL (Volume I), OFFEROR'S CERTIFICATIONS AND PRICE PROPOSAL (Volume II). All volumes of the proposal must be submitted as separate volumes/files as outlined in paragraph 2 above. Do not cross-reference similar material between volumes.

(b) Proposals shall be received by the closing date and time set for receipt of proposals.

(c) Do not include exceptions to the terms and conditions of the solicitation in your proposal. Should the offer include any standard company terms and conditions that conflict with the terms and conditions of the solicitation, the offer may be determined "unacceptable" and thus ineligible for award. Should the offeror have any questions related to specific terms and conditions, these should be resolved prior to the submission of the offer.

(d) The data criteria specified for each factor identified in Section 00 22 16, shall be submitted as part of the proposal.

8. TARGET PRICE RANGE

The target price range for this project is between **$6,500,000.00 and $8,500,000.00.**

9. DEFINITIONS AND RATINGS

Significant Strength. An aspect of an Offeror's proposal with appreciable merit or will exceed specified performance or capability requirements to the considerable advantage of the Government during contract performance.

Strength. An aspect of an offeror's proposal with merit or will exceed specified performance or capability requirements to the advantage of the Government during contract performance.

Weakness. A flaw in the proposal that increases the risk of unsuccessful contract performance. See RFO 15.001.
Significant Weakness. A flaw in the proposal that appreciably increases the risk of unsuccessful contract performance. See RFO 15.001.

Deficiency. Is any part of an offer that does not conform to a material requirement of a RFP. A material requirement is one that affects price, quantity, quality, or delivery, or that the RFP requires to be met at the time of proposal submission. See RFO 15.001.

Uncertainty. Any aspect of a non-cost/price factor proposal for which the intent of the offer is unclear (e.g., more than one way to interpret the offer or inconsistencies in the proposal indicating that there may have been an error, omission, or mistake).

In accordance with the DOD Source Selection Guide, Section 3.1, the Army methodology for evaluating Technical Approach and Related Risk is the Combined Technical/Risk Rating (see Table below). This methodology considers risk, in conjunction with the strengths, weaknesses, significant weaknesses, uncertainties, and deficiencies in determining technical ratings.

Combined Technical/Risk Rating Method	
Rating	**Description**
Outstanding	Proposal demonstrates an exceptional approach and understanding of the requirements and contains multiple strengths and/or at least one significant strength, and risk of unsuccessful performance is low.
Good	Proposal indicates a thorough approach and understanding of the requirements and contains at least one strength or significant strength, and risk of unsuccessful performance is low to moderate.
Acceptable	Proposal meets requirements and indicates an adequate approach and understanding of the requirements, and risk of unsuccessful performance is no worse than moderate.
Marginal	Proposal has not demonstrated an adequate approach and understanding of the requirements, and/or risk of unsuccessful performance is high.
Unacceptable	Proposal does not meet requirements of the solicitation and, thus, contains one or more deficiencies and is unawardable, and/or risk of performance is unacceptably high.

Note: Risk will not be rated separately; the Adjective Risk Ratings table is provided to define risk that is included in the combined technical/risk ratings.

Adjectival Risk Rating	**Description**
Low	Proposal may contain weakness/weaknesses which have low potential to cause disruption of schedule, increased cost, or degradation of performance. Normal contractor emphasis and normal Government monitoring will likely be able to overcome any difficulties.
Moderate	Proposal contains a significant weakness or combination of weaknesses which may have a moderate potential to cause disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will likely be able to overcome any difficulties.

High	Proposal contains a significant weakness or combination of weaknesses which is likely to have high potential to cause significant disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will unlikely be able to overcome any difficulties.
Unacceptable	Proposal contains a deficiency or a combination of significant weaknesses that causes an unacceptable level of risk of unsuccessful performance.

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

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

Section 00 22 00 - Supplementary Instructions

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.217-5	Evaluation of Options. (Deviation 2026-O0038)	2026-02		

Evaluation of Options (Feb 2026) (Deviation 2026-O0038)

Except when it is determined in accordance with FAR 17.202(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

SECTION 00 22 16
DESIGN-BID-BUILD SELECTION PROCEDURES

Award will be made to the Offeror whose proposal represents the best overall value through the HTR-FRP approach. The HTR-FRP approach prioritizes technical merit and forbids the tradeoff between non-price factors and price. The approach prioritizes the best possible performance, provided the price is determined to be fair and reasonable. Here, all proposals are initially evaluated based solely on the non-price factors specified in the RFP. Only the price of the highest-ranked technical proposal is then evaluated to ensure it is fair and reasonable. The non-price evaluation factors are in descending order of importance: Past Performance and Construction Schedule. Price is not an evaluation factor for the purpose of ranking proposals; it will be evaluated for fairness and reasonableness for the highest technically rated proposal in accordance with RFO 15.103-3. Relative weights among technical factors are provided in this Section. The Source Selection Evaluation Board (SSEB) reviews, evaluates, and rates the proposals against the source selection criteria in the RFP.

BASIS FOR AWARD

The Contracting Officer will award a single firm-fixed-price contract to the Offeror responsible that submits the highest technically rated proposal with a price that is determined to be fair and reasonable. This source selection will be conducted in accordance with the HTR-FRP approach described in RFO 15.103-3. Under this approach, proposals will first be evaluated and ranked based on the non-price factors only. Price is not an evaluation factor for the purpose of ranking proposals and will not be considered during the technical evaluation. After the Source Selection Authority (SSA) determines the highest technically rated proposal, the price of only that proposal will be evaluated for fairness and reasonableness in accordance with RFO Subpart 15.4. If the price of the highest technically rated proposal is determined to be fair and reasonable, that proposal will be selected for award. If the price is determined not to be fair and reasonable, the Government will reject that offer and proceed to evaluate the price of the next highest technically rated proposal. This sequential approach will continue until a contract is awarded to the highest technically rated responsible offeror with a fair and reasonable price. The Government will not award a contract to an Offeror whose proposal contains a deficiency as defined in RFO 15.001.

VOLUME I: PAST PERFORMANCE/TECHNICAL PROPOSAL			
FACTOR	**LOCATION**	**DESCRIPTION**	**RELATIVE IMPORTANCE**
FACTOR 1	Vol I, TAB A	PAST PERFORMANCE	MOST IMPORTANT FACTOR
FACTOR 2	Vol I, TAB B	TECHNICAL APPROACH	LESS IMPORTANT THAN FACTOR 1

NOTE: All evaluation factors, other than price, when combined, are considered approximately equal to price.

FACTOR 1 - PAST PERFORMANCE:

TAB A - FACTOR 1 - PAST PERFORMANCE refers to the quality of relevant and recent project experience. This tab shall contain past performance information regarding same/similar projects that demonstrate the experience of the offeror and/or proposed team. The past performance evaluation factor assesses the degree of confidence the Government has in an offeror's ability to supply products and services that meet users' needs, based on a demonstrated record of performance.

A. Submission Requirements for Factor 1:

Offerors shall submit no more than five Government and/or commercial projects for Construction which are recent and relevant to the efforts required by this solicitation as defined below. Use the attached Construction Past Performance Worksheet (Attachment 1) to submit construction experience. Limit each worksheet to no more than three pages.

Relevant: Demonstrate the experience of the offeror and/or proposed team on projects same/similar in SIZE, SCOPE, and COMPLEXITY to that described in the solicitation. Offerors shall identify and describe the relevancies for each of the projects submitted compared to the scope of this project. The Government will evaluate the information provided in making the relevancy determination.

Recent: All projects submitted for construction experience must have been completed within six years from the date of the solicitation. The Government will consider projects completed within six (6) years of the solicitation issuance date to be recent. If a project is not recent, the Government will not evaluate it further.

If any firm has multiple functions or divisions, limit the project examples to those performed by the division or unit submitting the offer. If projects were design-bid-build, identify them as such. If the Offeror is a Joint Venture (JV) and past performance cannot be provided as a JV, each partner shall submit past performance information. Combined number of projects submitted shall be no more than the number allowed.

Past Performance Assessment Questionnaire (PPQ) (Attachment 2) included in the solicitation is provided for the offeror or its team members to submit to the client for each project the offeror includes in its proposal for Factor 1: Past Performance that does not have a final Contractor Performance Assessment Reporting System (CPARS) evaluation or is a non-Federal Government project. Ensure correct phone numbers and email addresses are provided for the client point of contact. Completed PPQ's should be submitted with your proposal. If the offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the offeror should complete and submit with the proposal the first page of the PPQ which will provide contract and client information for the respective project(s).

Offerors should follow-up with clients/references to ensure timely submittal of questionnaires. If the client requests, questionnaires may be submitted directly to the Government's point of contact, Shayla J. Lucas via email at **shayla.j.lucas@usace.army.mil** prior to proposal closing date. Offerors shall not incorporate by reference into their proposal PPQs previously submitted for other RFPs. However, this does not preclude the Government from utilizing previously submitted PPQ information in the past performance evaluation. Do not request PPQs on projects that have a final CPARS evaluation. If a final CPARS evaluation exists and a PPQ is provided for the same project, the CPARS evaluation will be reviewed as the official past performance record for the project, and the PPQ will not be considered by the Source Selection Board or the SSA.

For USACE or other DoD projects which are underway but do not yet have a final CPARS evaluation, one PPQ per contract may be submitted; to be considered, the PPQ shall be signed by the Administrative Contracting Officer (ACO) or Contracting Officer for the contract.

Offerors are not required to submit any additional past performance information. The Government will utilize CPARS, and any other information deemed relevant to assess confidence in the Offeror's ability to perform.

Offerors are encouraged to submit completed CPARS for projects submitted for past performance experience.

Offerors may submit performance recognition documents received within the last six years, such as awards, award fee determinations, customer letters of commendation, and any other forms of performance recognition. There is no page limit for the performance recognition documents.

Offerors may submit information on past performance issues and corrective actions taken to prevent these issues from reoccurring. Discuss whether these corrective actions have been implemented on projects awarded subsequent to the performance issues, the effectiveness of the corrective actions, and POC information for the subsequent projects. Limit to no more than three pages, if submitted.

In addition to the above, the Government may review any other sources of information for evaluating past performance. Other sources may include, but are not limited to, past performance information retrieved through CPARS, using all CAGE/UEI numbers of team members (partnership, joint venture, teaming arrangement, or parent company/subsidiary/affiliate) identified in the offeror's proposal, inquiries of owner representative(s), Electronic Subcontract Reporting System (eSRS), and any other known sources not provided by the offeror.

While the Government may elect to consider data from other sources, the burden of providing detailed, current, accurate and complete past performance information rests with the Offeror.

B. Evaluation Criteria for Factor 1:

1. Relevancy Determination

a. The Government will evaluate the Offeror's past performance to determine how relevant each of the past performance projects is to the project under consideration. The Government may place greater value on projects performed as a prime contractor than as a subcontractor, depending upon overall role and relevancy considerations. Federal Government project past performance will not be rated inherently more important than non-Federal Government project past performance.

b. Projects completed outside the defined time period for recency will not be considered relevant to this solicitation.

c. More relevant past performance will typically be a stronger predictor of future success and have more influence on the past performance confidence assessment than past performance of lesser relevance.

d. Projects with lower degrees of relevance will not be as strong of predictors of likely future contract performance success and will typically have less influence on the final past performance confidence rating.

e. Projects that have little or no relevance typically do not influence the performance confidence rating; however, any projects with adverse past performance could reflect larger company-wide concerns and may impact upon the past performance confidence rating.

2. Confidence Determination

a. The SSEB will review the past performance information available to determine the quality and usefulness as it applies to performance confidence assessment. If the Government cannot establish the Offeror's relevant past performance, it reserves the right to utilize the PPQ to conduct telephone interviews on any source it deems relevant to the evaluation. References may be asked to comment on items such as quality of construction, timeliness, management of the work, subcontractor management, including timely payment to subs or suppliers, safety, relations between owner and designer or contractor, level of support for such things as as-built documentation, O&M manuals, training, correcting construction errors, warranty work, etc.

b. The Government's evaluation is not limited to past performance information on the cited example projects.

c. In determining the performance confidence rating for Past Performance, the degree of relevancy/recency of each of the considered efforts; the overall performance record of the offeror on each contract assessed; number and severity of problems, the demonstrated effectiveness of corrective actions taken (not just planned or promised); recognition documents; and trend data will be evaluated. Projects with higher degrees of relevance will typically have a greater influence on the final performance confidence rating. Projects with lower degrees of relevance will typically have less influence on the final performance confidence rating however, any projects with adverse past performance could reflect larger company-wide concerns and may impact upon the past performance confidence rating. Projects which are comparatively more recent may be better predictors of likely future success than older projects. The resulting relevant/recent assessment conclusions will then be combined, along with the assessed quality of performance on prior projects, to arrive at a single performance confidence rating for the Past Performance Factor.

d. The confidence rating will be established based on the past performance of the firms or that of its predecessor, if applicable. An entity may not establish past performance based on the past performance of its key personnel apart from that of the entity. If the Government does not obtain past performance information and cannot establish a past performance record for the Offeror through other sources, a rating of "Neutral Confidence" will be assigned.

e. If adverse past performance information is received and the Government initiates discussions, the offeror will be given the chance to respond to this information. CPARS included in the official record will be treated as if the offeror has already had an opportunity to address any adverse past performance identified during the evaluation process.

f. Although the SSEB may not rate an offeror that lacks recent, relevant past performance favorably or unfavorably with regard to past performance, the SSA may determine that a "Substantial Confidence" or "Satisfactory Confidence" past performance rating is worth more than a "Neutral Confidence" past performance rating in a best value tradeoff as long as the determination is consistent with stated solicitation criteria.

C. Evaluation and Rating System

a. A single, overall confidence rating shall be assigned to Past Performance.

b. The relevancy determination will assess the Offeror's past performance on a project-by-project basis to determine how relevant a recent effort accomplished by the Offeror is to the effort to be acquired under this solicitation.

c. The confidence rating assesses the risks associated with each Offeror's likelihood of success in performing the requirements stated in the RFP based on the Offeror's demonstrated performance on recent projects. SSEB members and the SSA may use personal knowledge or information from other sources in its evaluation of an Offeror's past performance, provided such information is consistent with the established evaluation criteria of the RFP. Offerors that have no relevant performance record will be given a neutral confidence rating.

FACTOR 2 – TECHNICAL APPROACH:

TAB B - FACTOR 2 - TECHNICAL APPROACH

A. Submission Requirements for Factor 2:

Offerors shall provide a comprehensive, well-organized description of their team's approach to successfully executing the requirements outlined in the RFP. The narrative should demonstrate a clear understanding of the scope of work, illustrate the offeror's capability to meet or exceed performance expectations and describe how the work will be delivered on time and within budget.

FACTOR 2 shall be limited to 20 pages. Tables, illustrations, and drawings are excluded from this limitation.

The Technical Approach shall include, at a minimum, the following elements:

1. Project Schedule

• Provide a detailed narrative and accompanying graphic schedules (e.g., Gantt chart) that clearly outlines all major features of work, milestones, and sequencing of work. Graphic schedules shall include, as a minimum, Activity ID, Activity Description, Original Duration, early start and early finish dates, and total float for each activity.

• The schedule must reflect a logical progression of tasks and demonstrate the reasonableness and realism of the proposed duration.

• For proposal evaluation purposes only, assume Notice to Proceed (NTP) will be issued on 10 September 2026.

NOTE: The Technical Approach factor shall include a project schedule demonstrating completion of all contract work per duration identified in Section 01 00 00.00 44

2. Disruption Mitigation

This project, located at Fort Hood, Texas, presents challenges which can impact project timelines, costs, safety, and requires careful planning and innovative solutions.

• Explain your strategy for minimizing schedule delays and cost growth, and for maintaining project safety as well as disruption to ongoing operations and adjacent activities during the construction effort.

• Include any innovative methods, staging techniques, or sequencing approaches intended to reduce impacts.

3. Project Execution Plan

Provide a comprehensive work plan describing how the project will be managed and executed from start to finish. At a minimum, address the following areas:

• Site mobilization and demobilization

• Subcontractor management

• Safety management and compliance

• Environmental compliance and sustainability measures

• Physical and information security requirements

4. Methodology and Innovation

• Describe the specific techniques, tools, frameworks, or best practices your team will use to accomplish the work.

• Highlight any innovative solutions or value-added approaches that will improve efficiency, safety, quality, or cost-effectiveness.

5. Key Personnel

• Identify all key personnel assigned to the project.

• Include their roles, responsibilities, qualifications, and relevant experience managing similar efforts.

• Explain the structure of the project team and reporting relationships.

6. Risk Management

• Provide a risk mitigation plan that identifies potential construction-related risks and outlines proactive strategies to address them.

• Include both internal and external risk factors (e.g., weather delays, supply chain issues, subcontractor performance).

7. Quality Control

• Describe how you will comply with Section 01 45 00.

• Provide your internal quality control measures that exceed the requirements of the solicitation that will be implemented to ensure that all deliverables meet contractual, regulatory, and technical requirements.

• Discuss inspection protocols, testing methods, and corrective action processes.

8. Communication Plan

• Describe how your team will communicate with the Government throughout the project lifecycle.

• Include the frequency and format of progress updates, stakeholder coordination, points of contact, and issue escalation protocols.

B. Evaluation Criteria for Factor 2:

The Government will evaluate the offeror's Technical Approach to determine the degree to which it reflects a comprehensive understanding of the requirements and the feasibility of the proposed plan to successfully execute the work. This evaluation will consider the clarity, completeness, and logic of the overall approach, as well as the offeror's ability to deliver quality results within the required timeframe and with minimal disruption to ongoing operations.

The evaluation will assess how well the offeror demonstrates an understanding of the scope of work and project objectives. This includes the offeror's ability to articulate the tasks, constraints, and operational environment in a manner that reflects a strong grasp of the technical and logistical challenges inherent in the project. Particular emphasis will be placed on the realism and feasibility of the proposed schedule. The Government will evaluate whether the submitted narrative and graphic (e.g., Gantt chart) schedules clearly identify all major features of work, milestones, and activity sequencing. The schedule will be assessed for logic, completeness, and consistency with the assumed NTP date of 10 September 2026.

The offeror's strategy for mitigating challenges such as schedule delays, cost growth, and project safety as well as minimizing disruption to ongoing operations will also be evaluated. The Government will consider the practicality and effectiveness of proposed sequencing, staging, and work-around measures intended to reduce impacts on the installation or adjacent activities. Proposals that demonstrate innovative but realistic approaches to disruption mitigation may be evaluated more favorably.

The work plan will be reviewed for its level of detail and the adequacy of its approach to

managing and executing the construction effort. This includes evaluation of the offeror's plans for site mobilization, subcontractor management, quality control, safety management, environmental compliance, and adherence to security requirements. The Government will assess how clearly the offeror presents these elements and the degree to which they contribute to overall project success.

Additionally, the methodology and techniques proposed to execute the work will be evaluated for appropriateness and effectiveness. This includes the use of industry best practices, management frameworks, construction methods, and any value-added or innovative approaches that enhance project performance, efficiency, or cost effectiveness.

The qualifications and experience of proposed key personnel will be assessed to determine their ability to successfully manage and execute the project. The evaluation will consider the clarity of team structure, the relevance of personnel experience to the scope of work, and the definition of roles and responsibilities.

The Government will review the offeror's risk mitigation plan to assess how well potential risks are identified, analyzed, and addressed. Evaluation will consider the realism of the proposed mitigation strategies and the offeror's ability to proactively manage risk throughout the project lifecycle.

The quality control approach will be evaluated based on the offeror's proposed procedures for ensuring compliance with contract requirements, including the use of inspections, testing protocols, and corrective action measures to ensure deliverable accuracy and completeness.

Finally, the Government will assess the offeror's communication approach, including how the team will maintain effective interaction with Government stakeholders throughout the project. This includes evaluation of reporting mechanisms, issue escalation procedures, and coordination practices.

VOLUME II: PRICE PROPOSAL

TAB	CONTENTS OF THE PRICE PROPOSAL
A	Proposal Cover Sheet & Acknowledgement of Amendments
B	**Price (FACTOR 3)**
C	Section 00 45 00 – Representations and Certifications
D	Bid Guarantee (Bid Bond)
E	Joint Venture Agreement (If Applicable)
F	Supplemental Data Form

General Instructions: In accordance with RFO 15.402 and 15.403-2, certified cost or pricing data are not required based on the fact that adequate competition is expected for this procurement. If after receipt of proposals the Contracting Officer

determines that there is insufficient information available to determine price reasonableness and none of the exceptions at RFO 15.403-2 apply, the Offeror may be required to submit cost or pricing data. Additionally, in the event that adequate competition is not obtained, the Contracting Officer may incorporate RFO Clause 52.215-20 entitled, “Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data,” into the solicitation and request a Certificate of Current Cost or Pricing Data**. There are no page limitations for this volume.** Proposal information included in this volume which is not directly related to Price will be disregarded.

TAB A - Proposal coversheet and acknowledgement of all amendments (SF30s) completed and signed by authorized individual of the offeror.

TAB B - **Price - FACTOR 3.** Proposed price schedule is to be completed in its entirety by all offerors to include the Subtotals and Totals section as found in Section 00 10 00 - Solicitation, CLIN Schedule.

TAB C - Section 00 45 00 – Representations and Certifications. Confirm that the Offeror’s representations and certifications have been completed in the System for Award Management (SAM). Submit the representations and certifications not entered in SAM that are included in Section 00 45 00 of this solicitation, under this tab.

TAB D - Offerors shall provide a fully executed Bid Bond as required by RFO Clause 52.228-1, Bid Guarantee electronically in Tab D. This requirement is to be completed regardless of Bid Bond requirement submission located in other parts of these instructions**. For the purposes of this Request for Proposal, please note that IAW RFO 28.001:** Bond means a written instrument executed by a bidder or contractor (the “principal”), and a second party (the “surety” or “sureties”) (except as provided in RFO 28.204), to assure fulfillment of the principal’s obligations to a third party (the “obligee” or “Government”), identified in the bond. If the principal’s obligations are not met, the bond assures payment, to the extent stipulated, of any loss sustained by the obligee.”

Bonds shall therefore be executed in the name of the legal entity, whether a joint venture, partnership, or the Prime Contractor of an informal teaming arrangement, with whom the Government would enter into a contract for a successful offeror. The entity named on the bond must be able to acquire bonding capacity on its own merits, and not as the result of indemnification from a subcontractor or third party. Compliance. Failure to comply with the RFP requirements for Price information may reduce or eliminate the offeror’s chance of being selected for award. Offerors shall ensure that the information presented in this volume is consistent and correlates with the information contained in the other proposal volumes.

TAB E - Joint Venture and LLC, if applicable. See Section 00 21 16 paragraph 7.a(4).

TAB F - Supplemental Data Form (Attachment 3) must be filled out in its entirety by all Offerors.

Price Evaluation:

Adjectival ratings shall not be used for offerors' price proposals. The Government will fully evaluate, if applicable, all priced Contract Line-Item Numbers (CLINs) for award. For award purposes, the total proposed price for all CLINs will be added together into a total sum (contract value). The Offeror's Price proposal will be evaluated as follows:

1. Firm Fixed Price Evaluation: For a price to be fair and reasonable, it must represent a price to the Government that a prudent person would pay in the conduct of competitive business. The Offeror's proposed fixed-price CLINs may be evaluated, using one or more of the techniques described in RFO 15.404-1 in order to determine if they are fair and reasonable

2. Overall Price Proposal Evaluation: The overall Price proposal will be evaluated for the following:

a. Compliance: The Price proposal submitted by the Offeror will be evaluated for compliance based upon the submission requirements contained in this Section.

b. Unbalanced Pricing: The Offeror's overall Price proposal will be evaluated for unbalanced pricing as defined in RFO 15.404-6. An offer may be rejected if the contracting officer determines that the lack of balance poses an unacceptable risk to the Government (see RFO 15.404-6 (b)(2)).

c. Errors: The Offeror's price proposal will be reviewed for errors. The Offeror may be given an opportunity to clarify certain aspects of their proposal at the sole discretion of the Contracting Officer.

d. Business Systems: The Government may verify the adequacy of the Offeror’s business systems, if applicable.

e. Total Evaluated Price: The total evaluated price consists of summing the Offeror’s proposed fixed-price CLIN prices together.

Negotiations: The Government intends to award without negotiations with offerors (except clarification as described in RFO 15.202(a)(2). Therefore, the offeror's initial proposal should contain the offeror's best possible technical solution, as price will not be used for ranking proposals. The concept of a simultaneous competitive range and a common cut-off date for Final Proposal Revisions does not apply to this acquisition methodology.

ATTACHMENT 1 - PAST PERFORMANCE ASSESSMENT WORKSHEET
(Limit each worksheet to no more than 3 pages)

CONSTRUCT/ON PROJECT#			
Offeror:			
Project Location and Contract Number:			
Was this project performed by the division or unit of the company submitting the offer for this solicitation?			
Owner:			
Owner's Point of Contact for Reference:		Telephone:	
Awarded Construction Cost:		Final Construction Cost:	
Explain Cost Growth, if any:			
Date of Award:	Original Completion Date:	Revised Completion Date:	Percent Complete:
Explain Time Growth, if any:			
General Scope of Construction and Offeror's Role:			
Work Your Company Self-Performed:		Extent and Type of Work You Subcontracted Out:	
Identify and describe the relevancies for this project compared to the scope of the solicitation. The Government will evaluate the information provided in making the relevancy determination.			
Did any members of the proposed team (firms, not individuals) have a role in this project? Identify the team members (by firm), their role in this project, and their proposed role in this solicitation.			

ATTACHMENT 2 - USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ)

CONTRACT INFORMATION (Contractor to complete Blocks 1-4)

I. Contractor Information

Firm Name: CAGE Code:
Address: UEI Number:
Phone Number:
Email Address:
Point of Contact: Contact Phone Number:

2. Work Performed as: Prime Contractor Sub Contractor Joint Venture Other (Explain) Percent of project work performed:
If subcontractor, who was the prime (Name/Phone #):

3. Contract Information

Contract Number:
Delivery/Task Order Number (if applicable):
Contract Type: Firm Fixed Price Cost Reimbursement Other (Please specify):
Contract Title:
Contract Location:

Award Date (mm/dd/yy):
Contract Completion Date (mm/dd/yy):
Actual Completion Date (mm/dd/yy):
Explain Differences:

Original Contract Price (Award Amount):
Final Contract Price *(to include all modifications, if applicable): Explain* Differences:

4. Project Description:

Complexity of Work High Med Routine
How is this project relevant to project of submission? *(Please provide details such as similar equipment, requirements, conditions, etc.)*

CLIENT INFORMATION (Client to complete Blocks 5-8)

5. Client Information
Name:
Title:
Phone Number:
Email Address:

6. Describe the client's role in the project:

7. Date Questionnaire was completed (mm/dd/yy):

8. Client's Signature:

NOTE: USACE REQUESTS THAT THE CLIENT COMPLETES THIS QUESTIONNAIRE AND SUBMITS DIRECTLY BACK TO THE OFFEROR. THE OFFEROR WILL SUBMIT THE COMPLETED QUESTIONNAIRE TO USACE WITH THEIR PROPOSAL, AND MAY DUPLICATE THIS QUESTIONNAIRE FOR FUTURE SUBMISSION ON USACE SOLICITATIONS. CLIENTS ARE HIGHLY ENCOURAGED TO SUBMIT QUESTIONNAIRES DIRECTLY TO THE OFFEROR. HOWEVER, QUESTIONNAIRES MAY BE SUBMITTED DIRECTLY TO USACE. PLEASE CONTACT THE OFFEROR FOR USACE POC INFORMATION. THE GOVERNMENT RESERVES THE RIGHT TO VERIFY ANY AND ALL INFORMATION ON THIS FORM.

USACE PAST PERFORMANCE QUESTIONAIRRE
Continued

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

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

Please circle the adjective rating which best reflects your evaluation of the contractor's performance.

1. QUALITY:						
a) Quality of technical data/report preparation efforts	E	VG	S	M	U	N
b) Ability to meet quality standards specified for technicalperformance	E	VG	S	M	U	N
c) Timeliness/effectiveness of contract problem resolutionwithout extensive customer guidance	E	VG	S	M	U	N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (withoutadverse effect on performance)	E	VG	S	M	U	N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:						
a) Compliance with contract delivery/completion schedulesincluding any significant intermediate milestones. *(If liquidated damages were assessed or the schedule was not met, please address below)*	E	VG	S	M	U	N
b) Rate the contractor's use of available resources toaccomplish tasks identified in the contract	E	VG	S	M	U	N
3. CUSTOMER SATISFACTION:						
a) To what extent were the end users satisfied with theproject?	E	VG	S	M	U	N
b) Contractor was reasonable and cooperative in dealing withyour staff (including the ability to successfully resolve disagreements/disputes; responsiveness to administrative reports, businesslike and communication)	E	VG	S	M	U	N
c) To what extent was the contractor cooperative, businesslike,and concerned with the interests of the customer?	E	VG	S	M	U	N
d) Overall customer satisfaction	E	VG	S	M	U	N
4. MANAGEMENT/ PERSONNEL/LABOR						
a) Effectiveness of on-site management, including management of subcontractors, suppliers, materials, and/orlabor force?	E	VG	S	M	U	N
b) Ability to hire, apply, and retain a qualified workforce tothis effort	E	VG	S	M	U	N
c) Government Property Control	E	VG	S	M	U	N
d) Knowledge/expertise demonstrated by contractorpersonnel	E	VG	S	M	U	N
e) Utilization of Small Business concerns	E	VG	S	M	U	N
f) Ability to simultaneously manage multiple projectswith multiple disciplines	E	VG	S	M	U	N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, executionand response to Government changes	E	VG	S	M	U	N
h) Effectiveness of overall management (including ability toeffectively lead, manage and control the program)	E	VG	S	M	U	N

5. COST/FINANCIAL MANAGEMENT						
a) Ability to meet the terms and conditions within thecontractually agreed price(s)?	E	VG	S	M	U	N
b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainabilityor other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please ratethe Contractor's timeliness and accuracy in submitting monthly invoices with appropriate back-up documentation, monthly status reports/budget variance reports, compliance with established budgets and avoidance of significant and/or unexplained variances (under runs or overruns)	E	VG	S	M	U	N
d) Is the Contractor's accounting system adequate for management and tracking of costs? *If no, please explain inRemarks section.*		Yes			No	
e) If this is/was a Government contract, has/was this contractbeen partially or completely terminated for default or convenience or are there any pending terminations? *Indicateif show cause or cure notices were issued, or any default action in comment section below.*		Yes			No	
f) Have there been any indications that the contractor has hadany financial problems? *If yes, please explain below.*		Yes			No	
6. SAFETY/SECURITY						
a) To what extent was the contractor able to maintain an environment of safety, adhere to its approved safety plan, andrespond to safety issues? (Includes: following the users rules, regulations, and requirements regarding housekeeping, safety,correction of noted deficiencies, etc.)	E	VG	S	M	U	N
b) Contractor complied with all security requirements for theproject and personnel security requirements.	E	VG	S	M	U	N
7. GENERAL						
a) Ability to successfully respond to emergency and/or surgesituations (including notifying COR, PM or Contracting Officer in a timely manner regarding urgent contractual issues).	E	VG	S	M	U	N
b) Compliance with contractual terms/provisions (explain ifspecific issues)	E	VG	S	M	U	N
c) In summary, provide an overall rating for the workperformed by this contractor.	E	VG	S	M	U	N

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

_____

_____

_____

Supplemental Data Form

Purpose: This form collects information to assess responsibility in accordance with (IAW) RFO 9.104-1 and to support the overall evaluation of the proposal. The information provided will help the Government determine whether the prospective contractor is responsible and will be used exclusively for that purpose.

Instructions: The form must be completed and returned with the proposal. If there are any questions about how to complete this form, they should be submitted in ProjNet.

If submitting a proposal as a JV and/or Mentor/Protégé, one copy of this form using the JV/Mentor/Protégé information must be provided, as well as a completed form for each of the partners. Specific sections of the form will provide additional instructions regarding what must be completed by the JV and/or individual partners.

A. Contractor General Information

Company Name	
Address (Street, City, and State)	
UEI	
Parent Company Name & UEI (if applicable)	

Small Business Status (mark all that apply with an X)			
	8(a)		Veteran-Owned
	Alaskan Native Corporation/Indian Tribe		Native Hawaiian Organization
	Small Disadvantaged Business		HUBZone
	Woman-Owned		Joint Venture
	Economically Disadvantaged Woman-Owned		Mentor/Protégé
	Service-Disabled Veteran Owned		Other than Small Business

B. Points of Contact for Current Proposal

For JVs: POCs must be populated in at least one of the forms (JV and/or individual partners), with partner-specific POCs identified based on the roles performed by each partner in creating the proposal. A financial POC must be provided for the JV if populated, or a POC must be provided for each partner if the JV is unpopulated.

Supplemental Data Form

Primary Proposal POC - this person is the primary liaison and can answer general questions about the proposal

Name	
Title	
Phone	
Email	

C. Organizational Personnel:

For JVs: only populated JVs must provide this information at the JV level, and it must be populated for the individual partners regardless of whether the JV is populated or unpopulated.

Total Current Key Personnel	
Total Current Permanent Personnel (not including Key)	
Max Personnel at any time	

D. Financial Data:

For JVs: only populated JVs must provide this information at the JV level, and it must be populated for the individual partners regardless of whether the JV is populated or unpopulated.

Fiscal Year start/end (e.g. January 1 – December 31):

For the prior three completed fiscal years, provide the following, as applicable:

Description	Current Year to Date	Prior Year	Two Years Prior	Three Years Prior
Total Revenue				
Net Income				
Total Assets (less equipment)				
Equipment (carrying value)				
Current Assets			N/A	N/A
Total Liabilities				
Current Liabilities			N/A	N/A
Payroll Expense				
Fringe Rate				
Overhead Rate				
G&A Rate				

E. Government Sales Data:

For JVs: this must be completed by both the JV and all partners.

Please place an “X” in the box in the table below associated with the average percentage of total revenue provided from Federal Government customers over the last three years.

Less than 10%	
10% - 25%	
26% - 50%	
51% -75%	
75% or more	

What was the dollar value of the largest Federal Government contract received in the last five years?

If different from above, what is the dollar value of the largest contract ever performed (to include commercial efforts)?

Supplemental Data Form
Schedule A – Existing Commitments

List below the construction projects ***currently in progress*** over $7___M. Also list construction projects for which your firm has submitted a bid, providing the solicitation number, offer/bid value, description and location, and POC information for the person that issued the solicitation (Percent Complete will be N/A). Please do not include information for bids that have expired or where a solicitation was cancelled.

For JVs: this must be completed by both the JV and all partners.

Contract or Solicitation Number	Contract or Offer Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Complete

Supplemental Data Form

Schedule A – Existing Commitments

Contract or Solicitation Number	Contract or Offer Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Complete

Supplemental Data Form
Schedule B – Completed Projects

List below the principal construction projects your firm has completed within the past six years, including all DoD contracts, with a total value exceeding 5% of the most recently completed year's revenue. The POC provided should be a Contracting Officer or any DoD/federal contracts and the equivalent role for any private efforts. The description should highlight scopes relevant to the current project proposed. Projects under this 5% threshold may be included if they provide specific experience relevant to the currently proposed efforts.

For JVs: this must be completed by both the JV and all partners.

Contract Number	Contract Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Sub-contracted

Supplemental Data Form
Schedule B – Completed Projects

Contract Number	Contract Amount	Description & Location	Point of Contact Name, email, and Phone Number	Percent Sub-contracted

Supplemental Data Form
Schedule C – Construction and/or Technical Equipment

List total equipment and facilities owned for performing the prospective contract and present status as to whether it is currently committed to existing contracts. If an asset is currently being used but is expected to be available for use on this effort, provide the estimated date the equipment will be available.

Acceptable descriptions for Condition are “New,” “Good,” or “Fair”

Acceptable entries for Present Status are “in use” or “available”

For JVs: this must be completed by both the JV and all partners. If an equipment listing is already provided as part of the JV Agreement or an addendum has been submitted specifically identifying the equipment to be provided for this effort, any of the fields in the table below that are not included in that list may be added to it and submitted in that format.

Quantity	Description	Condition	Purchase Price	Accumulated Depreciation	Present Status	Available Date

Supplemental Data Form
Schedule C – Construction and/or Technical Equipment

Quantity	Description	Condition	Purchase Price	Accumulated Depreciation	Present Status	Available Date

Section 00 45 00 - Representations and Certifications

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.203-11	Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions.	2024-09		

Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (Sep 2024)

(a) Definitions. As used in this provision-"Lobbying contact" has the meaning provided at 2 U.S. C. 1602(8). The terms "agency," "influencing or attempting to influence," "officer or employee of an agency," "person," "reasonable compensation," and "regularly employed" are defined in the FAR clause of this solicitation entitled "Limitation on Payments to Influence Certain Federal Transactions" (52.203-12).

(b) Prohibition. The prohibition and exceptions contained in the FAR clause of this solicitation entitled "Limitation on Payments to Influence Certain Federal Transactions" (52.203-12) are hereby incorporated by reference in this provision.

(c) Certification. The offeror, by signing its offer, hereby certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on its behalf in connection with the awarding of this contract.

(d) Disclosure. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(e) Penalty. Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by 31 U.S.C. 1352. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure required to be filed or amended by this provision, shall be subject to civil penalties as provided in 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(End of provision)

52.203-18	Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation.	2017-01

Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation (Jan 2017)

(a) Definition. As used in this provision-

Internal confidentiality agreement or statement, subcontract, and subcontractor , are defined in the clause at 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.

(b) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions), Government agencies are not permitted to use funds appropriated (or otherwise made available) for contracts with an entity that requires employees or subcontractors of such entity seeking to report waste, fraud, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(c) The prohibition in paragraph (b) of this provision does not contravene requirements applicable to Standard Form 312, (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(d) Representation. By submission of its offer, the Offeror represents that it will not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(End of provision)

52.204-5	Women-Owned Business (Other Than Small Business).	2014-10

Women-Owned Business (Other Than Small Business) (Oct 2014)

(a) Definition."Women-owned business concern," as used in this provision, means a concern that is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (c)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it [ ] is a women-owned business concern.

(End of provision)

52.209-2	Prohibition on Contracting With Inverted Domestic Corporations-Representation. (Deviation 2026-O0038)	2026-02

Prohibition on Contracting with Inverted Domestic Corporations-Representation (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

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

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) Government agencies are not permitted to use appropriated (or otherwise made available) funds for contracts with either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation, unless the exception at 9.108-3(b) applies or the requirement is waived in accordance with the procedures at 9.108-5.

(c) Representation. The Offeror represents that-

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

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

(End of provision)

52.209-5	Certification Regarding Responsibility Matters. (Deviation 2026-O0038)	2026-02

Certification Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(a)

(1) The Offeror certifies, to the best of its knowledge and belief, that-

(i) The Offeror and/or any of its Principals-

(A) Are [ ] are not [ ] presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have [ ] have not [ ], within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property (if offeror checks "have", the offeror shall also see 52.209-7, if included in this solicitation);

(C) Are [ ] are not [ ] presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision; and

(D) Have [ ], have not [ ], within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds the threshold at 9.104-5(a)(2) for which the liability remains unsatisfied. Federal taxes are considered delinquent if both of the following criteria apply:

(1) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if a pending administrative or judicial challenge remains. In the case of a judicial challenge to the liability, the liability is not finally determined

until all judicial appeal rights have been exhausted.

(2) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) The Offeror has [ ] has not [ ], within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

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

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the Government will consider the certification in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) This provision does not require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a). The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If the Government later determines that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.209-7	Information Regarding Responsibility Matters. (Deviation 2026-O0038)	2026-02

Information Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

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

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

(1) The total value of all current, active contracts and grants, including all priced options; and

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

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

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

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

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

(i) In a criminal proceeding, a conviction.

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

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

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

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

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

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

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

(End of provision)

52.209-11	Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. (Deviation 2026-O0038)	2026-02

Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law (Feb 2026) (Deviation 2026-O0038)

(a) The Government will not enter into a contract with any corporation that-

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

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

(b) The Offeror represents that-

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

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

(End of provision)

52.209-12	Certification Regarding Tax Matters.	2025-10

Certification Regarding Tax Matters (Oct 2025)

(a) This provision implements section 523 of Division B of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), and similar provisions, if contained in subsequent appropriations acts.

(b) If the Offeror is proposing a total contract price that will exceed $7 million (including options), the Offeror shall certify that, to the best of its knowledge and belief, it

(1) Has [ ] filed all Federal tax returns required during the three years preceding the certification;

(2) Has not [ ] been convicted of a criminal offense under the Internal Revenue Code of 1986; and

(3) Has not [ ], more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

(End of provision)

52.209-13	Violation of Arms Control Treaties or Agreements-Certification. (Deviation 2026-O0038)	2026-02

Violation of Arms Control Treaties or Agreements-Certification (Feb 2026) (Deviation 2026-O0038)

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

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

[ ] (1) The Offeror certifies that-

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

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

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

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

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

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

(i) An inability to certify compliance.

(ii) An inability to conclude compliance.

(iii) A statement about compliance concerns.

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

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

(d) Do not submit an offer unless-

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

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

(i) Waived application under 22 U.S.C. 2593e(d) or (e); or

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

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

(End of provision)

52.219-1	Small Business Program Representations. (Deviation 2026-O0038)	2026-02

Small Business Program Representations (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

Economically disadvantaged women-owned small business (EDWOSB) concern means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127, and the concern is certified by SBA or an approved third-party certifier in accordance with 13 CFR 127.300. It automatically qualifies as a women-owned small business concern eligible under the WOSB Program.

HUBZone small business concern means a small business concern that meets the requirements described in 13 CFR 126.200, is certified by the Small Business Administration (SBA) and designated by SBA as a HUBZone small business concern in the Small Business Search (SBS) (13 CFR 126.103).

Service-disabled veteran-owned small business (SDVOSB) concern eligible under the SDVOSB Program means an SDVOSB concern that is designated in the System for Award Management

(SAM) as certified by the Small Business Administration (SBA) in accordance with 13 CFR 128.300.

Small business concern-

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

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

Small disadvantaged business concern means a small business concern that-

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by one or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States, and

(2) The management and daily business operations of which are controlled (as defined at 13 CFR 124.106) by individuals who meet the criteria in paragraph (1) of this definition.

Women-owned small business (WOSB) concern eligible under the WOSB Program (in accordance with 13 CFR part 127) means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States, and the concern is certified by SBA or an approved third-party certifier in accordance with 13 CFR 127.300.

(b)

(1) The North American Industry Classification System (NAICS) code for this acquisition is ____ [insert NAICS code].

(2) The small business size standard is ____[insert size standard].

(3) The small business size standard for a concern that submits an offer, other than on a construction or service acquisition, but proposes to furnish an end item that it did not itself manufacture, process, or produce (i.e., nonmanufacturer), is 500 employees, or 150 employees for information technology value-added resellers under NAICS code 541519, if the acquisition-

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

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

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

(c) Representations.

(1) The offeror represents as part of its offer that-

(i) it [ ] is, [ ] is not a small business concern; or

(ii) It [ ] is, [ ] is not a small business joint venture that complies with the requirements of 13 CFR 121.103(h) and 13 CFR 125.8(a) and (b). [_____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.]

(2) [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it [ ] is, [ ] is not a women-owned small disadvantage business concern.

(3) Women-owned small business (WOSB) joint venture eligible under the WOSB Program. The offeror represents as part of its offer that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.]

(4) Economically disadvantaged women-owned small business (EDWOSB) joint venture. The offeror represents as part of its offer that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.]

(5) SDVOSB joint venture eligible under the SDVOSB Program. [Complete only if the offeror is certified as a SDVOSB concern]. The offeror represents as part of its offer that it [ ] is, [ ] is not a SDVOSB joint venture eligible under the SDVOSB Program that complies with the requirements of 13 CFR 128.402. [____The offeror shall enter the name and unique entity identifier of each party to the joint venture:__.]

(6) HUBZone joint venture eligible under the HUBZone Program. [Complete only if the offeror is a HUBZone small business concern.] The offeror represents, as part of its offer, that it [ ] is, [ ] is not a HUBZone joint venture that complies with the requirements of 13 CFR 126.616(a) through (c). [____The offeror shall enter the name and unique entity identifier of each party to the joint venture: __.] Each HUBZone small business concern participating in the HUBZone joint venture must be certified as a HUBZone concern.

(d) Notice. Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a business concern that is small, HUBZone small, small disadvantaged, service-disabled veteran-owned small, economically disadvantaged women-owned small, or women-owned small eligible under the WOSB Program in order to obtain a contract to be awarded under the preference programs established pursuant to section 8, 9, 15, 31, and 36 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, will be-

(1) Punished by imposition of fine, imprisonment, or both;

(2) Subject to administrative remedies, including suspension and debarment; and

(3) Ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.223-1	Biobased Product Certification. (Deviation 2026-O0038)	2026-02

Biobased Product Certification (Feb 2026) (Deviation 2026-O0038)

As required by the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101(4)) and the Energy Policy Act of 2005 (7 U.S.C. 8102(a)(2)(F)), the Offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture at https://www.biopreferred.gov/resources/categories.html to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the Offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.

(End of provision)

52.223-4	Recovered Material Certification.	2008-05

Recovered Material Certification (May 2008)

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(c)(3)(A)(i)), the offeror certifies, by signing this offer, that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

(End of provision)

52.229-12	Tax on Certain Foreign Procurements. (Deviation 2026-O0038)	2021-02

Tax on Certain Foreign Procurements (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

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

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

(2) A domestic partnership;

(3) A domestic corporation;

(4) Any estate (other than a foreign estate, within the meaning of 26 U.S.C. 7701(a)(31)); and

(5) Any trust if-

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

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

(b) This clause applies only to foreign persons. It implements 26 U.S.C. 5000C and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.

(c)

(1) If the Contractor is a foreign person and has only a partial or no exemption to the withholding, the Contractor shall include the Department of the Treasury IRS Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, with each voucher or invoice submitted under this contract throughout the period in which this status is applicable. The excise tax withholding is applied at the payment level, not at the contract level. The Contractor should revise each IRS Form W-14 submission to reflect the exemption (if any) that applies to that particular invoice, such as a different exemption applying. In the absence of a completed IRS Form W-14 accompanying a payment request, the default withholding percentage is 2 percent for the section 5000C withholding for that payment request. Information about IRS Form W-14 and its separate instructions is available via the internet at www.irs.gov

/w14.

(2) If the Contractor-

(i) Is a foreign person; and

(ii) Has indicated in its offer in the provision 52.229-11, Tax on Certain Foreign Procurements-Notice and Representation, that it is fully exempt from the withholding; and

(iii) Certified the full exemption on the IRS Form W-14, and if that full exemption no longer applies due to a change in circumstances during the performance of the contract that causes the Contractor to become subject to the withholding for the 2 percent excise tax; then the Contractor shall-

(A) Notify the Contracting Officer within 30 days of a change in circumstances that causes the Contractor to be subject to the excise tax withholding under 26 U.S.C. 5000C; and

(B) Comply with paragraph (c)(1) of this clause.

(d) The Government will withhold a full 2 percent of each payment unless the Contractor claims an exemption. If the Contractor enters a ratio in Line 12 of the IRS Form W-14, the result of Line 11 divided by Line 10, the Government will withhold from each payment an amount equal to 2 percent multiplied by the contract ratio. If the Contractor marks box 9 of the IRS Form W-14 (rather than completes Lines 10 through 12), the Contractor must identify and enter the specific exempt and nonexempt amounts in Line 15 of the IRS Form W-14; the Government will then withhold 2 percent only from the nonexempt amount. See the IRS Form W-14 and its instructions.

(e) Exemptions from the withholding under this clause are described at 26 CFR 1.5000C-1(d)(5) through (7). Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the 26 U.S.C. 5000C tax are adjudicated by the IRS as the 26 U.S.C. 5000C tax is a tax matter, not a contract issue.

(f) Taxes imposed under 26 U.S.C. 5000C may not be-

(1) Included in the contract price; nor

(2) Reimbursed.

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

(End of clause)

DFARS Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.203-7005	Representation Relating to Compensation of Former DoD Officials.	2022-09		

REPRESENTATION RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2022)

(a) Definition. "Covered DoD official" is defined in the clause at 252.203-7000, Requirements Relating to Compensation of Former DoD Officials.

(b) By submission of this offer, the Offeror represents, to the best of its knowledge and belief, that all covered DoD officials employed by or otherwise receiving compensation from the Offeror, and who are expected to undertake activities on behalf of the Offeror for any resulting contract, are presently in compliance with all applicable post-employment restrictions, including those contained in 18 U.S.C. 207, 41 U.S.C. 2101-2107, 5 CFR part 2641, section 1045 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91), and Federal Acquisition Regulation 3.104-2.

(End of provision)

252.204-7007	Alternate A, Annual Representations and Certifications.	2025-10	Alternate A	2025-10

ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (OCT 2025)

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

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

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

[ ] (i) Paragraph (e) applies.

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

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

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

(ii) 252.216-7008, Economic Price Adjustment-Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when

the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

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

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

(v) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of $200,000 or more.

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

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

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

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

[ ](ii) 252.225-7000, Buy American-Balance of Payments Program Certificate.

[ ](iii) 252.225-7020, Trade Agreements Certificate.

[ ] Use with Alternate I.

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

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

[ ] Use with Alternate I.

[ ] Use with Alternate II.

[ ] Use with Alternate III.

[ ] Use with Alternate IV.

[ ] Use with Alternate V.

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

[ ](vii) 252.232-7015, Performance-Based Payments-Representation.

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

FAR/DFARS Provision #	Title	Date	Change
____	____	____	
____	____	____	
____	____	____	
____	____	____	
____	____	____	

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

(End of provision)

252.204-7008 Compliance with Safeguarding 2016-10

Covered Defense Information
Controls.

COMPLIANCE WITH SAFEGUARDING COVERED DEFENSE INFORMATION CONTROLS (OCT 2016)

(a) Definitions. As used in this provision-

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

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

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

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

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

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

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

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

(End of provision)

252.204-7016	Covered Defense Telecommunications Equipment or Services-Representation.	2019-12

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

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

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

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

(End of provision)

252.204-7017	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment	2021-05

or Services-Representation.

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

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

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

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

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

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

The Offeror represents that it [ ] will [ ] will not provide covered defense telecommunications

equipment or services as a part of its offered products or services to DoD in the performance of any award resulting from this solicitation.

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

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

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

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

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

(End of provision)

252.219-7000	Advancing Small Business Growth.	2023-06

ADVANCING SMALL BUSINESS GROWTH (JUN 2023)

(a) This provision implements 10 U.S.C. 4959.

(b) The Offeror acknowledges by submission of its offer that by acceptance of the contract

resulting from this solicitation, the Offeror may exceed the applicable small business size standard of the North American Industry Classification System (NAICS) code assigned to the contract and would no longer qualify as a small business concern for that NAICS code. Small business size standards matched to industry NAICS codes are published by the Small Business Administration and are available at 13 CFR 121.201 and https://www.sba.gov/document /support-table-size-standards. The Offeror is therefore encouraged to develop the capabilities and characteristics typically desired in contractors that are competitive as other-than-small contractors in this industry.

(c) For procurement technical assistance, the Offeror may contact the nearest APEX Accelerator. APEX Accelerator locations are available at https://www.apexaccelerators.us.

(End of provision)

252.223-7997	Prohibition on Procurement of Certain Items Containing Perfluorooctane Sulfonate or Perfluorooctanoic Acid -- Representation. (Deviation 2022-O0010)	2022-09	Deviation 2022-O0010	2022-09

PROHIBITION ON PROCUREMENT OF CERTAIN ITEMS CONTAINING PERFLUOROOCTANE SULFONATE OR PERFLUOROOCTANOIC ACID - REPRESENTATION (DEVIATION 2022-O0010) (SEP 2022)

(a) Effective April 1, 2023, in accordance with section 333 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116-283) the Department of Defense may not procure any covered items that contain perfluorooctane sulfonate (PFOS) or perfluorooctanoic acid (PFOA). A covered item includes:

(1) Nonstick cookware or cooking utensils for use in galleys or dining facilities; and

(2) Upholstered furniture, carpets, and rugs that have been treated with stain-resistant coatings.

(b) Representation. By submission of its offer, the Offeror represents that it is not providing as part of its offer any covered items containing PFOS or PFOA.

(End of provision)

252.225-7031 Secondary Arab Boycott of Israel 2005-06
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SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

(a) Definitions. As used in this provision-

(1) "Foreign person" means any person (including any individual, partnership, corporation, or other form of association) other than a United States person.

(2) " United States " means the 50 States, the District of Columbia , outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.

(3) " United States person" is defined in 50 U.S.C. App. 2415(2) and means-

(i) Any United States resident or national (other than an individual resident outside the United States who is employed by other than a United States person);

(ii) Any domestic concern (including any permanent domestic establishment of any foreign concern); and

(iii) Any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern that is controlled in fact by such domestic concern.

(b) Certification. If the offeror is a foreign person, the offeror certifies, by submission of an offer, that it-

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. 2407(a) prohibits a United States person from taking.

(End of provision)

252.225-7055	Representation Regarding Business Operations with the Maduro Regime.	2022-05

REPRESENTATION REGARDING BUSINESS OPERATIONS WITH THE MADURO REGIME (MAY 2022)

(a) Definitions. As used in this provision-

"Agency or instrumentality of the government of Venezuela," "business operations," "government of Venezuela," and "person" have the meaning given in the clause 252.225-7056, Prohibition Regarding Business Operations with the Maduro Regime, of this solicitation.

(b) Prohibition. In accordance with section 890 of the National Defense Authorization Act for Fiscal Year 2020 (Pub. L. 116-92), DoD is prohibited from entering into a contract for the procurement of products or services with any person that has business operations with an authority of the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government, unless the person has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.

(c) Representation. By submission of its offer, the Offeror represents that the Offeror is a person that-

(1) Does not have any business operations with an authority of the Maduro regime or the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government; or

(2) Has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control

of the Department of the Treasury.

(End of provision)

252.225-7057	Preaward Disclosure of Employment of Individuals Who Work in the People's Republic of China.	2022-08

PREAWARD DISCLOSURE OF EMPLOYMENT OF INDIVIDUALS WHO WORK IN THE PEOPLE'S REPUBLIC OF CHINA (AUG 2022)

(a) Definitions. As used in this provision-

"Covered contract" and "covered entity" have the meaning given in the clause 252.225-7058, Postaward Disclosure of Employment of Individuals Who Work in the People's Republic of China.

(b) Prohibition on award. In accordance with section 855 of the National Defense Authorization Act for Fiscal Year 2022 (Pub. L. 117-81, 10 U.S.C. 4651 note prec.), DoD may not award a contract to the Offeror if it is a covered entity and proposes to employ one or more individuals who will perform work in the People's Republic of China on a covered contract, unless the Offeror has disclosed its use of workforce and facilities in the People's Republic of China.

(c) Preaward disclosure requirement. At the time of submission of an offer for a covered contract, an Offeror that is a covered entity shall provide disclosures to include-

(1) The proposed use of workforce on a covered contract or subcontract, if the Offeror employs one or more individuals who perform work in the People's Republic of China;

(2) The total number of such individuals who will perform work in the People's Republic of China; and

(3) A description of the physical presence, including street address or addresses, in the

People's Republic of China, where work on the covered contract will be performed.

(End of provision)

252.225-7059	Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region-Representation.	2023-06

PROHIBITION ON CERTAIN PROCUREMENTS FROM THE XINJIANG UYGHUR AUTONOMOUS REGION-REPRESENTATION (JUN 2023)

(a) Definitions. "Forced labor" and "XUAR", as used in this provision, have the meaning given in the 252.225-7060, Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region, clause of this solicitation.

(b) Prohibition. DoD may not knowingly procure any products mined, produced, or manufactured wholly or in part by forced labor from XUAR or from an entity that has used labor from within or transferred from XUAR as part of any forced labor programs, as specified in paragraph (b) of the 252.225-7060, Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region, clause of this solicitation.

(c) Representation. By submission of its offer, the Offeror represents that it has made a good faith effort to determine that forced labor from XUAR will not be used in the performance of a contract resulting from this solicitation.

(End of provision)

Section 00 70 00 - Conditions of the Contract

FAR Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.217-7	Option for Increased Quantity-Separately Priced Line Item.	1989-03		

Option for Increased Quantity-Separately Priced Line Item (Mar 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor as follows:

Option 1- CLIN 0002: Within 60 days of Notice to Proceed

Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.222-3	Convict Labor. (Deviation 2026-O0038)	2026-02		

Convict Labor (Feb 2026) (Deviation 2026-O0038)

(a) Except as provided in paragraph (b) of this clause, the Contractor must not employ in the performance of this contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.

(b) The Contractor is not prohibited from employing persons-

(1) On parole or probation to work at paid employment during the term of their sentence;

(2) Who have been pardoned or who have served their terms; or

(3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if-

(i) The worker is paid or is in an approved work training program on a voluntary basis;

(ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;

(iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and

(v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-7	Withholding of Funds. (Deviation 2026-O0038)	2026-02

Withholding of Funds (Feb 2026) (Deviation 2026-O0038)

The Contracting Officer must, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other federally assisted contract subject to prevailing wage requirements, which is held by

the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.223-7	Notice of Radioactive Materials. (Deviation 2026-O0038)	2026-02

Notice of Radioactive Materials (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall notify the Contracting Officer or designee, in writing, ____*days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in title 10 of the Code of Federal Regulations, in effect on the date of this contract, or (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved.

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts, the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall-

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

* The Contracting Officer shall insert the number of days required in advance of delivery of the item or completion of the servicing to assure that required licenses are obtained and appropriate personnel are notified to institute any necessary safety and health precautions.

(End of clause)

52.223-9	Estimate of Percentage of Recovered Material Content for EPA-Designated Items. (Alternate I)	2008-05	Alternate I	2008-05

Alternate I (May 2008). As prescribed in 23.108(b)(2), redesignate paragraph (b) of the basic clause as paragraph (c) and add the following paragraph (b) to the basic clause:

(b) The Contractor shall execute the following certification required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(i)(2)(C)):

Certification

I, ____(name of certifier), am an officer or employee responsible for the performance of this contract and hereby certify that the percentage of recovered material content for EPA-designated items met the applicable contract specifications or other contractual requirements.

____[Signature of the Officer or Employee]

____[Typed Name of the Officer or Employee]

____[Title]

____[Name of Company, Firm, or Organization]

____[Date]

(End of certification)

52.223-10	Waste Reduction Program. (DEVIATION 2025-O0004)	2025-03	Deviation 2025-O0004	2025-03

WASTE REDUCTION PROGRAM (MAR 2025)(DEVIATION 2025-O0004)

(a) Definitions. As used in this clause—

Recycling means the series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials in the manufacture of products other than fuel for producing heat or power by combustion.

Waste prevention means any change in the design, manufacturing, purchase, or use of materials or products (including packaging) to reduce their amount or toxicity before they are discarded. Waste prevention also refers to the reuse of products or materials.

Waste reduction means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) The Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. The Contractor's programs shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962, et seq.) and implementing regulations (40 CFR part 247).

(End of clause)

52.223-23	Sustainable Products and Services. (DEVIATION 2025-O0004)	2026-02	Deviation 2025-O0004	2025-03

SUSTAINABLE PRODUCTS AND SERVICES (MAR 2025) (DEVIATION 2025-O0004)

(a) Definitions. As used in this clause-

Biobased product means a product determined by the U.S. Department of Agriculture (USDA) to be a commercial product or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials, or that is an intermediate ingredient or feedstock. The term includes, with respect to forestry materials, forest products that meet biobased content requirements, notwithstanding the market share the product holds, the age of the product, or whether the market for the product is new or emerging. (7 U.S.C. 8101) (7 CFR 3201.2).

Recovered material means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process. (42 U.S.C. 6903).

Sustainable products and services means:

(1) Products containing recovered material designated by the U.S. Environmental Protection Agency (EPA) under the Comprehensive Procurement Guidelines (42 U.S.C. 6962) (40 CFR part 247) (https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program#products).

(2) Energy- and water-efficient products that are ENERGY STAR® certified or Federal Energy Management Program (FEMP)-designated products (42 U.S.C. 8259b) (10 CFR part 436, subpart C) (https://www.energy.gov/eere/femp/search-energy-efficient-products and https://www.energystar.gov/products?s=mega).

(3) Biobased products meeting the content requirement of the USDA under the BioPreferred® program (7 U.S.C. 8102) (7 CFR part 3201) (https://www.biopreferred.gov).

(4) Acceptable chemicals, products, and manufacturing processes listed under EPA's Significant New Alternatives Policy (SNAP) program, which ensures a safe and smooth transition away from substances that contribute to the depletion of stratospheric ozone (42 U.S. C. 7671l) (40 CFR part 82, subpart G) (https://www.epa.gov/snap).

(b) Requirements.

(1) The sustainable products and services, including the purchasing program and type of product or service, that are applicable to this contract, and any products or services that are not subject to this clause, will be set forth in the statement of work or elsewhere in the contract.

(2) The Contractor shall ensure that the sustainable products and services required by this contract are-

(i) Delivered to the Government;

(ii) Furnished for use by the Government;

(iii) Incorporated into the construction of a public building or public work; and

(iv) Furnished for use in performing services under this contract, where the cost of the products is a direct cost to this contract (versus costs which are normally applied to the Contractor's general and administrative expenses or indirect costs). This includes services performed by contractors performing management and operation of Government-owned facilities to the same

extent that, at the time of award, an agency would be required to comply if an agency operated or supported the facility.

(3) [Reserved]

(c) Resource. The Green Procurement Compilation (GPC) available at https://sftool.gov /greenprocurement provides a comprehensive list of sustainable products and services and sustainable acquisition guidance. The Contractor should review the GPC when determining which statutory purchasing programs apply to a specific product or service.

(End of clause)

52.227-4	Patent Indemnity-Construction Contracts. (Alternate I)	2007-12	Alternate I	2007-12

Alternate I (Dec 2007). As prescribed in 27.201-2 (d)(2), designate the first paragraph of the basic clause as paragraph (a) and add the following paragraph (b) to the basic clause:

(b) This patent indemnification shall not apply to the following items: _____[Contracting Officer list the items to be excluded.]

52.228-15	Performance and Payment Bonds-Construction (Deviation 2020-O0016)	2020-06	Deviation 2020-O0016	2020-04

PERFORMANCE AND PAYMENT BONDS-CONSTRUCTION (APR 2020) (DEVIATION 2020-O0016)

(a) Definitions. As used in this clause-

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is $150,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25, except that no seal is required). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment bonds (Standard Form 25A, except that no seal is required). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection.

(i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of the Treasury, Financial Management Service, Surety Bond Branch, 3700 East West Highway,

Room 6F01, Hyattsville, MD 20782. Or via the internet at http://www.fms.treas.gov/c570/.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 3133(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.240-90	Security Prohibitions and Exclusions Representations and Certifications. (Deviation 2026-O0038)	2026-02

Security Prohibitions and Exclusions Representations and Certifications (Feb 2026) (Deviation 2026-O0038)

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

Backhaul, covered article, covered telecommunications equipment or services, critical technology, FASCSA order, Intelligence community, interconnection arrangements, national security system, roaming, sensitive compartmented information, sensitive compartmented information system, source, and substantial or essential component have the meanings provided in the clause 52.240-91, Security Prohibitions and Exclusions.

Business operations means engaging in commerce in any form, including by acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other apparatus of business or commerce.

Marginalized populations of Sudan means-

(1) Adversely affected groups in regions authorized to receive assistance under section 8(c) of the Darfur Peace and Accountability Act (Pub. L. 109-344) (50 U.S.C. 1701 note); and

(2) Marginalized areas in Northern Sudan described in section 4(9) of such Act.

Restricted business operations means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate-

(1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;

(2) Are conducted under specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;

(3) Consist of providing goods or services to marginalized populations of Sudan;

(4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;

(5) Consist of providing goods or services that are used only to promote health or education; or

(6) Have been voluntarily suspended.

Sensitive technology-

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically-

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

(b) Procedures.

(1) Covered telecommunications and video surveillance. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) at https://www.sam.gov for entities excluded from receiving federal awards for "covered telecommunications equipment or services."

(2) FASCSA Orders.

(i) The Offeror shall search in SAM for the phrase "FASCSA order" for any covered article, or any products or services produced or provided by a source, if there is an applicable FASCSA order described in paragraph (e) of FAR 52.240-91, Security Prohibitions and Exclusions.

(ii) The Offeror shall review the solicitation for any FASCSA orders that are not in SAM but are effective and apply to the solicitation and resultant contract (see FAR 40.204-1(c)(2)).

(iii) FASCSA orders issued after the date of solicitation do not apply unless added by an amendment to the solicitation.

(c) Covered telecommunications equipment or services representations. By submission of its offer, the Offeror represents that, after conducting a reasonable inquiry (that looks at any information in the Offeror's possession but does not need to include an internal or third-party audit)-

(1) It will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation, except as waived by the solicitation, or as disclosed in paragraph (g); and

(2) It does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services, except as waived by the solicitation, or as disclosed in paragraph (g).

(d) FASCSA Representation. By submission of this offer, the offeror represents that it has conducted a reasonable inquiry, and that the offeror does not propose to provide or use in response to this solicitation any covered article, or any products or services produced or provided by a source, if the covered article or the source is prohibited by an applicable FASCSA order in effect on the date the solicitation was issued, except as waived by the solicitation, or as disclosed in paragraph (g). A reasonable inquiry will look at any information in the offeror's possession but does not need to include an internal or third-party audit.

(e) Sudan certification. By submission of its offer, the offeror certifies, after conducting a reasonable inquiry (that looks at any information in the offeror's possession but does not need to include an internal or third-party audit), that the offeror does not conduct any restricted business operations in Sudan.

(f) Iran Representation and Certifications.

(1) Except as provided in paragraph (f)(2) of this provision or if a waiver has been granted in accordance with FAR 40.203-3, the offeror, after conducting a reasonable inquiry (that looks at any information in the offeror's possession but does not need to include an internal or third-party audit), by submission of its offer-

(i) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(ii) Certifies that the offeror, or any person (as defined at section 15 of the Iran Sanctions Act of 1996, Pub. L. 104-172, 50 U.S.C. 1701 note) owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Act. These sanctioned activities are in the areas of development of the petroleum resources of Iran, production of refined petroleum products in Iran, sale and provision of refined petroleum products to Iran, and contributing to Iran's ability to acquire or develop certain weapons or technologies; and

(iii) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds $15,000 with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at https://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx)

(2) Exception for trade agreements. The representation and certification requirements of paragraph (f)(1) of this provision do not apply if-

(i) This solicitation includes a trade agreements notice or certification (e.g., 52.225-6, Trade Agreements Certificate); and

(ii) The offeror has certified that all the offered products to be supplied are designated country

end products or designated country construction material.

(iii) The offeror shall email questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(g) Disclosure.

(1) If the Offeror is not able to represent compliance with the prohibitions in paragraphs (c) or (d), then the Offeror shall disclose within 72 hours to the contracting office identified in paragraph (g)(2) the following information for each product or service not compliant:

(i) Contract number and order number, if applicable;

(ii) Identification of whether this disclosure relates to paragraph (c) on covered telecommunication equipment or services, or to paragraph (d) on FASCSA orders;

(iii) A description of the products or services that the Contractor identifies or has reason to suspect is prohibited (include brand; model number, such as the original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable);

(iv) The entity that produced the product or service (include entity name, unique entity identifier, Contractor and Government Entity (CAGE) code, facilities responsible for design, fabrication, assembly, packaging, and test of the product, and whether the entity was the OEM or a distributor (provide manufacturer codes and distributor codes used for the product));

(v) Description of the functionality of the product or service and how that functionality impacts the risk to the product or service;

(vi) An explanation of any factors relevant to determining if the product or service should be permitted by an applicable exception, exemption, or waiver (if the offeror would like the Government to consider a waiver);

(vii) Whether alternative products or services are available that would be compliant with the prohibition;

(viii) If the product or service is related to item maintenance, include the following information on the item being maintained:

(A) Brand;

(B) Model number, OEM number, manufacturer part number, or wholesaler number; and

(C) Item description, as applicable.

(ix) Any readily available information about mitigation actions undertaken or recommended.

(2) If a disclosure is required to be submitted to a contracting office, the offeror shall submit the disclosure as follows:

(i) If a Department of Defense contracting office, the offeror shall submit the disclosure to the website at https://dibnet.dod.mil.

(ii) For all other contracting offices, the Offeror shall submit the disclosure to the Contracting Officer.

(3) If the disclosure provided does not contain any of the information required by paragraph (1), and the Offeror later discovers new information that is required by paragraph (1), then the Offeror shall submit a subsequent disclosure within 72 hours of discovering the new information.

(h) Executive agency review of disclosures. The Contracting Officer will review disclosures provided in paragraph (g) to determine if any applicable waiver may be sought. The Contracting Officer may choose not to pursue a waiver and may instead make an award to an Offeror that does not require a waiver.

(End of provision)

52.240-91	Security Prohibitions and Exclusions. (Deviation 2026-O0038)	2026-02

Security Prohibitions and Exclusions (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

American Security Drone Act-covered foreign entity means an entity included on a list that the Federal Acquisition Security Council (FASC) develops and maintains and publishes in the System for Award Management (SAM) at https://www.sam.gov (section 1822 of Pub. L. 118-31, 41 U.S.C. 3901 note prec.).

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

Covered application means the social networking service TikTok or any successor application or service developed or provided by ByteDance Limited or an entity owned by ByteDance Limited.

Covered article, as defined in 41 U.S.C. 4713(k), means:

(1) Information technology, as defined in 40 U.S.C. 11101, including cloud computing services of all types;

(2) Telecommunications equipment or telecommunications service, as those terms are defined in section 3 of the Communications Act of 1934 (47 U.S.C. 153);

(3) The processing of information on a Federal or non-Federal information system, subject to the requirements of the Controlled Unclassified Information program (see 32 CFR part 2002); or

(4) Hardware, systems, devices, software, or services that include embedded or incidental information technology.

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

Covered telecommunications equipment or services means-

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

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance

and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

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

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

Critical technology means-

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

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

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

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

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

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

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

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

FASC-prohibited unmanned aircraft system means an unmanned aircraft system manufactured or assembled by an American Security Drone Act-covered foreign entity.

FASCSA order means any of the following orders issued under the Federal Acquisition Supply Chain Security Act (FASCSA) requiring removing covered articles from executive agency information systems or excluding one or more named sources or named covered articles from executive agency procurement actions, as described in 41 CFR 201-1.303(d) and (e):

(1) The Secretary of Homeland Security may issue FASCSA orders that apply to civilian agencies, to the extent not covered by paragraph (2) or (3) of this definition. This type of FASCSA order may be referred to as a Department of Homeland Security (DHS) FASCSA order.

(2) The Secretary of Defense may issue FASCSA orders that apply to the Department of Defense (DoD) and national security systems other than sensitive compartmented information systems. This type of FASCSA order may be referred to as a DoD FASCSA order.

(3) The Director of National Intelligence (DNI) may issue FASCSA orders that apply to the intelligence community and sensitive compartmented information systems, to the extent not covered by paragraph (2) of this definition. This type of FASCSA order may be referred to as a DNI FASCSA order.

Information technology, as defined in 40 U.S.C. 11101(6)-

(1) Means any equipment or interconnected system or subsystem of equipment, used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency, if the equipment is used by the executive agency directly or is used by a contractor under a contract with the executive agency that requires the use-

(i) Of that equipment; or

(ii) Of that equipment to a significant extent in the performance of a service or the furnishing of a product;

(2) Includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar

procedures, services (including support services), and related resources; but

(3) Does not include any equipment acquired by a Federal contractor incidental to a Federal contract.

Intelligence community, as defined by 50 U.S.C. 3003(4), means the following-

(1) The Office of the Director of National Intelligence;

(2) The Central Intelligence Agency;

(3) The National Security Agency;

(4) The Defense Intelligence Agency;

(5) The National Geospatial-Intelligence Agency;

(6) The National Reconnaissance Office;

(7) Other offices within the Department of Defense for the collection of specialized national intelligence through reconnaissance programs;

(8) The intelligence elements of the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, the Federal Bureau of Investigation, the Drug Enforcement Administration, and the Department of Energy;

(9) The Bureau of Intelligence and Research of the Department of State;

(10) The Office of Intelligence and Analysis of the Department of the Treasury;

(11) The Office of Intelligence and Analysis of the Department of Homeland Security; or

(12) Such other elements of any department or agency as may be designated by the President, or designated jointly by the Director of National Intelligence and the head of the department or agency concerned, as an element of the intelligence community.

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connecting a customer of telephone provider A to a customer of telephone

company B) or sharing data and other information resources.

Kaspersky Lab-covered article means any hardware, software, or service that-

(1) Is developed or provided by a Kaspersky Lab-covered entity;

(2) Includes any hardware, software, or service developed or provided in whole or in part by a Kaspersky Lab-covered entity; or

(3) Contains components using any hardware or software developed in whole or in part by a Kaspersky Lab-covered entity.

Kaspersky Lab-covered entity means-

(1) Kaspersky Lab;

(2) Any successor entity to Kaspersky Lab, including any change in name, e.g., "Kaspersky";

(3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(4) Any entity of which Kaspersky Lab has a majority ownership.

National security system, as defined in 44 U.S.C. 3552, means any information system (including any telecommunications system) used or operated by an agency or by a contractor of an agency, or other organization on behalf of an agency-

(1) The function, operation, or use of which involves intelligence activities; involves cryptologic activities related to national security; involves command and control of military forces; involves equipment that is an integral part of a weapon or weapons system; or is critical to the direct fulfillment of military or intelligence missions, but does not include a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications); or

(2) Is protected at all times by procedures established for information that have been specifically authorized under criteria established by an Executive order or an Act of Congress to be kept classified in the interest of national defense or foreign policy.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because

signal coverage is too weak or because traffic is too high.

Sensitive compartmented information means classified information concerning or derived from intelligence sources, methods, or analytical processes, which is required to be handled within formal access control systems established by the Director of National Intelligence.

Sensitive compartmented information system means a national security system authorized to process or store sensitive compartmented information.

Source means a non-Federal supplier, or potential supplier, of products or services, at any tier.

Subsidiary means an entity in which more than 50 percent of the entity is owned directly by a parent corporation or through another subsidiary of a parent corporation.

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

Unmanned aircraft means an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft (49 U.S.C. 44801(11)).

Unmanned aircraft system means an unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the operator to operate safely and efficiently in the national airspace system (49 U.S.C. 44801(12)).

(b) Prohibitions on providing or using specific products or services in performance of contract. Unless a waiver or exception applies, the Contractor is prohibited from providing any products or services to the Government or using in the performance of the contract any of the following:

(1) A covered application on any information technology owned or managed by the Government, or on any information technology used or provided by the Contractor under this contract, including equipment provided by the Contractor's employees (section 102 of Division R of the Consolidated Appropriations Act, 2023 (Pub. L. 117-328));

(2) A Kaspersky Lab-covered article (Section 1634 of Division A of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91));

(3) Covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system (paragraphs (a)(1)(A)

of section 889 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232)). This does not prohibit contractors from providing-

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

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

(c) Prohibition on unmanned aircraft systems manufactured or assembled by American Security Drone Act-covered foreign entities.

(1) Prohibition. The Contractor is prohibited from-

(i) Delivering any FASC-prohibited unmanned aircraft system, which includes unmanned aircraft (i.e., drones) and associated elements (sections 1823 and 1826 of American Security Drone Act of 2023, within the National Defense Authorization Act for Fiscal Year 2024, Pub. L. 118-31, Div. A, Title XVIII, Subtitle B, 41 U.S.C. 3901 note prec.);

(ii) On or after December 22, 2025, operating a FASC-prohibited unmanned aircraft system in the performance of the contract (section 1824 of Pub. L. 118-31); and

(iii) On or after December 22, 2025, using Federal funds to procure or operate a FASC-prohibited unmanned aircraft system (section 1825 of Pub. L. 118-31).

(2) Procedures. The Contractor shall search SAM for the FASC-maintained list of American Security Drone Act-covered foreign entities before proposing, or using in performance of the contract, any unmanned aircraft system. Also, the Contractor shall ensure any effort or expenditure associated with a FASC-prohibited unmanned aircraft system is consistent with a corresponding exemption, exception, or waiver determination expressly stated in the contract.

(3) Exemptions, exceptions, and waivers. The prohibitions in paragraph (c) of this clause do not apply where the agency has determined an exemption, exception, or waiver applies, and the contract indicates that such a determination has been made. See sections 1823 through 1825 and 1832 of Public Law 118-31 for statutory requirements pertaining to exemptions, exceptions, and waivers.

(d) Prohibition on using or providing specific products or services or conducting certain

transactions regardless of connection to contract.

(1) Certain telecommunications and video surveillance equipment, systems, or services.

(i) Unless an applicable waiver has been issued by the Government, the Contractor cannot use any equipment, systems, or services that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system (paragraph (a)(1)(B) of section 889 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232)).

(ii) This prohibition applies to using covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. This does not prohibit the contractor from using-

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

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

(2) Office of Foreign Assets Control Restrictions.

(i) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(ii) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas.

(A) For lists of entities and individuals subject to economic sanctions, see OFAC's List of Specially Designated Nationals and Blocked Persons at https://home.treasury.gov/policy-issues/financial-sanctions/specially-designated-nationals-and-blocked-persons-list-sdn-human-readable-lists.

(B) For more information about these restrictions, as well as updates, see OFAC's regulations

at 31 CFR chapter V and at https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanctions-programs-and-information.

(C) To conduct electronic screens of potential parties to regulated transactions, see the consolidated screening list at https://www.trade.gov/consolidated-screening-list, which consolidates multiple export screening lists of the Departments of Commerce, State, and the Treasury.

(3) Sudan prohibition. The Contractor is prohibited from conducting any restricted business operations in Sudan in accordance with Accountability and Divestment Act of 2007 (Pub. L. 110-174).

(4) Iran prohibitions.

(i) Unless an exception applies according to paragraph (d)(4)(iii) or the Government grants a waiver, the contractor shall not engage in certain activities or transactions relating to Iran (section 6(b)(1)(A) of Iran Sanctions Act (50 U.S.C. 1701 note).

(ii) Unless an exception applies according to paragraph (d)(4)(iii) or the Government grants a waiver, contractor shall not export certain sensitive technology to Iran, as determined by the President, and has an active exclusion in SAM (22 U.S.C. 8515).

(iii) The prohibition in paragraphs (d)(4)(i) and (d)(4)(ii) do not apply if the acquisition is subject to trade agreements and the offeror certifies that all the offered products are designated country end products or designated country construction material (see part 25).

(iv) Unless an exception applies or the Government grants a waiver, contractors are prohibited from knowingly engaging in any significant transaction (i.e., over $15,000) with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked according to the International Emergency Economic Powers Act (section 6(b)(1)(B) of Iran Sanctions Act (50 U.S.C. 1701 note)).

(e) Governmentwide exclusion and removal orders.

(1) Unless the Government has issued an applicable waiver, contractors shall not provide or use as part of the performance of the contract any covered article, or any products or services produced or provided by a source, if the covered article or the source is prohibited by an applicable FASCSA order as follows:

(i) For solicitations and contracts awarded by a Department of Defense contracting office, DoD FASCSA orders apply.

(ii) For all other solicitations and contracts, DHS FASCSA orders apply.

(2) The Contractor shall search for the phrase "FASCSA order" in the System for Award Management (SAM) at https://www.sam.gov to locate applicable FASCSA orders.

(3) The Government may identify in the solicitation other FASCSA orders that are not in SAM, which are effective and apply to the solicitation and resulting contract.

(4) A FASCSA order issued after the date of solicitation applies to this contract only if added by an amendment to the solicitation or modification to the contract (see FAR 40.204-1(c)).

(f) Reasonable inquiry. The contractor shall conduct a reasonable inquiry to determine if there are any prohibited products or services. The inquiry will look at any information in the entity's possession but does not need to include an internal or third-party audit.

(g) Removal of prohibited products and services. For Federal Supply Schedules, Governmentwide acquisition contracts, multi-agency contracts or any other procurement instrument intended for use by multiple agencies, upon notification from the Contracting Officer, during the performance of the contract, the Contractor shall promptly make any necessary changes or modifications to remove any product or service produced or provided by a source that this clause prohibits.

(h) General report.

(1) If the Contractor identifies or is notified by any source, (including a subcontractor at any tier), that any product or service provided or used (or to be provided or used) during contract performance does not comply with any prohibition in this clause, then the Contractor shall report the following information, or as much information is known, in writing to the contracting office as identified in paragraph (h)(2) within 72 hours:

(i) Contract number and order number, if applicable;

(ii) The specific prohibition the product or service is not complying with;

(iii) A description of the products or services that the Contractor identifies or has reason to suspect is prohibited (include brand; model number, such as the original equipment

manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable);

(iv) The entity that produced the product or service (include entity name, unique entity identifier, Contractor and Government Entity (CAGE) code, facilities responsible for design, fabrication, assembly, packaging, and test of the product, and whether the entity was the OEM or a distributor (provide manufacturer codes and distributor codes used for the product));

(v) Description of the functionality of the product or service and how that functionality impacts the risk to the product or service;

(vi) An explanation of any factors relevant to determining if the product or service should be permitted by an applicable exception, exemption, or waiver (if the contractor would like the Government to consider a waiver, and asks for such a waiver);

(vii) Whether alternative products or services are available that would comply with the prohibition;

(viii) If the product or service is related to item maintenance, include the following information on the item being maintained:

(A) Brand;

(B) Model number, OEM number, manufacturer part number, or wholesaler number; and

(C) Item description, as applicable.

(ix) Any readily available information about mitigation actions implemented or recommended.

(2) If a report must be submitted to a contracting office, the Contractor shall submit the report as follows:

(i) If a Department of Defense contracting office, the Contractor shall report to the website at https://dibnet.dod.mil.

(ii) For all other contracting offices, the Contractor shall report to the Contracting Officer.

(iii) For indefinite delivery contracts, the Contractor shall report to both the contracting office for the indefinite delivery contract and the contracting office for any affected order.

(3) If the report provided does not contain any of the information required by paragraph (h)(1) of this clause, and the contractor later discovers new information that is required by paragraph (h)(1) of this clause, then the contractor shall submit a subsequent report within 72 hours of discovering the new information.

(4) The contractor shall also report the information in paragraph (h)(1) if the contractor wishes to ask for a waiver of the requirements of a new FASCSA order being applied through modification.

(i) New FASCSA orders report.

(1) During contract performance, the Contractor shall review SAM at least once every three months, or as advised by the Contracting Officer, to check for covered articles subject to FASCSA order(s), or for products or services produced by a source subject to FASCSA order(s) not currently identified under paragraph (e) of this clause.

(2) If the Contractor identifies a new FASCSA order(s) that could impact their supply chain, then the Contractor shall conduct a reasonable inquiry to identify whether a covered article or product or service produced or provided by a source subject to the FASCSA order(s) was provided to the Government or used during contract performance. The inquiry will look at any information in the entity's possession but does not need to include an internal or third-party audit.

(3) The Contractor shall submit a report to the contracting office identified in paragraph (h)(2) of this clause if the Contractor identifies, including through any notification by a subcontractor at any tier, that a covered article or product or service produced or provided by a source was provided to the Government or used during contract performance and is subject to a FASCSA order(s). For indefinite delivery contracts, the Contractor shall report to both the contracting office for the indefinite delivery contract and the contracting office for any affected order. The Contractor shall report the following information within 72 hours for each covered article or each product or service produced or provided by a source, where the covered article or source is subject to a FASCSA order:

(i) Contract number and order number, if applicable;

(ii) Name of the covered article or source subject to a FASCSA order;

(iii) The specific FASCSA order the product or service does not comply with;

(iv) The elements of (h)(1)(iii) through (ix) of this clause.

(j) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (j) but excluding subparagraphs (d)(1) and (i)(1), in all subcontracts and other contractual instruments, including subcontracts for acquiring commercial products or commercial services.

(End of clause)

52.240-93	Basic Safeguarding of Covered Contractor Information Systems. (Deviation 2026-O0038)	2026-02

Basic Safeguarding of Covered Contractor Information Systems (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

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

Federal contract information-

(1) Means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government; but

(2) Does not include information provided by the Government to the public (such as on public websites) or simple transactional information (such as information necessary to process payments).

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

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

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

(b) Safeguarding requirements.

(1) Basic requirements. The Contractor shall safeguard its covered contractor information systems by implementing, at minimum, the following security controls:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of clause)

DFARS Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting. (DEVIATION 2024-	2024-05	Deviation 2024-O0013	2024-05

O0013 REVISION 1)

SAFEGUARDING COVERED DEFENSE INFORMATION AND CYBER INCIDENT REPORTING (MAY 2024) (DEVIATION 2024-O0013 REVISION 1)

(a) Definitions. As used in this clause-

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

analyses and related information, and computer software executable code and source code.

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

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

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

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

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

(i) Except as provided in paragraph (b)(2)(ii) of this clause, the covered contractor information system shall be subject to the security requirements in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, “Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations”, Revision 2 (available via the internet at https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-171r2.pdf).

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

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

(C) If the DoD CIO has previously adjudicated the contractor’s requests indicating that a

requirement is not applicable or that an alternative security measure is equally effective, a copy of that approval shall be provided to the Contracting Officer when requesting its recognition under this contract.

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

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

(c) Cyber incident reporting requirement.

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

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

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

(2) Cyber incident report. The cyber incident report shall be treated as information created by

or for DoD and shall include, at a minimum, the required elements at https://dibnet.dod.mil.

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

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

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

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

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

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

(i) Use and release of contractor attributional/proprietary information not created by or for DoD. Information that is obtained from the contractor (or derived from information obtained from the

contractor) under this clause that is not created by or for DoD is authorized to be released outside of DoD-

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

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

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

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

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

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

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

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

(m) Subcontracts. The Contractor shall-

(1) Include this clause, including this paragraph (m), in subcontracts, or similar contractual

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

(2) Require subcontractors to-

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

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

(End of clause)

252.204-7998	Alternate A, Annual Representations and Certifications. (DEVIATION 2026-O0043)	2026-02	Alternate A Deviation 2026-O0043	2026-02 2026-02

Alternate A, Annual Representations and Certifications (DEVIATION 2026-O0043)(FEB 2026)

Include the following paragraphs (e), (f), and (g) in the provision at FAR 52.204-7:

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

(2) If the provision at FAR 52.204-7, System for Award Management - Registration, is not included in this solicitation, and the Offeror has an active registration in the System for Award

Management (SAM), the Offeror may choose to use paragraph (g) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

[ ] (i) Paragraph (g) applies.

[ ] (ii) Paragraph (g) does not apply and the Offeror has completed the individual representations and certifications in the solicitation.

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

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

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

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

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

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

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

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

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

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

[ ](ii) 252.225-7000, Buy American--Balance of Payments Program Certificate.

[ ](iii) 252.225-7020, Trade Agreements Certificate.

[ ]Use with Alternate I.

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

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

[ ]Use with Alternate I.

[ ]Use with Alternate II.

[ ]Use with Alternate III.

[ ]Use with Alternate IV.

[ ]Use with Alternate V.

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

[ ] (vii) 252.232-7015, Performance-Based Payments--Representation.

(g) The Offeror has completed the annual representations and certifications electronically via the SAM website at https://www.sam.gov After reviewing the SAM database information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in FAR 52.204-7 and paragraph (f) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in this offer by reference (see FAR 4.203-1); except for the changes identified below [Offeror to insert changes, identifying change by provision number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are

current, accurate, and complete as of the date of this offer.

FAR/DFARS provision No.	Title	Date	Change
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

(End of provision)

252.215-7992	Only One Offer. (DEVIATION 2026-O0048)	2026-03	Deviation 2026-O0048	2026-03

ONLY ONE OFFER (DEVIATION 2026-O0048) (MAR 2026)

(a) Cost or pricing data requirements. After initial submission of offers, if the Contracting Officer notifies the Offeror that only one offer was received, the Offeror agrees to--

(1) Submit any additional cost or pricing data that is required in order to determine whether the price is fair and reasonable (10 U.S.C. 3705) or to comply with the statutory requirement for certified cost or pricing data (10 U.S.C. 3702); and

(2) Except as provided in paragraph (b) of this provision, if the acquisition exceeds the certified cost or pricing data threshold and an exception to the requirement for certified cost or pricing data at FAR 15.403-2(b)(2) through (5) does not apply, certify all cost or pricing data in accordance with paragraph (c) of DFARS provision 252.215-7994, Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data, of this solicitation.

(b) Canadian Commercial Corporation. If the Offeror is the Canadian Commercial Corporation, certified cost or pricing data are not required. If the Contracting Officer notifies the Canadian Commercial Corporation that additional data other than certified cost or pricing data are required in accordance with DFARS 225.870-4(c), the Canadian Commercial Corporation shall obtain and provide the following:

(1) Profit rate or fee (as applicable).

(2) Analysis provided by Public Works and Government Services Canada to the Canadian Commercial Corporation to determine a fair and reasonable price (comparable to the analysis required at 15.404).

(3) Data other than certified cost or pricing data necessary to permit a determination by the U. S. Contracting Officer that the proposed price is fair and reasonable [U.S. Contracting Officer to provide description of the data required in accordance with FAR 15.403-1 with the notification].

____

(4) As specified in FAR 15.403-1(d), an offeror who does not comply with a requirement to submit data that the U.S. Contracting Officer has deemed necessary to determine price reasonableness or cost realism is ineligible for award unless the head of the contracting activity determines that it is in the best interest of the Government to make the award to that offeror.

(c) Subcontracts. Unless the Offeror is the Canadian Commercial Corporation, the Offeror shall insert the substance of this provision, including this paragraph (c), in all subcontracts exceeding the simplified acquisition threshold defined in FAR part 2.

(End of provision)

252.215-7993	Proposal Adequacy Checklist. (DEVIATION 2026-O0048)	2026-03	Deviation 2026-O0048	2026-03

PROPOSAL ADEQUACY CHECKLIST (DEVIATION 2026-O0048) (MAR 2026)

The offeror shall complete the following checklist, providing location of requested information, or an explanation of why the requested information is not provided. In preparation of the offeror's checklist, offerors may elect to have their prospective subcontractors use the same or similar checklist as appropriate.

PROPOSAL ADEQUACY CHECKLIST

REFERENCES SUBMISSION ITEM PROPOSAL PAGE No. If not provided EXPLAIN (may use continuation pages)

GENERAL INSTRUCTIONS

1. FAR 15.408-2, Table 15-1, Section I Paragraph A Is there a properly completed first page of the proposal per FAR 15.408-2 Table 15-1 I.A or as specified in the solicitation? ____ ____

2. FAR 15.408-2, Table 15-1, Section I Paragraph A(7) Does the proposal identify the need for Government-furnished material/tooling/test equipment? Include the accountable contract number and contracting officer contact information if known. ____ ____

3. FAR 15.408-2, Table 15-1, Section I Paragraph A(8) Does the proposal identify and explain notifications of noncompliance with Cost Accounting Standards Board or Cost Accounting Standards (CAS); any proposal inconsistencies with your disclosed practices or applicable CAS; and inconsistencies with your established estimating and accounting principles and procedures? ____ ____

4. FAR 15.408-2, Table 15-1, Section I, Paragraph C(1)FAR 2.101, "Cost or pricing data" Does the proposal disclose any other known activity that could materially impact the costs?This may include, but is not limited to, such factors as--(1) Vendor quotations;(2) Nonrecurring costs;(3) Information on changes in production methods and in production or purchasing volume;(4) Data supporting projections of business prospects and objectives and related operations costs;(5) Unit-cost trends such as those associated with labor efficiency;(6) Make-or-buy decisions;(7) Estimated resources to attain business goals; and(8) Information on management decisions that could have a significant bearing on costs. ____ ____

5. FAR 15.408-2, Table 15-1, Section I Paragraph B Is an Index of all certified cost or pricing data and information accompanying or identified in the proposal provided and appropriately referenced? ____ ____

6. FAR 15.403-2(b) Are there any exceptions to submission of certified cost or pricing data pursuant to FAR 15.403-2(b)? If so, is supporting documentation included in the proposal? (Note questions 18-20.) ____ ____

7. FAR 15.408-2, Table 15-1, Section I Paragraph C(2)(i) Does the

proposal disclose the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data? ____ ____

8. FAR 15.408-2, Table 15-1, Section I Paragraph C(2)(ii) Does the proposal disclose the nature and amount of any contingencies included in the proposed price? ____ ____

9. FAR 15.408-2, Table 15-1, Section II, Paragraph A or B Does the proposal explain the basis of all cost estimating relationships (labor hours or material) proposed on other than a discrete basis? ____ ____

10. FAR 15.408-2, Table 15-1, Section I Paragraphs D and E Is there a summary of total cost by element of cost and are the elements of cost cross-referenced to the supporting cost or pricing data? (Breakdowns for each cost element must be consistent with your cost accounting system, including breakdown by year.) ____ ____

11. FAR 15.408-2, Table 15-1, Section I Paragraphs D and E If more than one Contract Line Item Number (CLIN) or sub Contract Line Item Number (sub-CLIN) is proposed as required by the RFP, are there summary total amounts covering all line items for each element of cost and is it cross-referenced to the supporting cost or pricing data? ____ ____

12. FAR 15.408-2, Table 15-1, Section I Paragraph F Does the proposal identify any incurred costs for work performed before the submission of the proposal? ____ ____

13. FAR 15.408-2, Table 15-1, Section I Paragraph G Is there a Government forward pricing rate agreement (FPRA)? If so, the offeror shall identify the official submittal of such rate and factor data. If not, does the proposal include all rates and factors by year that are utilized in the development of the proposal and the basis for those rates and factors? ____ ____

COST ELEMENTS

MATERIALS AND SERVICES

14. FAR 15.408-2, Table 15-1, Section II Paragraph A Does the proposal include a consolidated summary of individual material and services, frequently referred to as a Consolidated Bill of Material (CBOM), to include the basis for pricing? The offeror's consolidated summary shall include raw materials, parts, components, assemblies, subcontracts and services to be produced or performed by others, identifying as a minimum the item, source, quantity, and price. ____ ____

SUBCONTRACTS (Purchased materials or services)

15. DFARS 215.404-8 Has the offeror identified in the proposal those subcontractor proposals, for which the contracting officer has initiated or may need to request field pricing analysis? ____ ____

16. FAR 15.404-8(b)FAR 52.244-2 Per the thresholds of FAR 15.404-8(b),

Subcontract Pricing Considerations, does the proposal include a copy of the applicable subcontractor's certified cost or pricing data? ____ ____

17. FAR 15.408-2, Table 15-1, Note 1; Section II Paragraph A Is there a price/cost analysis establishing the reasonableness of each of the proposed subcontracts included with the proposal?If the offeror's price/cost analyses are not provided with the proposal, does the proposal include a matrix identifying dates for receipt of subcontractor proposal, completion of fact finding for purposes of price/cost analysis, and submission of the price/cost analysis? ____ ____

EXCEPTIONS TO CERTIFIED COST OR PRICING DATA

18. FAR 52.215-20,FAR 2.101, "commercial product" or "commercial service" Has the offeror submitted an exception to the submission of certified cost or pricing data for commercial products or commercial services proposed either at the prime or subcontractor level, in accordance with provision 52.215-20?a. Has the offeror specifically identified the type of commercial product or commercial service claim (FAR 2.101 "commercial product" or "commercial service" definition), and the basis on which the commercial product or commercial service meets the definition?b. For modified commercial products (FAR 2.101 "commercial product" definition); did the offeror classify the modification(s) as either--i. A modification of a type customarily available in the commercial marketplace (paragraph (3)(i)); orii. A minor modification (paragraph (3)(ii)) of a type not customarily available in the commercial marketplace made to meet Federal Government requirements not exceeding the thresholds in FAR 15.403-2(c)(3)(iii)(B)?c. For proposed commercial products "of a type", or "evolved" or modified (FAR 2.101 "commercial product" definition), did the contractor provide a technical description of the differences between the proposed item and the comparison item (s)? ____ ____

19. [Reserved]

20. FAR 15.408-2, Table 15-1, Section II Paragraph A(1) Does the proposal support the degree of competition and the basis for establishing the source and reasonableness of price for each subcontract or purchase order priced on a competitive basis exceeding the threshold for certified cost or pricing data? ____ ____

INTERORGANIZATIONAL TRANSFERS

21. FAR 15.408-2, Table 15-1, Section II Paragraph A.(2) For inter-organizational transfers proposed at cost, does the proposal include a complete cost proposal in compliance with Table 15-1? ____ ____

22. FAR 15.408-2, Table 15-1, Section II Paragraph A(1) For inter-organizational transfers proposed at price in accordance with FAR 31.205-26(e), does the proposal provide an analysis by the prime that supports the exception from certified cost or pricing data in accordance with FAR15.403-2? ____ ____

DIRECT LABOR

23. FAR 15.408-2, Table 15-1, Section II Paragraph B Does the proposal

include a time phased (i.e.; monthly, quarterly) breakdown of labor hours, rates and costs by category or skill level? If labor is the allocation base for indirect costs, the labor cost must be summarized in order that the applicable overhead rate can be applied. ____ ____

24. FAR 15.408-2, Table 15-1, Section II Paragraph B For labor Basis of Estimates (BOEs), does the proposal include labor categories, labor hours, and task descriptions, (e.g.; Statement of Work reference, applicable CLIN, Work Breakdown Structure, rationale for estimate, applicable history, and time-phasing)? ____ ____

25. FAR subpart 22.10 If covered by the Service Contract Labor Standards statute (41 U.S.C. chapter 67), are the rates in the proposal in compliance with the minimum rates specified in the statute? ____ ____

INDIRECT COSTS

26. FAR 15.408-2, Table 15-1, Section II Paragraph C Does the proposal indicate the basis of estimate for proposed indirect costs and how they are applied? (Support for the indirect rates could consist of cost breakdowns, trends, and budgetary data.) ____ ____

OTHER COSTS

27. FAR 15.408-2, Table 15-1, Section II Paragraph D Does the proposal include other direct costs and the basis for pricing? If travel is included does the proposal include number of trips, number of people, number of days per trip, locations, and rates (e.g. airfare, per diem, hotel, car rental, etc)? ____ ____

28. FAR 15.408-2, Table 15-1, Section II Paragraph E If royalties exceed $1,500 does the proposal provide the information/data identified by Table 15-1? ____ ____

29. FAR 15.408-2, Table 15-1, Section II Paragraph F When facilities capital cost of money is proposed, does the proposal include submission of Form CASB-CMF or reference to an FPRA/FPRP and show the calculation of the proposed amount? ____ ____

FORMATS FOR SUBMISSION OF LINE ITEM SUMMARIES

30. FAR 15.408-2, Table 15-1, Section III Are all cost element breakdowns provided using the applicable format prescribed in FAR 15.408-2, Table 15-1 III? (or alternative format if specified in the request for proposal) ____ ____

31. FAR 15.408-2, Table 15-1, Section III Paragraph B If the proposal is for a modification or change order, have cost of work deleted (credits) and cost of work added (debits) been provided in the format described in FAR 15.408-2, Table 15-1.III.B? ____ ____

32. FAR 15.408-2, Table 15-1, Section III Paragraph C For price revisions /redeterminations, does the proposal follow the format in FAR 15.408-2, Table 15-1.III. C? ____ ____

OTHER

33. FAR 16.4 If an incentive contract type, does the proposal include offeror proposed target cost, target profit or fee, share ratio, and, when applicable, minimum /maximum fee, ceiling price? ____ ____

34. FAR 16.203-4 and FAR 15.408-2, Table 15-1, Section II, Paragraphs A, B, C, and D If Economic Price Adjustments are being proposed, does the proposal show the rationale and application for the economic price adjustment? ____ ____

35. FAR 52.232-28 If the offeror is proposing Performance-Based Payments did the offeror comply with FAR 52.232-28? ____ ____

36. FAR 15.110(v)FAR 52.215-22FAR 52.215-23 Excessive Pass-through Charges- Identification of Subcontract Effort: If the offeror intends to subcontract more than 70% of the total cost of work to be performed, does the proposal identify: (i) the amount of the offeror's indirect costs and profit applicable to the work to be performed by the proposed subcontractor(s); and (ii) a description of the added value provided by the offeror as related to the work to be performed by the proposed subcontractor(s)? ____ ____

(End of provision)

252.215-7996	Notification to Offerors-Postaward Debriefings. (DEVIATION 2026-O0048)	2026-03	Deviation 2026-O0048	2026-03

NOTIFICATION TO OFFERORS--POSTAWARD DEBRIEFINGS (DEVIATION 2026-O0048) (MAR 2026)

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

"Nontraditional defense contractor" means an entity that is not currently performing and has not performed any contract or subcontract for DoD that is subject to full coverage under the cost accounting standards prescribed pursuant to 41 U.S.C. 1502 and the regulations implementing such section, for at least the 1-year period preceding the solicitation of sources by DoD for the procurement (10 U.S.C. 3014).

(b) Postaward debriefing.

(1) Upon timely request, the Government will provide a written or oral postaward debriefing to successful or unsuccessful offerors for contract awards valued at $15 million

(2) When required, the minimum postaward debriefing information will include the following:

(i) For contracts in excess of $15 million and not in excess of $150 million with a small business or nontraditional defense contractor, an option for the small business or nontraditional defense contractor to request disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(ii) For contracts in excess of $150 million, disclosure of the agency's written source selection decision document, redacted to protect the confidential and proprietary information of other offerors for the contract award.

(3) If a required postaward debriefing is provided--

(i) The debriefed Offeror may submit additional written questions related to the debriefing not later than 2 business days after the date of the debriefing;

(ii) The agency will respond in writing to timely submitted additional questions within 5 business days after receipt by the contracting officer; and

(iii) The postaward debriefing will not be considered to be concluded until the later of--

(A) The date that the postaward debriefing is delivered, orally or in writing; or

(B) If additional written questions related to the debriefing are timely received, the date the agency delivers its written response.

(c) Contract performance. The Government may suspend performance of or terminate the awarded contract upon notice from the Government Accountability Office of a protest filed within the time periods listed in paragraphs (c)(1) through (3) of this provision, whichever is later:

(1) Within 10 days after the date of contract award.

(2) Within 5 days after a debriefing date offered to the protestor under a timely debriefing request in accordance with Federal Acquisition Regulation (FAR) 15.301 unless an earlier

debriefing date is negotiated as a result.

(3) Within 5 days after a postaward debriefing under FAR 15.301 is concluded in accordance with Defense Federal Acquisition Regulation Supplement 215.301-170.

(End of provision)

252.225-7966	Prohibition Regarding Russian Fossil Fuel Business Operations-Representation (Deviation 2024-O0006, Revision 1)	2024-03	Deviation 2024-O0006	2024-03

PROHIBITION REGARDING RUSSIAN FOSSIL FUEL BUSINESS OPERATIONS—REPRESENTATION (DEVIATION 2024-O0006, REVISION 1) (MAR 2024)

(a) Definitions. The terms business operations and fossil fuel company have the meanings given in the 252.225-7967 clause of this solicitation.

(b) Representation. By submission of an offer, the Offeror represents it is not, or that it does not knowingly have fossil fuel business operations with an entity or individual that is, 50 percent or more owned, individually or collectively, by-

(1) An authority of the government of the Russian Federation; or

(2) A fossil fuel company that operates in the Russian Federation, except if the fossil fuel company transports oil or gas-

(i) Through the Russian Federation for sale outside of the Russian Federation; and

(ii) That was extracted from a country other than the Russian Federation with respect to the energy sector of which the President has not imposed sanctions as of the date on which the contract is awarded.

(End of provision)

252.225-7967	Prohibition Regarding Russian Fossil Fuel Business Operations (Deviation 2024-O0006, Revision 1)	2024-02	Deviation 2024-O0006	2024-02

PROHIBITION REGARDING RUSSIAN FOSSIL FUEL BUSINESS OPERATIONS (DEVIATION 2024-O0006, REVISION 1) (FEB 2024)

(a) Definitions. As used in this clause-

“Business operations” means knowingly engaging in commerce in any form, including acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other known apparatus of business or commerce. The term does not include-

(1) Any shipment subject to price caps as specified in the-

(i) “Statement of the G7 and Australia on a Price Cap for Seaborne Russian-Origin Crude Oil”, issued on December 2, 2022, between member countries of that coalition; or

(ii) “Statement of the G7 and Australia on Price Caps for Seaborne Russian-Origin Petroleum Products Berlin, Brussels, Canberra, London, Ottawa, Paris, Rome, Tokyo, Washington”, issued on February 4, 2023, between such members, if such shipment complies with the applicable price caps; or

(A) Actions taken for the benefit of the country of Ukraine, as determined by the Secretary; or

(B) Actions taken to support the suspension or termination of business operations for commercial activities during the period beginning on the effective date and ending on December 31, 2029, including-

(1) Any action to secure or divest from facilities, property, or equipment;

(2) The provision of products or services provided to reduce or eliminate operations in territory internationally recognized as the Russian Federation or to comply with sanctions relating to the Russian Federation; and;

(3) Activities that are incident to liquidating, dissolving, or winding down a subsidiary or legal entity in Russia.

Fossil fuel company means an entity or individual that-

(1) Carries out oil, gas, or coal exploration, development, or production activities;

(2) Processes or refines oil, gas, or coal; or

(3) Transports, or constructs facilities for the transportation of, Russian oil, gas, or coal.

(b) Prohibition. In accordance with section 804 of the National Defense Authorization Act for Fiscal Year 2024 (Pub. L. 118-31), the Contractor is prohibited from entering into a subcontract or other contractual instrument for the procurement of products or services with any entity or individual that is known to be, or that is known to have fossil fuel business operations with an entity or individual that is, not less than 50 percent owned, individually or collectively, by-

(1) An authority of the government of the Russian Federation; or

(2) A fossil fuel company that operates in the Russian Federation, except if the fossil fuel company transports oil or gas-

(i) Through the Russian Federation for sale outside of the Russian Federation; and

(ii) That was extracted from a country other than the Russian Federation with respect to the energy sector of which the President has not imposed sanctions as of the date on which the contract is awarded.

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

(End of clause)

252.225-7993	Prohibition on Providing Funds to the Enemy. (DEVIATION 2024-O0003)	2023-12	Deviation 2024-O0003	2023-12

PROHIBITION ON PROVIDING FUNDS TO THE ENEMY (DEVIATION 2024-O0003) (DEC 2023)

(a) The Contractor shall-

(1) Exercise due diligence to ensure that none of the funds, including supplies and services, received under this contract are provided directly or indirectly (including through subcontracts) to a person or entity who is actively opposing United States or Coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities;

(2) Check the list of prohibited/restricted sources in the System for Award Management (SAM) at www.sam.gov-

(i) Prior to subcontract award; and

(ii) At least on a monthly basis; and

(3) Terminate or void in whole or in part any subcontract with a person or entity listed in SAM as a prohibited or restricted source pursuant to section 841 of the National Defense Authorization Act for Fiscal Year 2015 (Pub. L. 113-291), as amended, unless the Contracting Officer provides to the Contractor written approval of the head of the contracting activity to continue the subcontract.

(b) The Head of the Contracting Activity has the authority to-

(1) Terminate any contract for default, in whole or in part, if the Head of the Contracting Activity determines in writing that the contractor failed to exercise due diligence, as required by paragraph (a) of this clause; or

(2)(i) Void any contract, in whole or in part, if the Head of the Contracting Activity determines in writing that any funds received under this contract have been provided directly or indirectly to a

person or entity who is actively opposing United States or Coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

(ii) When voided in whole or in part, a contract is unenforceable as contrary to public policy, either in its entirety or with regard to a segregable task or effort under the contract, respectively.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts, including subcontracts for commercial products and commercial services, under this contract that have an estimated value over $50,000 and will be performed outside the United States and its outlying areas.

(End of clause)

252.232-7004	DoD Progress Payment Rates (DEVIATION 2020-O0010)	2014-10	Deviation 2020-O0010	2020-03

DOD PROGRESS PAYMENT RATES (MAR 2020) (DEVIATION 2020-O0010)

If the Contractor is a small business concern, the Progress Payments clause of this contract is modified to change each mention of the progress payment rate and liquidation rate (excepting paragraph (k), Limitations on Undefinitized Contract Actions) to 95 percent.

(End of clause)

252.240-7997	NIST SP 800-171 DoD Assessment Requirements. (DEVIATION 2026-O0025)	2026-02	Deviation 2026-O0025	2026-02

NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (DEVIATION 2026-O0025)(FEB 2026)

(a) Definitions.

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

High Assessment means an assessment that is conducted by Government personnel, trained in accordance with DoD policy and procedures, using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that--

(1) Consists of--

(i) A review of a contractor's previous assessment(s), as applicable;

(ii) A thorough document review;

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

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

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

Medium Assessment means an assessment conducted by Government personnel, trained in accordance with DoD policy and procedures, using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that--

(1) Consists of--

(i) A review of a contractor's previous assessment(s), as applicable;

(ii) A thorough document review; and

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

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

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

(c) Requirements. The Contractor shall provide access to its facilities, systems, and personnel necessary for the Government to conduct a Medium or High NIST SP 800-171 DoD Assessment, using the methodology described at 32 CFR 170.24, if necessary. The results of Medium or High NIST SP 800-171 DoD Assessments, when conducted by DCMA, will take precedence over any other assessment, in accordance with 32 CFR 170.16(a)(1)(iv), 32 CFR 170.17(a)(1)(iv), and 32 CFR 170.18(a)(1)(iv).

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

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

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

(ii) Organization conducting the assessment, i.e., DCMA.

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

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

(v) Summary level score (overall numerical score, not the individual value assigned for each requirement).

(vi) Date that all requirements are expected to be implemented based on information gathered

from associated plan(s) of action developed in accordance with NIST SP 800-171.

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

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

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

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

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

(g) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services (excluding commercially available off-the-shelf items).

(End of clause)

Section 00 72 00 - General Conditions

FAR Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.203-3	Gratuities.	1984-04		

Gratuities (Apr 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative-

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled-

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This paragraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5	Covenant Against Contingent Fees.	2014-05

Covenant Against Contingent Fees (May 2014)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

Bona fide employee, as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

Contingent fee, as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

Improper influence, as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-6	Restrictions on Subcontractor Sales to the Government.	2020-06

Restrictions on Subcontractor Sales to the Government (Jun 2020)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

(End of clause)

52.203-7	Anti-Kickback Procedures.	2020-06

Anti-Kickback Procedures (Jun 2020)

(a) Definitions.

Kickback, as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

Person, as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

Prime contract, as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

Prime Contractor as used in this clause, means a person who has entered into a prime contract with the United States.

Prime Contractor employee, as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

Subcontract, as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

Subcontractor, as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

Subcontractor employee, as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) 41 U.S.C. chapter 87, Kickbacks, prohibits any person from-

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by

a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)

(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c)(5) but excepting paragraph (c)(1) of this clause, in all subcontracts under this contract that exceed the threshold specified in Federal Acquisition Regulation 3.502-2(i) on the date of subcontract award.

(End of clause)

52.203-8 Cancellation, Rescission, and 2014-05

Recovery of Funds for Illegal or
Improper Activity.

Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (May 2014)

(a) If the Government receives information that a contractor or a person has violated 41 U.S.C. 2102-2104, Restrictions on Obtaining and Disclosing Certain Information, the Government may-

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which-

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct violates 41 U.S.C.2102 for the purpose of either-

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct punishable under 41 U.S.C.2105(a).

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

(End of clause)

52.203-10 Price or Fee Adjustment for 2014-05

Illegal or Improper Activity.

Price or Fee Adjustment for Illegal or Improper Activity (May 2014)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of 41 U.S.C.2102 or 2103, as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be-

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts-

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may-

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be

reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the statute by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12	Limitation on Payments to Influence Certain Federal Transactions.	2020-06

Limitation on Payments to Influence Certain Federal Transactions (Jun 2020)

(a) Definitions. As used in this clause-

Agency means "executive agency" as defined in Federal Acquisition Regulation (FAR) 2.101.

Covered Federal action means any of the following actions:

(1) Awarding any Federal contract.

(2) Making any Federal grant.

(3) Making any Federal loan.

(4) Entering into any cooperative agreement.

(5) Extending, continuing, renewing, amending, or modifying any Federal contract, grant, loan, or cooperative agreement.

Indian tribe and "tribal organization" have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b) and include Alaskan Natives.

Influencing or attempting to influence means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

Local government means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

Officer or employee of an agency includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.

(3) A special Government employee, as defined in section 202, Title 18, United States Code.

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

Person means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or

not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Reasonable compensation means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

Reasonable payment means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

Recipient includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.

Regularly employed means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

State means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibition. 31 U.S.C. 1352 prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352, the Contractor shall not use

appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of this contractor the extension, continuation, renewal, amendment, or modification of this contract.

(1) The term appropriated funds does not include profit or fee from a covered Federal action.

(2) To the extent the Contractor can demonstrate that the Contractor has sufficient monies, other than Federal appropriated funds, the Government will assume that these other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.

(c) Exceptions. The prohibition in paragraph (b) of this clause does not apply under the following conditions:

(1) Agency and legislative liaison by Contractor employees.

(i) Payment of reasonable compensation made to an officer or employee of the Contractor if the payment is for agency and legislative liaison activities not directly related to this contract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.

(ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern-

(A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or

(B) The application or adaptation of the person's products or services for an agency's use.

(iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act,

as amended by Pub. L. 95-507, and subsequent amendments.

(2) Professional and technical services.

(i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(iii) As used in paragraph (c)(2) of this clause, "professional and technical services" are limited to advice and analysis directly applying any professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).

(iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(3) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.

(d) Disclosure.

(1) If the Contractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Contractor with respect to this contract, the Contractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.

(2) If the Contractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Contractor shall, at the end of the calendar quarter in which the change occurs, submit to the Contracting Officer within 30 days an updated disclosure using OMB Standard Form LLL.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(g) Subcontracts.

(1) The Contractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract under this contract that exceeds the threshold specified in FAR 3.808 on the date of subcontract award. The Contractor or subcontractor that awards the subcontract shall retain the declaration.

(2) A copy of each subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor, submit to the Contracting Officer within 30 days a copy of all disclosures. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(3) The Contractor shall include the substance of this clause, including this paragraph (g), in

any subcontract that exceeds the threshold specified in FAR 3.808 on the date of subcontract award.

(End of clause)

52.203-13	Contractor Code of Business Ethics and Conduct.	2021-11

Contractor Code of Business Ethics and Conduct (Nov 2021)

(a) Definitions. As used in this clause-

Agent means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

Full cooperation-

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors' and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require-

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from-

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

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

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

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

(b) Code of business ethics and conduct.

(1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall-

(i) Have a written code of business ethics and conduct;

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall-

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)

(i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has

credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed-

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729- 3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial product or commercial service as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals

and employees, and as appropriate, the Contractor's agents and subcontractors.

(2) An internal control system.

(i) The Contractor's internal control system shall-

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including-

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729- 3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that exceed the threshold specified in FAR 3.1004(a) on the date of subcontract award and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(End of clause)

52.203-16	Preventing Personal Conflicts of Interest.	2020-06

Preventing Personal Conflicts of Interest (Jun 2020)

(a) Definitions. As used in this clause-

Acquisition function closely associated with inherently governmental functions means supporting or providing advice or recommendations with regard to the following activities of a Federal agency:

(1) Planning acquisitions.

(2) Determining what supplies or services are to be acquired by the Government, including developing statements of work.

(3) Developing or approving any contractual documents, to include documents defining requirements, incentive plans, and evaluation criteria.

(4) Evaluating contract proposals.

(5) Awarding Government contracts.

(6) Administering contracts (including ordering changes or giving technical direction in contract performance or contract quantities, evaluating contractor performance, and accepting or rejecting contractor products or services).

(7) Terminating contracts.

(8) Determining whether contract costs are reasonable, allocable, and allowable.

Covered employee means an individual who performs an acquisition function closely associated with inherently governmental functions and is-

(1) An employee of the contractor; or

(2) A subcontractor that is a self-employed individual treated as a covered employee of the contractor because there is no employer to whom such an individual could submit the required disclosures.

Non-public information means any Government or third-party information that-

(1) Is exempt from disclosure under the Freedom of Information Act (5 U.S.C. 552) or otherwise protected from disclosure by statute, Executive order, or regulation; or

(2) Has not been disseminated to the general public and the Government has not yet determined whether the information can or will be made available to the public.

Personal conflict of interest means a situation in which a covered employee has a financial interest, personal activity, or relationship that could impair the employee's ability to act impartially and in the best interest of the Government when performing under the contract. (A de minimis interest that would not "impair the employee's ability to act impartially and in the best interest of the Government" is not covered under this definition.)

(1) Among the sources of personal conflicts of interest are-

(i) Financial interests of the covered employee, of close family members, or of other members of the covered employee's household;

(ii) Other employment or financial relationships (including seeking or negotiating for prospective employment or business); and

(iii) Gifts, including travel.

(2) For example, financial interests referred to in paragraph (1) of this definition may arise from-

(i) Compensation, including wages, salaries, commissions, professional fees, or fees for business referrals;

(ii) Consulting relationships (including commercial and professional consulting and service arrangements, scientific and technical advisory board memberships, or serving as an expert witness in litigation);

(iii) Services provided in exchange for honorariums or travel expense reimbursements;

(iv) Research funding or other forms of research support;

(v) Investment in the form of stock or bond ownership or partnership interest (excluding diversified mutual fund investments);

(vi) Real estate investments;

(vii) Patents, copyrights, and other intellectual property interests; or

(viii) Business ownership and investment interests.

(b) Requirements. The Contractor shall-

(1) Have procedures in place to screen covered employees for potential personal conflicts of interest, by-

(i) Obtaining and maintaining from each covered employee, when the employee is initially assigned to the task under the contract, a disclosure of interests that might be affected by the task to which the employee has been assigned, as follows:

(A) Financial interests of the covered employee, of close family members, or of other members of the covered employee's household.

(B) Other employment or financial relationships of the covered employee (including seeking or negotiating for prospective employment or business).

(C) Gifts, including travel; and

(ii) Requiring each covered employee to update the disclosure statement whenever the

employee's personal or financial circumstances change in such a way that a new personal conflict of interest might occur because of the task the covered employee is performing.

(2) For each covered employee-

(i) Prevent personal conflicts of interest, including not assigning or allowing a covered employee to perform any task under the contract for which the Contractor has identified a personal conflict of interest for the employee that the Contractor or employee cannot satisfactorily prevent or mitigate in consultation with the contracting agency;

(ii) Prohibit use of non-public information accessed through performance of a Government contract for personal gain; and

(iii) Obtain a signed non-disclosure agreement to prohibit disclosure of non-public information accessed through performance of a Government contract.

(3) Inform covered employees of their obligation-

(i) To disclose and prevent personal conflicts of interest;

(ii) Not to use non-public information accessed through performance of a Government contract for personal gain; and

(iii) To avoid even the appearance of personal conflicts of interest;

(4) Maintain effective oversight to verify compliance with personal conflict-of-interest safeguards;

(5) Take appropriate disciplinary action in the case of covered employees who fail to comply with policies established pursuant to this clause; and

(6) Report to the Contracting Officer any personal conflict-of-interest violation by a covered employee as soon as it is identified. This report shall include a description of the violation and the proposed actions to be taken by the Contractor in response to the violation. Provide follow-up reports of corrective actions taken, as necessary. Personal conflict-of-interest violations include-

(i) Failure by a covered employee to disclose a personal conflict of interest;

(ii) Use by a covered employee of non-public information accessed through performance of a

Government contract for personal gain; and

(iii) Failure of a covered employee to comply with the terms of a non-disclosure agreement.

(c) Mitigation or waiver.

(1) In exceptional circumstances, if the Contractor cannot satisfactorily prevent a personal conflict of interest as required by paragraph (b)(2)(i) of this clause, the Contractor may submit a request through the Contracting Officer to the Head of the Contracting Activity for-

(i) Agreement to a plan to mitigate the personal conflict of interest; or

(ii) A waiver of the requirement.

(2) The Contractor shall include in the request any proposed mitigation of the personal conflict of interest.

(3) The Contractor shall-

(i) Comply, and require compliance by the covered employee, with any conditions imposed by the Government as necessary to mitigate the personal conflict of interest; or

(ii) Remove the Contractor employee or subcontractor employee from performance of the contract or terminate the applicable subcontract.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts-

(1) That exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award; and

(2) In which subcontractor employees will perform acquisition functions closely associated with inherently governmental functions (i.e., instead of performance only by a self-employed individual).

(End of clause)

52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.	2017-01

Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017)

(a) Definitions. As used in this clause-

Internal confidentiality agreement or statement means a confidentiality agreement or any other written statement that the contractor requires any of its employees or subcontractors to sign regarding nondisclosure of contractor information, except that it does not include confidentiality agreements arising out of civil litigation or confidentiality agreements that contractor employees or subcontractors sign at the behest of a Federal agency.

Subcontract means any contract as defined in subpart 2.1 entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor means any supplier, distributor, vendor, or firm (including a consultant) that furnishes supplies or services to or for a prime contractor or another subcontractor.

(b) The Contractor shall not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(c) The Contractor shall notify current employees and subcontractors that prohibitions and restrictions of any preexisting internal confidentiality agreements or statements covered by this clause, to the extent that such prohibitions and restrictions are inconsistent with the prohibitions of this clause, are no longer in effect.

(d) The prohibition in paragraph (b) of this clause does not contravene requirements applicable to Standard Form 312 (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(e) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015, (Pub. L. 113-235), and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions) use of funds appropriated (or otherwise made available) is prohibited, if the Government determines that the Contractor is not in compliance with the provisions of this clause.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), in subcontracts under such contracts.

(End of clause)

52.204-9	Personal Identity Verification of Contractor Personnel.	2011-01

Personal Identity Verification of Contractor Personnel (Jan 2011)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall account for all forms of Government-provided identification issued to the Contractor employees in connection with performance under this contract. The Contractor shall return such identification to the issuing agency at the earliest of any of the following, unless otherwise determined by the Government:

(1) When no longer needed for contract performance.

(2) Upon completion of the Contractor employee's employment.

(3) Upon contract completion or termination.

(c) The Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts when the subcontractor's employees are required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system. It shall be the responsibility of the prime Contractor to return such identification to the issuing agency in accordance with the terms set forth in paragraph (b) of this section, unless otherwise approved in writing by the Contracting Officer.

(End of clause)

52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards. (Deviation 2026-O0038)	2026-02

Reporting Executive Compensation and First-Tier Subcontract Awards (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause:

Executive means officers, managing partners, or any other employees in management positions.

First-tier subcontract means a subcontract awarded directly by the Contractor to acquire supplies or services (including construction) for performing a prime contract. It does not include the Contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a contractor's general and administrative expenses or indirect costs.

Month of award means the month in which the Contracting Officer signs a contract or the month in which the Contractor signs a first-tier subcontract.

Total compensation means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the information described at 17 CFR 229.402 (c)(2).

(b) Requirement. Section 2(d)(2) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public; therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public. Nothing in this clause requires disclosing classified information.

(c) Reporting. Unless otherwise directed by the Contracting Officer, or as provided in paragraph (f) of this clause, the Contractor shall report the following in the System for Award Management at https://www.sam.gov as follows:

(1) Executive compensation of the prime contractor. The Contractor shall report the names and total compensation of each of the five most highly compensated executives for its preceding completed fiscal year, if-

(i) In the Contractor's preceding fiscal year, the Contractor received-

(A)80 percent or more of its annual gross revenues from Federal contracts (and subcontracts); loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(B)$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts); loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

(2) First-tier subcontract information. The Contractor shall report the following information by the

end of the month following the month of award of each first-tier subcontract award:

(i) Unique entity identifier for the subcontractor receiving the award and for the subcontractor's ultimate parent company, if the subcontractor has a parent company.

(ii) Name of the subcontractor.

(iii) Amount of the subcontract award.

(iv) Date of the subcontract award.

(v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(vi) The subcontract number assigned by the Prime Contractor.

(vii) Subcontractor's physical address.

(viii) Subcontractor's primary performance location.

(ix) The prime contract number, and order number if applicable.

(x) Awarding agency name and code.

(xi) Funding agency name and code.

(xii) Government contracting office code.

(xiii) The applicable North American Industry Classification System code.

(3) Executive compensation of the first-tier subcontractor. The Contractor shall report by the end of the month following the month of award of a first-tier subcontract award and annually thereafter (calculated from the prime contract award date) the names and total compensation of each of the five most highly compensated executives for that subcontractor in the subcontractor's preceding completed fiscal year, if-

(i) In the subcontractor's preceding fiscal year, the subcontractor received-

(A)80 percent or more of its annual gross revenues from Federal contracts (and subcontracts);

loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(B)$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts); loans, grants (and subgrants); cooperative agreements; and other forms of Federal financial assistance; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986 (see http://www.sec.gov/answers/execomp.htm).

(d) Restriction. The Contractor shall not split or break down subcontracts to a value below the threshold at the Federal Acquisition Regulation 4.208(e), on the date of subcontract award, to avoid the reporting requirements in paragraph (c) of this clause.

(e) Duration. Continued reporting on first-tier subcontracts is not required unless one of the reported data elements changes during the performance of the subcontract. The Contractor is not required to make further reports after a first-tier subcontract expires.

(f) Exceptions.

(1) If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards for that subcontractor.

(g) Prepopulated data. The Subcontract Reports in SAM will prepopulate with some information from SAM and the Federal Procurement Data System (FPDS). If the FPDS information is incorrect, the Contractor should notify the Contracting Officer. If the SAM information is incorrect, the Contractor is responsible for correcting this information.

(End of clause)

52.204-13 System for Award Management- 2026-02

Maintenance. (Deviation 2026-O0038)

System for Award Management-Maintenance (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Commercial and Government Entity code means-

(1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity by unique location (referred to as "CAGE code"); or

(2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency to entities located outside the United States and its outlying areas that the DLA CAGE Branch records and maintains in the CAGE master file (referred to as "NCAGE code").

Unique Entity Identifier (UEI) means an identifier used to identify a specific commercial, nonprofit, or Government entity.

(b) Active registration.

(1) The Contractor shall maintain an active Federal Government contracts registration in the System for Award Management (SAM) at https://www.sam.gov during contract performance and through final payment under this contract. To maintain an active registration in SAM, the Contractor shall review at least annually its registration in SAM and validate that the information is current, accurate, and complete.

(2) The Contractor is responsible for the currency, accuracy, and completeness of the information provided within SAM, and for any liability resulting from the Government's reliance on inaccurate or incomplete information. Updating SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(c) Novation and change-of-name agreements.

(1) If the Contractor has legally changed its business name or "doing business as" name (whichever is shown on the contract), or has transferred the assets used to perform the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in part 42 of the Federal Acquisition Regulation (FAR), the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to -

(i) Change the legal business name in SAM;

(ii) Comply with the requirements of FAR part 42; and

(iii) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor shall provide with its written notification sufficient documentation to support the legally changed name.

(2) If the Contractor fails to comply with the requirements of paragraph (c)(1) of this clause, or fails to perform the agreement at paragraph (c)(1)(iii) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(d) Assignees.

(1) The Contractor shall not change the legal business name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see FAR part 32). Assignees shall be separately registered in SAM.

(2) Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be incorrect information within the meaning of the "Suspension of Payment" paragraph of the EFT clause of this contract.

(e) Unique entity identifier (UEI). The Contractor shall ensure that its UEI is maintained throughout the life of the contract.

(f) Commercial and Government Entity (CAGE) code. The Contractor shall ensure that the CAGE code is maintained throughout the life of the contract. To update a CAGE code, the Contractor shall initiate the change by updating its SAM registration.

(g) Communicating changes. The Contractor shall communicate any change to its UEI or CAGE code to the Contracting Officer within 30 days after the change, so a modification can be issued to update the UEI or CAGE code on this contract. A change in the UEI does not necessarily require a novation.

(End of clause)

52.204-19	Incorporation by Reference of Representations and Certifications.	2014-12

Incorporation by Reference of Representations and Certifications (Dec 2014)

The Contractor's representations and certifications, including those completed electronically via the System for Award Management (SAM), are incorporated by reference into the contract.

(End of clause)

52.204-91	Contractor Identification. (Deviation 2026-O0038)	2026-02

Contractor Identification (Feb 2026) (Deviation 2026-O0038)

Definitions. As used in this clause-

Commercial and Government Entity code means-

(1) An identifier assigned to entities located in the United States or its outlying areas by the Defense Logistics Agency (DLA) Commercial and Government Entity (CAGE) Branch to identify a commercial or government entity by unique location (referred to as "CAGE code"); or

(2) An identifier assigned by a member of the North Atlantic Treaty Organization (NATO) or by the NATO Support and Procurement Agency (NSPA) to entities located outside the United States and its outlying areas that the DLA CAGE Branch records and maintains in the CAGE master file (referred to as "NCAGE code").

Unique entity identifier means an identifier used to identify a specific commercial, nonprofit, or Government entity.

(b) Unique entity identifier (UEI). The Contractor shall ensure that its UEI is maintained throughout the life of the contract.

(c) Commercial and Government Entity (CAGE) code. The Contractor shall ensure that the CAGE code is maintained throughout the life of the contract. The Contractor shall request changes to a CAGE code as indicated in the following table.

If the Contractor is…	Then…
Registered in the System for Award Management (SAM)	Initiate the change by updating its SAM registration
Located in the United States or its outlying areas and is not registered in SAM	Submit a change request to the DLA CAGE Branch via https://cage.dla.mil
Located outside the United States and its outlying areas and is not registered in SAM	Request a change by contacting the appropriate National Codification Bureau (https://www.nato.int/structur/ac/135/about/contacts) or NSPA (https://eportal.nspa.nato.int /AC135Public/scage/CageList.aspx)

(d) Communicating changes. The Contractor shall communicate any change to its UEI or CAGE code to the Contracting Officer within 30 days after the change, so a modification can be issued to update the UEI or CAGE code on this contract. A change in the UEI does not necessarily require a novation.

(End of clause)

52.209-6 Protecting the Government's 2026-02

Interest When Subcontracting With Contractors Debarred, Suspended, Proposed for Debarment, or Voluntarily Excluded. (Deviation 2026-O0038)

Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, Proposed for Debarment, or Voluntarily Excluded (Feb 2026) (Deviation 2026-O0038)

(a) Definition. As used in this clause-

Commercially available off-the-shelf (COTS) item

(1) Means any item of supply (including construction material) that is-

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" in Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

(b) The Government suspends or debars Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Contractor shall not enter into any subcontract, in excess of the threshold specified in FAR 9.405-2(b) on the date of subcontract award, with a Contractor that is debarred, suspended, or proposed for debarment by any executive agency unless a compelling reason exists to do so.

(c) The Contractor shall require each proposed subcontractor whose subcontract will exceed the threshold specified in FAR 9.405-2(b) on the date of subcontract award, other than a

subcontractor providing a commercially available off-the-shelf item, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, proposed for debarment, or voluntarily excluded by the Federal Government.

(d) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party (other than a subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, proposed for debarment, or voluntarily excluded (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being listed with an exclusion in SAM.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its being listed with an exclusion in SAM.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, proposed debarment, or voluntary exclusion.

(e) Subcontracts. Unless this is a contract for the acquisition of commercial products or commercial services, the Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each subcontract that-

(1) Exceeds the threshold specified in FAR 9.405-2(b) on the date of subcontract award; and

(2) Is not a subcontract for commercially available off-the-shelf items.

(End of clause)

52.209-9 Updates of Publicly Available 2026-02

Information Regarding
Responsibility Matters.
(Deviation 2026-O0038)

Updates of Publicly Available Information Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the System for Award Management via https://www.sam.gov.

(b) All information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consists of two segments-

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by-

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for-

(i) Past performance reviews required by part 42.

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that the Government has posted. FAPIIS will retain the comments as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) All information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available (section 3010 of Pub. L. 111-212).

(d) The Government will handle public requests for system information posted prior to April 15, 2011, under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

(End of clause)

52.209-10	Prohibition on Contracting With Inverted Domestic Corporations. (Deviation 2026-O0038)	2026-02

Prohibition on Contracting with Inverted Domestic Corporations (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Inverted domestic corporation means a foreign incorporated entity that meets the definition of an inverted domestic corporation under 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c).

Subsidiary means an entity in which more than 50 percent of the entity is owned-

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) If the contractor reorganizes as an inverted domestic corporation or becomes a subsidiary of an inverted domestic corporation at any time during the period of performance of this contract, applicable law may prohibit the Government from paying for Contractor activities performed after the date when it becomes an inverted domestic corporation or subsidiary. The Government may seek any available remedies in the event the Contractor fails to perform in accordance with the terms and conditions of the contract as a result of Government action under this clause.

(c) Exceptions to this prohibition are located at 9.108-3.

(d) In the event the Contractor becomes either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation during contract performance, the Contractor shall give written notice to the Contracting Officer within five business days from the date of the inversion event.

(End of clause)

52.210-1	Market Research. (Deviation 2026-O0038)	2026-02

Market Research (Feb 2026) (Deviation 2026-O0038)

(a) Definition. As used in this clause-

Commercial product, commercial service, and nondevelopmental item have the meaning

contained in Federal Acquisition Regulation (FAR) 2.101.

(b) Before awarding subcontracts for noncommercial acquisitions, where the subcontracts are over the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, the Contractor shall conduct market research to determine, in the following order of priority, whether-

(1) A commercial product or commercial service can meet the agency's requirements;

(2) The requirements could be modified so the agency could use an existing commercial product or commercial service;

(3) A commercial product or commercial service could be modified to meet the agency's requirements; or

(4) The requirement can only be satisfied by a nondevelopmental item.

(End of clause)

52.211-12	Liquidated Damages-Construction.	2000-09

Liquidated Damages-Construction (Sept 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of **(see section 01 00 00.00 44)** for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-13	Time Extensions.	2000-09

Time Extensions (Sept 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(End of clause)

52.211-15	Defense Priority and Allocation Requirements.	2008-04

Defense Priority and Allocation Requirements (Apr 2008)

This is a rated order certified for national defense, emergency preparedness, and energy program use, and the Contractor shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).

(End of clause)

52.215-2	Audit and Records-Negotiation. (Deviation 2026-O0038)	2026-02

Audit and Records-Negotiation (Feb 2026) (Deviation 2026-O0038)

(a) As used in this clause, records includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Certified cost or pricing data. If the Contractor has been required to submit certified cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the certified cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to-

(1) The proposal for the contract, subcontract, or modification;

(2) The discussions conducted on the proposal(s), including those related to negotiating;

(3) Pricing of the contract, subcontract, or modification; or

(4) Performance of the contract, subcontract or modification.

(d) Comptroller General.-

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder and to interview any current employee regarding such transactions.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary

course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating-

(1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and

(2) The data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified for contractor record retention in Part 4 of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition-

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g)

(1) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, and-

(i) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(ii) For which certified cost or pricing data are required; or

(iii) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

(2) The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-10	Price Reduction for Defective Certified Cost or Pricing Data.	2011-08

Price Reduction for Defective Certified Cost or Pricing Data (Aug 2011)

(a) If any price, including profit or fee, negotiated in connection with this contract, or any cost reimbursable under this contract, was increased by any significant amount because-

(1) The Contractor or a subcontractor furnished certified cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) A subcontractor or prospective subcontractor furnished the Contractor certified cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) Any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction.

(b) Any reduction in the contract price under paragraph (a) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective certified cost or pricing data.

(c)

(1) If the Contracting Officer determines under paragraph (a) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current certified cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the certified cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)

(i) Except as prohibited by subdivision (c)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if-

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the certified cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if-

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(d) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid-

(1) Interest compounded daily, as required by 26 U.S.C.6622, on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C.6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted certified cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-11	Price Reduction for Defective Certified Cost or Pricing Data-Modifications. (Deviation 2026-O0038)	2026-02

Price Reduction for Defective Certified Cost or Pricing Data-Modifications (Feb 2026) (Deviation 2026-O0038)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-3(a) on the date of execution of the modification, except that this clause does not apply to any modification if an exception under FAR 15.403-2 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished certified cost or pricing data that were

not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor certified cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective certified cost or pricing data.

(d)

(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current certified cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the certified cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)

(i) Except as prohibited by paragraph (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if-

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the certified cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if-

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid-

(1) Interest compounded daily, as required by 26 U.S.C.6622, on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted certified cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-12	Subcontractor Certified Cost or Pricing Data. (Deviation 2026-O0038)	2026-02

Subcontractor Certified Cost or Pricing Data (Feb 2026) (Deviation 2026-O0038)

(a) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-3(a), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408-2, Table 15-1 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-2 applies. If the threshold for submission of certified cost or pricing data specified in FAR 15.403-3(a) is adjusted for inflation as set forth in FAR part 1, then the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.403-4 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that, when entered into, exceeds the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), the Contractor shall insert either##

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of certified cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Certified Cost or Pricing Data-Modifications.

(End of clause)

52.215-13 Subcontractor Certified Cost or 2026-02

Pricing Data-Modifications.
(Deviation 2026-O0038)

Subcontractor Certified Cost or Pricing Data-Modifications (Feb 2026) (Deviation 2026-O0038)

(a) The requirements of paragraphs (b) and (c) of this clause shall-

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in Federal Acquisition Regulation (FAR) 15.403-3(a) on the date of execution of the modification; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of certified cost or pricing data in FAR 15.403-3(a), the Contractor shall require the subcontractor to submit certified cost or pricing data (actually or by specific identification in writing), in accordance with FAR 15.408-2, Table 15-1 (to include any information reasonably required to explain the subcontractor's estimating process such as the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data, and the nature and amount of any contingencies included in the price), unless an exception under FAR 15.403-2 applies. If the threshold for submission of certified cost or pricing data specified in FAR 15.403-3(a) is adjusted for inflation as set forth in FAR part 1, then the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.403-4 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of certified cost or pricing data in FAR 15.403-3(a) on the date of agreement on price or the date of award, whichever is later.

(End of clause)

52.215-15	Pension Adjustments and Asset Reversions. (Deviation 2026-O0038)	2026-02

Pension Adjustments and Asset Reversions (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.

(b) For segment closings, pension plan terminations, or curtailment of benefits, the amount of the adjustment shall be-

(1) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99), the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) ; and

(2) For contracts and subcontracts that are not subject to full coverage under the CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12) , except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) shall be the sum of the pension plan costs allocated to all non-CAS covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) subpart 31.2 or for which certified cost or pricing data were submitted.

(c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which certified cost or pricing data were submitted or that are subject to FAR subpart 31.2.

(d) The Contractor shall include the substance of this clause in all subcontracts under this

contract that meet the applicability requirement of FAR 15.110(o).

(End of clause)

52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions. (Deviation 2026-O0038)	2026-02

Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall promptly notify the Contracting Officer in writing when the Contractor determines that it will terminate or reduce the benefits of a PRB plan.

(b) If PRB fund assets revert or inure to the Contractor, or are constructively received by it under a plan termination or otherwise, the Contractor shall make a refund or give a credit to the Government for its equitable share as required by 31.205-6(o)(5) of the Federal Acquisition Regulation (FAR). When determining or agreeing on the method for recovery of the Government's equitable share, the contracting parties should consider the following methods: cost reduction, amortizing the credit over a number of years (with appropriate interest), cash refund, or some other agreed upon method. Should the parties be unable to agree on the method for recovery of the Government's equitable share, through good faith negotiations, the Contracting Officer shall designate the method of recovery.

(c) The Contractor shall insert the substance of this clause in all subcontracts that meet the applicability requirements of FAR 15.110(r).

(End of clause)

52.215-19	Notification of Ownership	2026-02

Changes. (Deviation 2026-
O0038)

Notification of Ownership Changes (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall-

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

(c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.110(s).

(End of clause)

52.215-23	Limitations on Pass-Through Charges. (Deviation 2026-O0038)	2026-02

Limitations on Pass-Through Charges (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Added value means that the Contractor performs subcontract management functions that the Contracting Officer determines are a benefit to the Government (e.g., processing orders of parts or services, maintaining inventory, reducing delivery lead times, managing multiple sources for contract requirements, coordinating deliveries, performing quality assurance functions).

Excessive pass-through charge, with respect to a Contractor or subcontractor that adds no or negligible value to a contract or subcontract, means a charge to the Government by the Contractor or subcontractor that is for indirect costs or profit/fee on work performed by a subcontractor (other than charges for the costs of managing subcontracts and any applicable indirect costs and associated profit/fee based on such costs).

No or negligible value means the Contractor or subcontractor cannot demonstrate to the Contracting Officer that its effort added value to the contract or subcontract in accomplishing the work performed under the contract (including task or delivery orders).

Subcontract means any contract, as defined in Federal Acquisition Regulation (FAR)2.101, entered into by a subcontractor to furnish supplies or services for performance of the contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor, as defined in FAR part 44, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

(b) General. The Government will not pay excessive pass-through charges. The Contracting Officer shall determine if excessive pass-through charges exist.

(c) Reporting. Required reporting of performance of work by the Contractor or a subcontractor. The Contractor shall notify the Contracting Officer in writing if-

(1) The Contractor changes the amount of subcontract effort after award such that it exceeds 70 percent of the total cost of work to be performed under the contract, task order, or delivery order. The notification shall identify the revised cost of the subcontract effort and shall include verification that the Contractor will provide added value; or

(2) Any subcontractor changes the amount of lower-tier subcontractor effort after award such that it exceeds 70 percent of the total cost of the work to be performed under its subcontract. The notification shall identify the revised cost of the subcontract effort and shall include verification that the subcontractor will provide added value as related to the work to be performed by the lower-tier subcontractor(s).

(d) Recovery of excessive pass-through charges. If the Contracting Officer determines that excessive pass-through charges exist;

(1) For other than fixed-price contracts, the excessive pass-through charges are unallowable in accordance with the provisions in FAR 31; and

(2) For applicable DoD fixed-price contracts, as identified in 15.110(v)(2)(i)(B), the Government shall be entitled to a price reduction for the amount of excessive pass-through charges included in the contract price.

(e) Access to records.

(1) The Contracting Officer, or authorized representative, shall have the right to examine and audit all the Contractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the Contractor proposed, billed, or claimed excessive pass-through charges.

(2) For those subcontracts to which paragraph (f) of this clause applies, the Contracting Officer, or authorized representative, shall have the right to examine and audit all the subcontractor's records (as defined at FAR 52.215-2(a)) necessary to determine whether the subcontractor proposed, billed, or claimed excessive pass-through charges.

(f) Subcontracts.The Contractor shall insert the substance of this clause, including this paragraph (f), in all cost-reimbursement subcontracts under this contract that exceed the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, except if the contract is with DoD, then insert in all cost-reimbursement subcontracts and fixed-price subcontracts, except those identified in FAR 15.110(v)(2)(i)(B)(2), that exceed the threshold for obtaining cost or pricing data in FAR 15.403-3(a) on the date of subcontract award.

(End of clause)

52.219-3	Notice of HUBZone Set-Aside or Sole-Source Award. (Deviation 2026-O0038)	2026-02

Notice of HUBZone Set-Aside or Sole-Source Award (Feb 2026) (Deviation 2026-O0038)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern, certified by the Small Business Administration (SBA), that appears on the List of Qualified HUBZone Small Business Concerns maintained by the SBA (13 CFR 126.103).

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside or awarded on a sole-source basis to, HUBZone small business concerns;

(2) Part or parts of a multiple-award contract that have been set aside for HUBZone small business concerns; and

(3) Orders set aside for HUBZone small business concerns under multiple-award contracts as described in 8.4 and 16.5

(c) General.

(1) Offers are solicited only from HUBZone small business concerns. Offers received from concerns that are not HUBZone small business concerns will not be considered.

(2) Any award resulting from this solicitation will be made to a HUBZone small business concern.

(d) Joint venture. A joint venture may be considered a HUBZone concern if-

(1) At least one party to the joint venture is a HUBZone small business concern and complies with 13 CFR 126.616(c); and

(2) Each party to the joint venture qualifies as small under the size standard for the solicitation, or the protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under the SBA mentor-protégé program.

(e) A HUBZone joint venture agrees that, in the performance of the contract, at least 40 percent of the aggregate work performed by the joint venture shall be completed by the HUBZone small business parties to the joint venture. Work performed by the HUBZone small business party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns. (Deviation 2026-O0038)	2026-02

Notice of Price Evaluation preference for HUBZone Small Business Concerns (Feb 2026) (Deviation 2026-O0038)

(a) Evaluation preference.

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(b) Waiver of evaluation preference. A HUBZone small business concern may choose to waive the evaluation preference. If the concern waives the preference, the factor will be added to its offer for evaluation purposes.

[ ] Offeror chooses to waive the evaluation preference.

(c) Joint venture. A HUBZone joint venture agrees that, in the performance of the contract, at least 40 percent of the aggregate work performed by the joint venture shall be completed by the HUBZone small business parties to the joint venture. Work performed by the HUBZone small business parties to the joint venture must be more than administrative functions.

(End of provision)

52.219-6	Notice of Total Small Business Set-Aside. (Deviation 2026-O0038)	2026-02

Notice of Total Small Business Set-Aside (Feb 2026) (Deviation 2026-O0038)

(a) Definition. Small business concern, as used in this clause-

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(2) Affiliates, as used in paragraph (a)(1) of this clause, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership, common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for small business concerns; and

(2) Orders set aside for small business concerns under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(End of clause)

52.219-8	Utilization of Small Business Concerns. (Deviation 2026-O0038)	2026-02

Utilization of Small Business Concerns (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this contract-

HUBZone small business concern means a small business concern that meets the requirements described in 13 CFR 126.200, certified by the Small Business Administration (SBA) and designated by SBA as a HUBZone small business concern in the Small Business Search (SBS) and the System for Award Management (SAM).

Service-disabled veteran-owned small business (SDVOSB) concern means an SDVOSB concern that meets the requirements described in 13 CFR 128.300, is certified by SBA, and is designated by SBA as an SDVOSB concern in SBS and SAM.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation and qualified as a small business under the criteria and size standards in 13 CFR part 121, including the size standard that corresponds to the NAICS code assigned to the contract or subcontract.

Small disadvantaged business (SDB) concern means a small business concern under the size standard applicable to the acquisition, that-

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by-

(i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding the threshold at 13 CFR 124.104(c)(2) after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13. CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

Veteran-owned small business (VOSB) concern means a small business concern-

(1) Not less than 51 percent of which is owned and controlled by one or more veterans (as defined at 38 U.S.C.101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business (WOSB) concern means a small business concern-

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women;

(2) Whose management and daily business operations are controlled by one or more women; and

(3) That is certified by SBA or an approved third- party certifier in accordance with 13 CFR 127.300 and is designated by SBA as a WOSB concern in SBS and SAM.

(b) It is the policy of the United States that small business concerns, VOSB concerns, SDVOSB concerns, HUBZone small business concerns, SDB concerns, and WOSB concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime

contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, VOSB concerns, SDVOSB concerns, HUBZone small business concerns, SDB concerns, and WOSB concerns.

(c)

(1) A joint venture qualifies as a small business concern if-

(i) Each party to the joint venture qualifies as small under the size standard for the solicitation; or

(ii) The protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under a SBA mentor-protégé program. (See 13 CFR 125.9(d).)

(2) A joint venture qualifies as a HUBZone small business concern if it complies with the requirements in 13 CFR 126.616(a) through (c).

(d) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the Small Business Administration or the awarding agency of the as may be necessary to determine the extent of the Contractor's compliance with this clause.

(e)

(1) Unless the Contractor has reason to question the representation, it may accept a subcontractor's written representations of its size and socioeconomic status as a small business or SDB, if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.

(2) Unless the Contractor has reason to question the representation, it may accept a subcontractor's representations of its size and socioeconomic status as a small business or SDB in the System for Award Management (SAM) if the subcontractor-

(i) Is registered in SAM; and

(ii) Represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.

(3) The Contractor may not require that the subcontractor register in SAM for the purposes of representing size or socioeconomic status in connection with a subcontract.

(4) A contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(5) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern, VOSB, SDVOSB, or WOSB concern is certified by SBA by checking SAM or SBS at https://search.certifications.sba.gov/.

(End of clause)

52.219-13	Notice of Set-Aside of Orders.	2020-03

Notice of Set-Aside of Orders (Mar 2020)

(a) The Contracting Officer may set aside orders for the small business concerns identified in 19.000(a)(3).

(b) The Contracting Officer will give notice of the order or orders, if any, to be set aside for small business concerns identified in 19.000(a)(3) and the applicable small business program. This notice, and its restrictions, will apply only to the specific orders that have been set aside for any of the small business concerns identified in 19.000(a)(3).

(End of clause)

52.219-27	Notice of Set-Aside for, or Sole-Source Award to, Service-Disabled Veteran-Owned Small	2026-02

Business (SDVOSB) Concerns
Eligible Under the SDVOSB
Program. (Deviation 2026-O0038)

Notice of Set-Aside for, or Sole-Source Award to, Service-Disabled Veteran-Owned Small Business (SDVOSB) Concerns Eligible Under the SDVOSB Program. (Feb 2026) (Deviation 2026-O0038)

(a) Definition.

Service-disabled veteran-owned small business (SDVOSB) concern means a small business concern-

(1)

(i) Not less than 51 percent of which is owned and controlled by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran; or

(2) A small business concern eligible under the SDVOSB Program in accordance with 13 CFR part 128 (see FAR 19.106).

(3) Service-disabled veteran, as used in this definition, means a veteran as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16) and who is registered in the Beneficiary Identification and Records Locator Subsystem, or successor system that is maintained by the Department of Veterans Affairs' Veterans Benefits Administration, as a service-disabled veteran.

Service-disabled veteran-owned small business (SDVOSB) concern eligible under the SDVOSB Program means an SDVOSB concern that is designated in the System for Award Management

(SAM) as certified by the Small Business Administration (SBA) in accordance with 13 CFR 128.300.

Service-disabled veteran-owned small business (SDVOSB) Program means a program that authorizes contracting officers to limit competition, including award on a sole-source basis, to SDVOSB concerns eligible under the SDVOSB Program.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for, or awarded on a sole-source basis to, SDVOSB concerns eligible under the SDVOSB Program;

(2) Part or parts of a multiple-award contract that have been set aside for SDVOSB concerns eligible under the SDVOSB Program; and

(3) Orders set aside for SDVOSB concerns eligible under the SDVOSB Program, under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from concerns designated in SAM as SDVOSB concerns certified by SBA. Offers received from concerns that are not SDVOSB concerns certified by SBA will not be considered.

(2) Any award resulting from this solicitation will be made only to a concern designated in SAM as an SDVOSB certified by SBA.

(d) A joint venture may be considered an SDVOSB concern if the managing partner of the joint venture complies with the criteria defined in paragraph (a) of this clause and 13 CFR 128.402.

(e) In a joint venture that complies with paragraph (d) of this clause, the SDVOSB party or parties to the joint venture shall perform at least 40 percent of the work performed by the joint venture. Work performed by the SDVOSB party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.219-28	Postaward Small Business Program Rerepresentation. (Deviation 2026-O0038)	2026-02

Postaward Small Business Program Rerepresentation (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern-

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause.

(2) Affiliates, as used in this definition, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership, common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

(b) If the Contractor represented that it was a small business concern, a small disadvantaged business concern, or a joint venture that was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts-

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code(s) assigned to this contract. The small business size standard corresponding to this NAICS code(s) can be found at https://www.sba.gov/document /support--table-size-standards.

(d) The small business size standard for a Contractor providing an end item that it does not manufacture, process, or produce itself, for a contract other than a construction or service contract, is 500 employees, or 150 employees for information technology value-added resellers under NAICS code 541519, if the acquisition-

(1) Was set aside for small business and has a value above the simplified acquisition threshold;

(2) Used the HUBZone price evaluation preference regardless of dollar value, unless the Contractor waived the price evaluation preference; or

(3) Was an 8(a), HUBZone, service-disabled veteran-owned, economically disadvantaged women-owned, or women-owned small business set-aside or sole-source award regardless of dollar value.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation(s) required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting officer in writing within the timeframes specified in paragraph (b) of this clause, that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

(1) The Contractor represents that it [ ] is, [ ] is not a small business concern under ____NAICS Code assigned to ____contract number.

(2) [Complete only if the Contractor represented itself as a small business concern in paragraph (g)(1) of this clause.] The Contractor represents that it [ ] is, [ ] is not, a small disadvantaged business concern as defined in 13 CFR 124.1001.

(3) Women-owned small business (WOSB) joint venture eligible under the WOSB Program. The Contractor represents that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: __.]

(4) Economically disadvantaged women-owned small business (EDWOSB) joint venture. The Contractor represents that it [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR 127.506(a) through (c). [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: __ .]

(5) Service-disabled veteran-owned small business (SDVOSB) joint venture eligible under the SDVOSB Program. The Contractor represents that it [ ] is, [ ] is not an SDVOSB joint venture eligible under the SDVOSB Program that complies with the requirements of 13 CFR 128.402. [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: __.]

(6) HUBZone joint venture eligible under the HUBZone Program.[Complete only if the offeror is a HUBZone small business concern.] The offeror represents, as part of its offer, that It [ ] is, [ ] is not a HUBZone joint venture that complies with the requirements of 13 CFR 126.616(a) through (c). [____The Contractor shall enter the name and unique entity identifier of each party to the joint venture: .] Each HUBZone small business concern participating in the HUBZone joint venture must be certified as a HUBZone concern. [____Contractor to sign and date and insert authorized signer's name and title.]

(End of clause)

52.219-29	Notice of Set-Aside for, or Sole-Source Award to, Economically Disadvantaged Women-Owned Small Business Concerns. (Deviation 2026-O0038)	2026-02

Notice of Set-Aside for, or Sole-Source Award to, Economically Disadvantaged Women-Owned Small Business Concerns (Feb 2026) (Deviation 2026-O0038)

(a) Definition-

Economically disadvantaged women-owned small business (EDWOSB) concern as used in this clause, means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127, and is certified pursuant to 13 CFR 127.300 as an EDWOSB. It automatically qualifies as a women-owned small business (WOSB) concern eligible under the WOSB Program.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for, or awarded on a sole-source basis to, EDWOSB concerns;

(2) Part or parts of a multiple-award contract that have been set aside for EDWOSB concerns; and

(3) Orders set aside for EDWOSB concerns under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from certified EDWOSB concerns. Offers received from concerns that are not certified EDWOSB concerns will not be considered.

(2) Any award resulting from this solicitation will be made to a certified EDWOSB concern.

(d) Joint venture. A joint venture may be considered an EDWOSB concern if-

(1) At least one party to the joint venture complies with the criteria defined in paragraph (a) and paragraph (c)(1) of this clause, and 13 CFR 127.506(c); and

(2) Each party to the joint venture qualifies as small under the size standard for the solicitation, or the protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under the SBA mentor-protégé program.

(e) In a joint venture that complies with paragraph (d) of this clause, the EDWOSB party or parties to the joint venture shall perform at least 40 percent of the work performed by the joint venture. Work performed by the EDWOSB party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.219-30	Notice of Set-Aside for, or Sole-Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program. (Deviation 2026-O0038)	2026-02

Notice of Set-Aside for, or Sole-Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program (Feb 2026) (Deviation 2026-O0038)

(a) Definition.

Women-owned small business (WOSB) concern eligible under the WOSB Program (in accordance with 13 CFR part 127), as used in this clause, means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States, and the concern is certified by SBA or an approved third-party certifier in accordance with 13 CFR 127.300 as a WOSB. A certified EDWOSB is automatically eligible as a certified WOSB.

(b) Applicability. This clause applies only to-

(1) Contracts that have been set aside for, or awarded on a sole-source basis to, WOSB concerns eligible under the WOSB Program;

(2) Part or parts of a multiple-award contract that have been set aside for WOSB concerns eligible under the WOSB Program; and

(3) Orders set aside for WOSB concerns eligible under the WOSB Program, under multiple-award contracts as described in 8.4 and 16.5.

(c) General.

(1) Offers are solicited only from certified WOSB concerns eligible under the WOSB Program. Offers received from concerns that are not certified WOSB concerns eligible under the WOSB Program shall not be considered

(2) Any award resulting from this solicitation will be made to a certified WOSB concern eligible under the WOSB Program.

(d) Joint venture. A joint venture may be considered a WOSB concern eligible under the WOSB Program if-

(1) At least one party to the joint venture complies with the criteria defined in paragraph (a) and (c)(1) of this clause, and 13 CFR 127.506(c); and

(2) Each party to the joint venture qualifies as small under the size standard for the solicitation, or the protégé is small under the size standard for the solicitation in a joint venture comprised of a mentor and protégé with an approved mentor-protégé agreement under the SBA mentor-protégé program.

(e) In a joint venture that complies with paragraph (d) of this clause, the WOSB party or parties to the joint venture shall perform at least 40 percent of the work performed by the joint venture. Work performed by the WOSB party or parties to the joint venture must be more than administrative functions.

(End of clause)

52.222-4	Contract Work Hours and Safety Standards-Overtime Compensation. (Deviation 2026-O0038)	2026-02

Contract Work Hours and Safety Standards-Overtime Compensation (Feb 2026) (Deviation 2026-O0038)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.301-1) must require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate specified at 29 CFR 5.5(b)(2) per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37). In accordance with the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 2461 Note), the Department of Labor adjusts this civil monetary penalty for inflation no later than January 15 each year.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or

subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors must maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and must make them available to the Government until 3 years after contract completion. The records must contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors must allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also must allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor must insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower tier subcontracts. The Contractor must be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6	Construction Wage Rate Requirements. (Deviation 2026-O0038)	2026-02

Construction Wage Rate Requirements (Feb 2026) (Deviation 2026-O0038)

(a) Definition.-"Site of the work"-

(1) Means-

(i) The primary site of the work. The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) The secondary site of the work, if any. Any other site where a significant portion of the building or work is constructed, provided that such site is-

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided-

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the "primary site of the work" as defined in paragraph (a)(1)(i), or the "secondary site of the work" as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of bids and not on the Project site, are not included in the "site of the work." Such permanent, previously established facilities are not a part of the "site of the work" even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b)

(1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued

by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work must be effective from the first day on which work under the contract was performed at that site and must be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work must be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Construction Wage Rate Requirements statute on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(3) Such laborers and mechanics must be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Construction Wage Rate Requirements (Davis-Bacon Act) poster (WH-1321) must be posted at all times by the Contractor and its subcontractors at the primary site of the work and the secondary site of the work, if any, in a prominent and accessible place where it can be easily seen by the workers.

(c)

(1) The Contractor must complete and submit to the Contracting Officer the Standard Form (SF) 1444, Request for Authorization of Additional Classification and Rate, if any class of laborers or

mechanics that is not listed in the wage determination applicable to the contract is to be employed under the contract. Upon receipt of a complete SF 1444, the Contracting Officer will submit a report to the Administrator, Wage and Hour Division, for approving, modifying, disapproving, or rendering a final determination, of the additional classification and wage rate including any amount designated for fringe benefits.

(2) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraph (c) of this clause must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(d) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor must either pay the benefit as stated in the wage determination or must pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(e) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Construction Wage Rate Requirements statute have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(End of clause)

52.222-8	Payrolls and Basic Records. (Deviation 2026-O0038)	2026-02

Payrolls and Basic Records (Feb 2026) (Deviation 2026-O0038)

(a) Payrolls and basic records relating thereto must be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records must contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of

wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) (Construction Wage Rate Requirement statute)), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Construction Wage Rate Requirements, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B), the Contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs must maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)

(1) The Contractor must submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause, except that full social security numbers and home addresses must not be included on weekly transmittals. Instead the payrolls must only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be obtained from the U.S. Department of Labor Wage and Hour Division website at https://www.dol.gov/agencies/whd/forms. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors must maintain the full social security number and current address of each covered worker, and must provide them upon request to the Contracting Officer, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a Prime Contractor to require a subcontractor to provide addresses and social security numbers to the Prime Contractor for its own records, without weekly submission to the Contracting Officer.

(2) Each payroll submitted must be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and must certify-

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 must satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor must make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor must permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

52.222-9	Apprentices and Trainees. (Deviation 2026-O0038)	2026-02

Apprentices and Trainees (Feb 2026) (Deviation 2026-O0038)

(a) Apprentices.

(1) An apprentice will be permitted to work at less than the predetermined rate for the work performed when employed-

(i) Pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS) or with a State Apprenticeship Agency recognized by the OATELS; or

(ii) In the first 90 days of probationary employment as an apprentice in such an apprenticeship program, even though not individually registered in the program, if certified by the OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program.

(3) Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (a)(1) of this clause, must be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program must be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.

(5) Apprentices must be paid fringe benefits in accordance with the provisions of the

apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes must be paid in accordance with that determination.

(6) In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees.

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer, and Labor Services (OATELS). The ratio of trainees to journeymen on the job site must not be greater than permitted under the plan approved by OATELS.

(2) Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees must be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees must be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the OATELS must be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program must be paid not less than the applicable wage rate in the wage determination for the work actually performed.

(3) In the event OATELS withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause must be in conformity with the equal employment opportunity requirements of Executive Order11246, as amended, and 29 CFR Part 30.

(End of clause)

52.222-10	Compliance with Copeland Act Requirements. (Deviation 2026-O0038)	2026-02

Compliance with Copeland Act Requirements (Feb 2026) (Deviation 2026-O0038)

The Contractor must comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-11	Subcontracts (Labor Standards). (Deviation 2026-O0038)	2026-02

Subcontracts (Labor Standards) (Feb 2026) (Deviation 2026-O0038)

(a) Definition. "Construction, alteration or repair," as used in this clause, means all types of work done by laborers and mechanics employed by the construction Contractor or construction subcontractor on a particular building or work at the site thereof, including without limitation-

(1) Altering, remodeling, installation (if appropriate) on the site of the work of items fabricated off-

site;

(2) Painting and decorating;

(3) Manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work;

(4) Transportation of materials and supplies between the site of the work within the meaning of paragraphs (a)(1)(i) and (ii) of the "site of the work" as defined in the FAR clause at 52.222-6, Construction Wage Rate Requirements of this contract, and a facility which is dedicated to the construction of the building or work and is deemed part of the site of the work within the meaning of paragraph (2) of the "site of the work" definition; and

(5) Transportation of portions of the building or work between a secondary site where a significant portion of the building or work is constructed, which is part of the "site of the work" definition in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, and the physical place or places where the building or work will remain (paragraph (a)(1)(i) of the FAR clause at 52.222-6, in the "site of the work" definition).

(b) The Contractor must insert in any subcontracts for construction, alterations and repairs within the United States the clauses entitled-

(1) Construction Wage Rate Requirements;

(2) Contract Work Hours and Safety Standards-Overtime Compensation (if the clause is included in this contract);

(3) Apprentices and Trainees;

(4) Payrolls and Basic Records;

(5) Compliance with Copeland Act Requirements;

(6) Withholding of Funds;

(7) Subcontracts (Labor Standards);

(8) Contract Termination-Debarment;

(9) Disputes Concerning Labor Standards;

(10) Compliance with Construction Wage Rate Requirements and Related Regulations; and

(11) Certification of Eligibility.

(c) The prime Contractor must be responsible for compliance by any subcontractor or lower tier subcontractor performing construction within the United States with all the contract clauses cited in paragraph (b).

(d)

(1) Within 14 days after award of the contract, the Contractor must deliver to the Contracting Officer a completed Standard Form (SF) 1413, Statement and Acknowledgment, for each subcontract for construction within the United States, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (b) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor must deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(e) The Contractor must insert the substance of this clause, including this paragraph (e) in all subcontracts for construction within the United States.

(End of clause)

52.222-12 Contract Termination-Debarment. 2014-05

Contract Termination-Debarment (May 2014)

A breach of the contract clauses entitled Construction Wage Rate Requirements, Contract Work Hours and Safety Standards-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards),

Compliance with Construction Wage Rate Requirements and Related Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13	Compliance with Construction Wage Rate Requirements and Related Regulations.	2014-05

Compliance with Construction Wage Rate Requirements and Related Regulations (May 2014)

All rulings and interpretations of the Construction Wage Rate Requirements and related statutes contained in 29 CFR parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

52.222-14	Disputes Concerning Labor Standards. (Deviation 2026-O0038)	2026-02

Disputes Concerning Labor Standards (Feb 2026) (Deviation 2026-O0038)

The United States Department of Labor has set forth in 29 CFR parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes must be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or

their representatives.

(End of clause)

52.222-15	Certification of Eligibility.	2014-05

Certification of Eligibility (May 2014)

(a) By entering into this contract, the Contractor certifies that neither it nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b)(2) or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

52.222-30	Construction Wage Rate Requirements-Price Adjustment (None or Separately Specified Method).	2018-08

Construction Wage Rate Requirements-Price Adjustment (None or Separately Specified Method) (Aug 2018)

(a) The wage determination issued under the Construction Wage Rate Requirements statute by the Administrator, Wage and Hour Division, U.S. Department of Labor, that is effective for an option to extend the term of the contract, will apply to that option period.

(b) The Contracting Officer will make no adjustment in contract price, other than provided for elsewhere in this contract, to cover any increases or decreases in wages and benefits as a result of-

(1) Incorporation of the Department of Labor's wage determination applicable at the exercise of the option to extend the term of the contract;

(2) Incorporation of a wage determination otherwise applied to the contract by operation of law; or

(3) An increase in wages and benefits resulting from any other requirement applicable to workers subject to the Construction Wage Rate Requirements statute.

(End of clause)

52.222-35	Equal Opportunity for Veterans. (Deviation 2026-O0038)	2026-02

Equal Opportunity for Veterans (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at Federal Acquisition Regulation (FAR) 22.1301.

(b) Equal opportunity requirements. The Contractor must abide by the requirements of 38 U.S. C. 4212(a)(1) and (2). These requirements prohibit discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor must insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1302-1(a)(2) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor must act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

52.222-36	Equal Opportunity for Workers with Disabilities. (Deviation 2026-O0038)	2026-02

Equal Opportunity for Workers with Disabilities (Feb 2026) (Deviation 2026-O0038)

(a) Equal opportunity clause. The Contractor must abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor must include the terms of this clause in every subcontract or purchase order in excess of the threshold specified in Federal Acquisition Regulation (FAR) 22.1401-2(a)(1) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor must act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

52.222-37	Employment Reports on Veterans. (Deviation 2026-O0038)	2026-02

Employment Reports on Veterans (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause, "active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," and "recently separated veteran," have the meanings given in Federal Acquisition Regulation (FAR) 22.1301.

(b) Unless the Contractor is a State or local government agency, the Contractor must report at least annually, as required by the Secretary of Labor, on-

(1) The total number of employees in the contractor's workforce, by job category and hiring location, who are protected veterans (i.e., active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans);

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of protected veterans (i.e., active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans); and

(3) The maximum number and minimum number of employees of the Contractor or subcontractor during the period covered by the report.

(c) The Contractor must report the above items by filing the VETS-4212 "Federal Contractor Veterans' Employment Report" (see "VETS-4212 Federal Contractor Reporting" and "Filing Your VETS-4212 Report" at http://www.dol.gov/vets/vets4212.htm).

(d) The Contractor must file VETS-4212 Reports no later than September 30 of each year.

(e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause must reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report.

(f) The number of veterans reported must be based on data known to the contractor when

completing the VETS-4212. The contractor's knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self-identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the contractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C. 4212.

(g) The Contractor must insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1302-1(b) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor.

(End of clause)

52.222-40	Notification of Employee Rights Under the National Labor Relations Act. (Deviation 2026-O0038)	2026-02

Notification of Employee Rights Under the National Labor Relations Act (Feb 2026) (Deviation 2026-O0038)

(a) During the term of this contract, the Contractor must post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR471.2 (d) and (f).

(1) Physical posting of the employee notice must be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor must also post the required notice electronically by displaying prominently, on any Web site that

is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required employee notice, printed by the Department of Labor, may be-

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-Management Standards Web site at http://www.dol.gov /olms/regs/compliance/EO13496.htm; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor must comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor must include the substance of this clause, including this paragraph (f), in every subcontract that exceeds $10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor must not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor must take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of clause)

52.222-42	Statement of Equivalent Rates for Federal Hires.	2014-05

Statement of Equivalent Rates for Federal Hires (May 2014)

In compliance with the Service Contract Labor Standards statute and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only: It is not a Wage Determination

Employee Class	Monetary Wage-Fringe Benefits
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

____ ____
____ ____
(End of clause)

52.222-44	Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment. (Deviation 2026-O0038)	2026-02

Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (Feb 2026) (Deviation 2026-O0038)

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to Contractor collective bargaining agreements.

(b) The Contractor warrants that the prices in this contract do not include any allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(c) The contract price, contract unit price labor rates, or fixed hourly labor rates will be adjusted to reflect increases or decreases by the Contractor in wages and fringe benefits to the extent that these increases or decreases are made to comply with-

(1) An increased or decreased wage determination applied to this contract by operation of law; or

(2) An amendment to the Fair Labor Standards Act of1938 that is enacted subsequent to award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(d) Any such adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (c) of this clause, and to the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance; it must not otherwise include any amount for general and administrative costs, overhead, or profit.

(e) The Contractor must notify the Contracting Officer of any increase claimed under this clause

within 30 days after the effective date of the wage change, unless this period is extended by the Contracting Officer in writing. The Contractor must promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice must contain a statement of the amount and the change in fixed hourly rates (if this is a time-and-materials or labor-hour contract) claimed and any relevant supporting data that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price, contract unit price labor rates, or fixed hourly rates must be modified in writing. The Contractor must continue performance pending agreement on or determination of any such adjustment and its effective date.

(f) The Contracting Officer or an authorized representative must, until the expiration of 3 years after final payment under the contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor.

(End of clause)

52.222-50	Combating Trafficking in Persons. (Deviation 2026-O0038)	2026-02

Combating Trafficking in Persons (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Agent means any individual, including a director, an officer, an employee, or an independent contractor, authorized to act on behalf of the organization.

Coercion means-

(1) Threats of serious harm to or physical restraint against any person;

(2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or

(3) The abuse or threatened abuse of the legal process.

Commercial sex act means any sex act on account of which anything of value is given to or received by any person.

Commercially available off-the-shelf (COTS) item -

(1) Means any item of supply (including construction material) that is-

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" at Federal Acquisition Regulation (FAR) 2.101;

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

Debt bondage means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

Employee means an employee of the Contractor directly engaged in the performance of work under the contract who has other than a minimal impact or involvement in contract performance.

Forced Labor means knowingly providing or obtaining the labor or services of a person-

(1) By threats of serious harm to, or physical restraint against, that person or another person;

(2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or

(3) By means of the abuse or threatened abuse of law or the legal process.

Involuntary servitude includes a condition of servitude induced by means of-

(1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or

(2) The abuse or threatened abuse of the legal process.

Recruitment fees means fees of any type, including charges, costs, assessments, or other financial obligations, that are associated with the recruiting process, regardless of the time, manner, or location of imposition or collection of the fee.

(1) Recruitment fees include, but are not limited to, the following fees (when they are associated with the recruiting process) for-

(i) Soliciting, identifying, considering, interviewing, referring, retaining, transferring, selecting, training, providing orientation to, skills testing, recommending, or placing employees or potential employees;

(ii) Advertising;

(iii) Obtaining permanent or temporary labor certification, including any associated fees;

(iv) Processing applications and petitions;

(v) Acquiring visas, including any associated fees;

(vi) Acquiring photographs and identity or immigration documents, such as passports, including any associated fees;

(vii) Accessing the job opportunity, including required medical examinations and immunizations; background, reference, and security clearance checks and examinations; and additional certifications;

(viii) An employer's recruiters, agents or attorneys, or other notary or legal fees;

(ix) Language interpretation or translation, arranging for or accompanying on travel, or providing other advice to employees or potential employees;

(x) Government-mandated fees, such as border crossing fees, levies, or worker welfare funds;

(xi) Transportation and subsistence costs-

(A) While in transit, including, but not limited to, airfare or costs of other modes of transportation, terminal fees, and travel taxes associated with travel from the country of origin to the country of performance and the return journey upon the end of employment; and

(B) From the airport or disembarkation point to the worksite;

(xii) Security deposits, bonds, and insurance; and

(xiii) Equipment charges.

(2) A recruitment fee, as described in the introductory text of this definition, is a recruitment fee, regardless of whether the payment is-

(i) Paid in property or money;

(ii) Deducted from wages;

(iii) Paid back in wage or benefit concessions;

(iv) Paid back as a kickback, bribe, in-kind payment, free labor, tip, or tribute; or

(v) Collected by an employer or a third party, whether licensed or unlicensed, including, but not limited to-

(A) Agents;

(B) Labor brokers;

(C) Recruiters;

(D) Staffing firms (including private employment and placement firms);

(E) Subsidiaries/affiliates of the employer;

(F) Any agent or employee of such entities; and

(G) Subcontractors at all tiers.

Severe forms of trafficking in persons means-

(1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

(2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

Sex trafficking means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Policy. The United States Government has adopted a policy prohibiting trafficking in persons including the trafficking-related activities of this clause. Contractors, contractor employees, and their agents must not-

(1) Engage in severe forms of trafficking in persons during the period of performance of the contract;

(2) Procure commercial sex acts during the period of performance of the contract;

(3) Use forced labor in the performance of the contract;

(4) Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee's identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;

(5)

(i) Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language understood by the employee or potential employee, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant costs to be charged to the employee or potential employee, and, if applicable, the hazardous nature of the work;

(ii) Use recruiters that do not comply with local labor laws of the country in which the recruiting takes place;

(6) Charge employees or potential employees recruitment fees;

(7)

(i) Fail to provide return transportation or pay for the cost of return transportation upon the end of employment-

(A) For an employee who is not a national of the country in which the work is taking place and who was brought into that country for the purpose of working on a U.S. Government contract or subcontract (for portions of contracts performed outside the United States); or

(B) For an employee who is not a United States national and who was brought into the United States for the purpose of working on a U.S. Government contract or subcontract, if the payment of such costs is required under existing temporary worker programs or pursuant to a written agreement with the employee (for portions of contracts performed inside the United States); except that-

(ii) The requirements of paragraphs (b)(7)(i) of this clause must not apply to an employee who is-

(A) Legally permitted to remain in the country of employment and who chooses to do so; or

(B) Exempted by an authorized official of the contracting agency from the requirement to provide return transportation or pay for the cost of return transportation;

(iii) The requirements of paragraph (b)(7)(i) of this clause are modified for a victim of trafficking in persons who is seeking victim services or legal redress in the country of employment, or for a witness in an enforcement action related to trafficking in persons. The contractor must provide the return transportation or pay the cost of return transportation in a way that does not obstruct the victim services, legal redress, or witness activity. For example, the contractor must not only offer return transportation to a witness at a time when the witness is still needed to testify. This paragraph does not apply when the exemptions at paragraph (b)(7)(ii) of this clause apply.

(8) Provide or arrange housing that fails to meet the host country housing and safety standards; or

(9) If required by law or contract, fail to provide an employment contract, recruitment agreement, or other required work document in writing. Such written work document must be in a language the employee understands. If the employee must relocate to perform the work, the work document must be provided to the employee at least five days prior to the employee relocating. The employee's work document must include, but is not limited to, details about work description, wages, prohibition on charging recruitment fees, work location(s), living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance process, and the content of applicable laws and regulations that prohibit trafficking in persons.

(c) Contractor requirements. The Contractor must-

(1) Notify its employees and agents of-

(i) The United States Government's policy prohibiting trafficking in persons, described in paragraph (b) of this clause; and

(ii) The actions that will be taken against employees or agents for violations of this policy. Such actions for employees may include, but are not limited to, removal from the contract, reduction in benefits, or termination of employment; and

(2) Take appropriate action, up to and including termination, against employees, agents, or subcontractors that violate the policy in paragraph (b) of this clause.

(d) Notification.

(1) The Contractor must inform the Contracting Officer and the agency Inspector General immediately of-

(i) Any credible information it receives from any source (including host country law enforcement) that alleges a Contractor employee, subcontractor, subcontractor employee, or their agent has engaged in conduct that violates the policy in paragraph (b) of this clause (see also 18 U.S.C. 1351, Fraud in Foreign Labor Contracting, and 52.203-13(b)(3)(i)(A), if that clause is included in the solicitation or contract, which requires disclosure to the agency Office of the Inspector General when the Contractor has credible evidence of fraud); and

(ii) Any actions taken against a Contractor employee, subcontractor, subcontractor employee, or their agent pursuant to this clause.

(2) If the allegation may be associated with more than one contract, the Contractor must inform the contracting officer for the contract with the highest dollar value.

(e) Remedies. In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraphs (c), (d), (g), (h), or (i) of this clause may result in-

(1) Requiring the Contractor to remove a Contractor employee or employees from the performance of the contract;

(2) Requiring the Contractor to terminate a subcontract;

(3) Suspension of contract payments until the Contractor has taken appropriate remedial action;

(4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Contractor non-compliance;

(5) Declining to exercise available options under the contract;

(6) Termination of the contract for default or cause, in accordance with the termination clause of this contract; or

(7) Suspension or debarment.

(f) Mitigating and aggravating factors. When determining remedies, the Contracting Officer may consider the following:

(1) Mitigating factors. The Contractor had a Trafficking in Persons compliance plan or an awareness program at the time of the violation, was in compliance with the plan, and has taken appropriate remedial actions for the violation, that may include reparation to victims for such violations.

(2) Aggravating factors. The Contractor failed to abate an alleged violation or enforce the requirements of a compliance plan, when directed by the Contracting Officer to do so.

(g) Full cooperation.

(1) The Contractor must, at a minimum-

(i) Disclose to the agency Inspector General information sufficient to identify the nature and extent of an offense and the individuals responsible for the conduct;

(ii) Provide timely and complete responses to Government auditors' and investigators' requests for documents;

(iii) Cooperate fully in providing reasonable access to its facilities and staff (both inside and outside the U.S.) to allow contracting agencies and other responsible Federal agencies to conduct audits, investigations, or other actions to ascertain compliance with the Trafficking Victims Protection Act of 2000 (22 U.S.C. chapter 78), E.O. 13627, or any other applicable law or regulation establishing restrictions on trafficking in persons, the procurement of commercial sex acts, or the use of forced labor; and

(iv) Protect all employees suspected of being victims of or witnesses to prohibited activities, prior to returning to the country from which the employee was recruited, and must not prevent or hinder the ability of these employees from cooperating fully with Government authorities.

(2) The requirement for full cooperation does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not-

(i) Require the Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine;

(ii) Require any officer, director, owner, employee, or agent of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; or

(iii) Restrict the Contractor from-

(A) Conducting an internal investigation; or

(B) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

(h) Compliance plan.

(1) This paragraph (h) applies to any portion of the contract that-

(i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(ii) Has an estimated value that exceeds $700,000.

(2) The Contractor must maintain a compliance plan during the performance of the contract that is appropriate-

(i) To the size and complexity of the contract; and

(ii) To the nature and scope of the activities to be performed for the Government, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.

(3) Minimum requirements. The compliance plan must include, at a minimum, the following:

(i) An awareness program to inform contractor employees about the Government's policy prohibiting trafficking-related activities described in paragraph (b) of this clause, the activities prohibited, and the actions that will be taken against the employee for violations. Additional information about Trafficking in Persons and examples of awareness programs can be found at the Web site for the Department of State's Office to Monitor and Combat Trafficking in Persons at http://www.state.gov/j/tip/.

(ii) A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees

the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at help@befree.org.

(iii) A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employee or potential employee, and ensures that wages meet applicable host-country legal requirements or explains any variance.

(iv) A housing plan, if the Contractor or subcontractor intends to provide or arrange housing, that ensures that the housing meets host-country housing and safety standards.

(v) Procedures to prevent agents and subcontractors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or subcontractor employees that have engaged in such activities.

(4) Posting.

(i) The Contractor must post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the work is to be performed in the field or not in a fixed location) and on the Contractor's Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Contractor must provide the relevant contents of the compliance plan to each worker in writing.

(ii) The Contractor must provide the compliance plan to the Contracting Officer upon request.

(5) Certification. Annually after receiving an award, the Contractor must submit a certification to the Contracting Officer that-

(i) It has implemented a compliance plan to prevent any prohibited activities identified at paragraph (b) of this clause and to monitor, detect, and terminate any agent, subcontract or subcontractor employee engaging in prohibited activities; and

(ii) After having conducted due diligence, either-

(A) To the best of the Contractor's knowledge and belief, neither it nor any of its agents, subcontractors, or their agents is engaged in any such activities; or

(B) If abuses relating to any of the prohibited activities identified in paragraph (b) of this clause have been found, the Contractor or subcontractor has taken the appropriate remedial and

referral actions.

(i) Subcontracts.

(1) The Contractor must include the substance of this clause, including this paragraph (i), in all subcontracts and in all contracts with agents. The requirements in paragraph (h) of this clause apply only to any portion of the subcontract that-

(i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and

(ii) Has an estimated value that exceeds $700,000.

(2) If any subcontractor is required by this clause to submit a certification, the Contractor must require submission prior to the award of the subcontract and annually thereafter. The certification must cover the items in paragraph (h)(5) of this clause.

(End of clause)

52.222-54	Employment Eligibility Verification. (Deviation 2026-O0038)	2026-02

Employment Eligibility Verification (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Commercially available off-the-shelf (COTS) item-

(1) Means any item of supply that is-

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products. Per 46 CFR 525.1 (c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

Employee assigned to the contract means an employee who was hired after November 6, 1986 (after November 27, 2009 in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1802-2. An employee is not considered to be directly performing work under a contract if the employee-

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

Subcontract means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

Subcontractor means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

United States, as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U. S. Virgin Islands.

(b) Enrollment and verification requirements.

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award,

the Contractor must-

(i) Enroll. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) Verify all new employees. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) Verify employees assigned to the contract. For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor must use E-Verify to initiate verification of employment eligibility of-

(i) All new employees.

(A) Enrolled 90 calendar days or more. The Contractor must initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) Enrolled less than 90 calendar days. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor must initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) Employees assigned to the contract. For each employee assigned to the contract, the Contractor must initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor must follow the applicable

verification requirements at (b)(1) or (b)(2) respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) Option to verify employment eligibility of all employees. The Contractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the contract. The Contractor must initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of-

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor must comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspending and debarring official.

(ii) During the period between termination of the MOU and a decision by the suspending and debarring official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the Contractor is not suspended, debarred, or subject to a voluntary exclusion, then the Contractor must reenroll in E-Verify.

(c) Web site. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: https://www.e-Verify.gov.

(d) Individuals previously verified. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee-

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial

Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD)-12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) Subcontracts. The Contractor must include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that-

(1) Is for-

(i) Services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than $3,500; and

(3) Includes work performed in the United States.

(End of clause)

52.222-62	Paid Sick Leave Under Executive Order 13706. (Deviation 2026-O0038)	2026-02

Paid Sick Leave Under Executive Order 13706 (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause (in accordance with 29 CFR 13.2)-

Child, "domestic partner", and "domestic violence" have the meaning given in 29 CFR 13.2.

Employee -

(1)

(i) Means any person engaged in performing work on or in connection with a contract covered by Executive Order (E.O.) 13706; and

(A) Whose wages under such contract are governed by the Service Contract Labor Standards statute (41 U.S.C. chapter 67), the Wage Rate Requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV), or the Fair Labor Standards Act (29 U.S.C. chapter 8);

(B) Including employees who qualify for an exemption from the Fair Labor Standards Act's minimum wage and overtime provisions;

(C) Regardless of the contractual relationship alleged to exist between the individual and the employer; and

(ii) Includes any person performing work on or in connection with the contract and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.

(2)

(i) An employee performs "on" a contract if the employee directly performs the specific services called for by the contract; and

(ii) An employee performs "in connection with" a contract if the employee's work activities are necessary to the performance of a contract but are not the specific services called for by the contract.

Individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship has the meaning given in 29 CFR 13.2.

Multiemployer plan means a plan to which more than one employer is required to contribute and which is maintained pursuant to one or more collective bargaining agreements between one or more employee organizations and more than one employer.

Paid sick leave means compensated absence from employment that is required by E.O. 13706 and 29 CFR Part 13.

Parent, "sexual assault", "spouse", and "stalking" have the meaning given in 29 CFR 13.2.

United States means the 50 States and the District of Columbia.

(b) Executive Order 13706.

(1) This contract is subject to E.O. 13706 and the regulations issued by the Secretary of Labor in 29 CFR Part 13 pursuant to the E.O.

(2) If this contract is not performed wholly within the United States, this clause only applies with respect to that part of the contract that is performed within the United States.

(c) Paid sick leave. The Contractor must-

(1) Permit each employee engaged in performing work on or in connection with this contract to earn not less than 1 hour of paid sick leave for every 30 hours worked;

(2) Allow accrual and use of paid sick leave as required by E.O. 13706 and 29 CFR Part 13;

(3) Comply with the accrual, use, and other requirements set forth in 29 CFR 13.5 and 13.6, which are incorporated by reference in this contract;

(4) Provide paid sick leave to all employees when due free and clear and without subsequent deduction (except as otherwise provided by 29 CFR 13.24), rebate, or kickback on any account;

(5) Provide pay and benefits for paid sick leave used no later than one pay period following the end of the regular pay period in which the paid sick leave was taken; and

(6) Be responsible for the compliance by any subcontractor with the requirements of E.O. 13706, 29 CFR Part 13, and this clause.

(d) Contractors may fulfill their obligations under E.O. 13706 and 29 CFR Part 13 jointly with other contractors through a multiemployer plan, or may fulfill their obligations through an individual fund, plan, or program (see 29 CFR 13.8).

(e) Withholding. The Contracting Officer must, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this or any other Federal contract with the same Contractor,

so much of the accrued payments or advances as may be considered necessary to pay employees the full amount owed to compensate for any violation of the requirements of E.O. 13706, 29 CFR Part 13, or this clause, including-

(1) Any pay and/or benefits denied or lost by reason of the violation;

(2) Other actual monetary losses sustained as a direct result of the violation; and

(3) Liquidated damages.

(f) Payment suspension/contract termination/contractor debarment.

(1) In the event of a failure to comply with E.O. 13706, 29 CFR Part 13, or this clause, the contracting agency may, on its own action or after authorization or by direction of the Department of Labor and written notification to the Contractor take action to cause suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(2) Any failure to comply with the requirements of this clause may be grounds for termination for default or cause.

(3) A breach of the contract clause may be grounds for debarment as a contractor and subcontractor as provided in 29 CFR 13.52.

(g) The paid sick leave required by E.O. 13706, 29 CFR Part 13, and this clause is in addition to the Contractor's obligations under the Service Contract Labor Standards statute and Wage Rate Requirements (Construction) statute, and the Contractor may not receive credit toward its prevailing wage or fringe benefit obligations under those Acts for any paid sick leave provided in satisfaction of the requirements of E.O. 13706 and 29 CFR Part 13.

(h) Nothing in E.O. 13706 or 29 CFR Part 13 shall excuse noncompliance with or supersede any applicable Federal or State law, any applicable law or municipal ordinance, or a collective bargaining agreement requiring greater paid sick leave or leave rights than those established under E.O. 13706 and 29 CFR Part 13.

(i) Recordkeeping.

(1) The Contractor must make and maintain, for no less than three (3) years from the completion of the work on the contract, records containing the following information for each employee, which the Contractor must make available upon request for inspection, copying, and

transcription by authorized representatives of the Administrator of the Wage and Hour Division of the Department of Labor:

(i) Name, address, and social security number of each employee.

(ii) The employee's occupation(s) or classification(s).

(iii) The rate or rates of wages paid (including all pay and benefits provided).

(iv) The number of daily and weekly hours worked.

(v) Any deductions made.

(vi) The total wages paid (including all pay and benefits provided) each pay period.

(vii) A copy of notifications to employees of the amount of paid sick leave the employee has accrued, as required under 29 CFR 13.5(a)(2).

(viii) A copy of employees' requests to use paid sick leave, if in writing, or, if not in writing, any other records reflecting such employee requests.

(ix) Dates and amounts of paid sick leave taken by employees (unless the Contractor's paid time off policy satisfies the requirements of E.O. 13706 and 29 CFR Part 13 as described in 29 CFR 13.5(f)(5), leave must be designated in records as paid sick leave pursuant to E.O. 13706).

(x) A copy of any written responses to employees' requests to use paid sick leave, including explanations for any denials of such requests, as required under 29 CFR 13.5(d)(3).

(xi) Any records reflecting the certification and documentation the Contractor may require an employee to provide under 29 CFR 13.5(e), including copies of any certification or documentation provided by an employee.

(xii) Any other records showing any tracking of or calculations related to an employee's accrual or use of paid sick leave.

(xiii) The relevant contract.

(xiv) The regular pay and benefits provided to an employee for each use of paid sick leave.

(xv) Any financial payment made for unused paid sick leave upon a separation from employment intended, pursuant to 29 CFR 13.5(b)(5), to relieve the Contractor from the obligation to reinstate such paid sick leave as otherwise required by 29 CFR 13.5(b)(4).

(2)

(i) If the Contractor wishes to distinguish between an employee's covered and noncovered work, the Contractor must keep records or other proof reflecting such distinctions. Only if the Contractor adequately segregates the employee's time will time spent on noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. Similarly, only if the Contractor adequately segregates the employee's time may the Contractor properly refuse an employee's request to use paid sick leave on the ground that the employee was scheduled to perform noncovered work during the time he or she asked to use paid sick leave.

(ii) If the Contractor estimates covered hours worked by an employee who performs work in connection with contracts covered by the E.O. pursuant to 29 CFR 13.5(a)(1)(i) or (iii), the Contractor must keep records or other proof of the verifiable information on which such estimates are reasonably based. Only if the Contractor relies on an estimate that is reasonable and based on verifiable information will an employee's time spent in connection with noncovered work be excluded from hours worked counted toward the accrual of paid sick leave. If the Contractor estimates the amount of time an employee spends performing in connection with contracts covered by the E.O., the Contractor must permit the employee to use his or her paid sick leave during any work time for the Contractor.

(3) In the event the Contractor is not obligated by the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, or the Fair Labor Standards Act to keep records of an employee's hours worked, such as because the employee is exempt from the Fair Labor Standards Act's minimum wage and overtime requirements, and the Contractor chooses to use the assumption permitted by 29 CFR 13.5(a)(1)(iii), the Contractor is excused from the requirement in paragraph (i)(1)(iv) of this clause and 29 CFR 13.25(a)(4) to keep records of the employee's number of daily and weekly hours worked.

(4)

(i) Records relating to medical histories or domestic violence, sexual assault, or stalking, created for purposes of E.O. 13706, whether of an employee or an employee's child, parent, spouse, domestic partner, or other individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship, must be maintained as confidential records in separate files/records from the usual personnel files.

(ii) If the confidentiality requirements of the Genetic Information Nondiscrimination Act of 2008 (GINA), section 503 of the Rehabilitation Act of 1973, and/or the Americans with Disabilities Act (ADA) apply to records or documents created to comply with the recordkeeping requirements in this contract clause, the records and documents must also be maintained in compliance with the confidentiality requirements of the GINA, section 503 of the Rehabilitation Act of 1973, and /or ADA as described in 29 CFR 1635.9, 41 CFR 60-741.23(d), and 29 CFR 1630.14(c)(1), respectively.

(iii) The Contractor must not disclose any documentation used to verify the need to use 3 or more consecutive days of paid sick leave for the purposes listed in 29 CFR 13.5(c)(1)(iv) (as described in 29 CFR 13.5(e)(1)(ii)) and must maintain confidentiality about any domestic abuse, sexual assault, or stalking, unless the employee consents or when disclosure is required by law.

(5) The Contractor must permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(6) Nothing in this contract clause limits or otherwise modifies the Contractor's recordkeeping obligations, if any, under the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, the Family and Medical Leave Act, E.O. 14026, their respective implementing regulations, or any other applicable law.

(j) Interference/discrimination.

(1) The Contractor must not in any manner interfere with an employee's accrual or use of paid sick leave as required by E.O. 13706 or 29 CFR Part 13. Interference includes, but is not limited to-

(i) Miscalculating the amount of paid sick leave an employee has accrued;

(ii) Denying or unreasonably delaying a response to a proper request to use paid sick leave;

(iii) Discouraging an employee from using paid sick leave;

(iv) Reducing an employee's accrued paid sick leave by more than the amount of such leave used;

(v) Transferring an employee to work on contracts not covered by the E.O. to prevent the accrual or use of paid sick leave;

(vi) Disclosing confidential information contained in certification or other documentation provided to verify the need to use paid sick leave; or

(vii) Making the use of paid sick leave contingent on the employee's finding a replacement worker or the fulfillment of the Contractor's operational needs.

(2) The Contractor must not discharge or in any other manner discriminate against any employee for-

(i) Using, or attempting to use, paid sick leave as provided for under E.O. 13706 and 29 CFR Part 13;

(ii) Filing any complaint, initiating any proceeding, or otherwise asserting any right or claim under E.O. 13706 and 29 CFR Part 13;

(iii) Cooperating in any investigation or testifying in any proceeding under E.O. 13706 and 29 CFR Part 13; or

(iv) Informing any other person about his or her rights under E.O. 13706 and 29 CFR Part 13.

(k) Notice. The Contractor must notify all employees performing work on or in connection with a contract covered by the E.O. of the paid sick leave requirements of E.O. 13706, 29 CFR Part 13, and this clause by posting a notice provided by the Department of Labor in a prominent and accessible place at the worksite so it may be readily seen by employees. Contractors that customarily post notices to employees electronically may post the notice electronically, provided such electronic posting is displayed prominently on any Web site that is maintained by the Contractor, whether external or internal, and customarily used for notices to employees about terms and conditions of employment.

(l) Disputes concerning labor standards. Disputes related to the application of E.O. 13706 to this contract must not be subject to the general disputes clause of the contract. Such disputes must be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Part 13. Disputes within the meaning of this contract clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the Department of Labor, or the employees or their representatives.

(m) Subcontracts. The Contractor must insert the substance of this clause, including this paragraph (m), in all subcontracts, regardless of dollar value, that are subject to the Service

Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

(End of clause)

52.222-90	Addressing DEI Discrimination by Federal Contractors. (Deviation 2026-O0040, Revision 1)	2026-04

Addressing DEI Discrimination by Federal Contractors (Apr 2026) (Deviation 2026-O0040, Revision 1)

(a) Definitions. As used in this clause-

Program participation means membership or participation in, or access or admission to: training, mentoring, or leadership development programs; educational opportunities; clubs; associations; or similar opportunities that are sponsored or established by the contractor or subcontractor.

Racially discriminatory diversity, equity, and inclusion (DEI) activities means disparate treatment based on race or ethnicity in the recruitment, employment (e.g., hiring, promotions), contracting (e.g., vendor agreements), program participation, or allocation or deployment of an entity's resources.

(b) In connection with the performance of work under this contract, the Contractor agrees as follows:

(1) The Contractor will not engage in any racially discriminatory DEI activities;

(2) The Contractor will furnish all information and reports, including providing access to books, records, and accounts, as required by the Contracting Officer, for purposes of ascertaining compliance with this clause;

(3) In the event of the Contractor's or a subcontractor's noncompliance with this clause, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor or subcontractor may be declared ineligible for further Government contracts;

(4) The Contractor will report any subcontractor's known or reasonably knowable conduct that may violate this clause to the Contracting Officer and take any appropriate remedial actions directed by the Contracting Officer; and

(5) The Contractor will inform the Contracting Officer if a subcontractor sues the Contractor and the suit puts at issue, in any way, the validity of this clause.

(6) The Contractor recognizes that compliance with the requirements of this clause are material to the Government's payment decisions for purposes of 31 U.S.C. 3729(b)(4).

(c) The Contractor must include the substance of this clause, including this paragraph (c), in subcontracts at any tier, including those for commercial products and commercial services, except those where the place of delivery or performance is outside the United States.

(End of clause)

52.223-2	Reporting of Biobased Products Under Service and Construction Contracts. (Deviation 2026-O0038)	2026-02

Reporting of Biobased Products Under Service and Construction Contracts (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Biobased product means a product determined by the U.S. Department of Agriculture (USDA) to be a commercial product or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials, or that is an intermediate ingredient or feedstock. The term

includes, with respect to forestry materials, forest products that meet biobased content requirements, notwithstanding the market share the product holds, the age of the product, or whether the market for the product is new or emerging. (7 U.S.C. 8101) (7 CFR 4270.2).

USDA-designated product category a generic grouping of biobased products that are listed by USDA in a procurement guideline (7 CFR part 4270) and for which USDA has provided minimum biobased content standards (see https://www.biopreferred.gov/resources/categories.html).

(b) Requirement. The Contractor shall-

(1) Report to https://www.sam.gov, with a copy to the Contracting Officer, on the product types and dollar value of any biobased products in USDA-designated product categories purchased by the Contractor during the previous Government fiscal year, between October 1 and September 30; and

(2) Submit this report no later than-

(i) October 31 of each year during contract performance; and

(ii) At the end of contract performance.

(End of clause)

52.223-3	Hazardous Material Identification and Safety Data. (Deviation 2026-O0038)	2026-02

Hazardous Material Identification and Safety Data (Feb 2026) (Deviation 2026-O0038)

(a) Hazardous material, as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The Offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Safety Data Sheet submitted under this contract.

Material (If none, insert None)	Identification No.
_____	_____
_____	_____
_____	_____

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

52.223-5	Pollution Prevention and Right-to-Know Information.	2024-05

Pollution Prevention and Right-to-Know Information (May 2024)

(a) Definitions. As used in this clause-

Toxic chemical means a chemical or chemical category listed in 40 CFR 372.65.

(b) Federal facilities are required to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050), and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

(1) The emergency planning reporting requirements of section 302 of EPCRA.

(2) The emergency notice requirements of section 304 of EPCRA.

(3) The list of Material Safety Data Sheets, required by section 311 of EPCRA.

(4) The emergency and hazardous chemical inventory forms of section 312 of EPCRA.

(5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by section 6607 of PPA.

(End of clause)

52.223-9	Estimate of Percentage of Recovered Material Content for EPA-Designated Items.	2008-05

Estimate of Percentage of Recovered Material Content for EPA-Designated Items (May 2008)

(a) Definitions. As used in this clause-

Postconsumer materialmeans a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, 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 _____[Contracting Officer complete in accordance with

agency procedures].

(End of clause)

52.223-11	Ozone-Depleting Substances. (Deviation 2026-O0038)	2026-02

Ozone-Depleting Substances (Feb 2026) (Deviation 2026-O0038)

(a) Definition. As used in this clause-

Ozone-depleting substance means any substance the Environmental Protection Agency designates in 40 CFR part 82 as-

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) Requirement. In accordance with 40 CFR 82.84(a)(5), the Contractor shall label products that contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j(b), (c), (d), and (e) and 40 CFR part 82, subpart E, as follows:

Warning: Contains (or manufactured with, if applicable) *____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

(End of clause)

52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners. (Deviation 2026-O0038)	2026-02

Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (Feb 2026) (Deviation 2026-O0038)

In accordance with 40 CFR 82.84(a)(3), the Contractor shall comply with the applicable requirements of sections 608 and 609 of the Clean Air Act (42 U.S.C. 7671g and 7671h) as each or both apply to this contract.

(End of clause)

52.225-9	Buy American-Construction Materials. (Deviation 2026-O0038)	2026-02

Buy American-Construction Materials (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Commercially available off-the-shelf (COTS) item-

(1) Means any item of supply (including construction material) that is-

(i) A commercial product (as defined in paragraph (1) of the definition of "commercial product" at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means-

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Critical component means a component that is mined, produced, or manufactured in the United States and deemed critical to the U.S. supply chain. The list of critical components is at FAR 25.105.

Critical item means a domestic construction material or domestic end product that is deemed critical to U.S. supply chain resiliency. The list of critical items is at FAR 25.105.

Domestic construction material means-

(1) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both-

(i) An unmanufactured construction material mined or produced in the United States; or

(ii) A construction material manufactured in the United States, if-

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 60 percent of the cost of all its components, except that the percentage will be 65 percent for items delivered in calendar years 2024 through 2028 and 75 percent for items delivered starting in calendar year 2029. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. Components of unknown origin are treated as foreign; or

(B) The construction material is a COTS item; or

(2) For construction material that consists wholly or predominantly of iron or steel or a combination of both, a construction material manufactured in the United States if the cost of foreign iron and steel constitutes less than 5 percent of the cost of all components used in such construction material. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the construction material and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the construction material contains multiple components, the cost of all the materials used in such construction material is calculated in accordance with the definition of "cost of components".

Fastener means a hardware device that mechanically joins or affixes two or more objects together. Examples of fasteners are nuts, bolts, pins, rivets, nails, clips, and screws.

Foreign construction material means a construction material other than a domestic construction material.

Foreign iron and steel means iron or steel products not produced in the United States. Produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, from the initial melting stage through the application of coatings, except metallurgical processes involving refinement of steel additives. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel

content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

Steel means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the domestic content test of the Buy American statute is waived for construction material that is a COTS item, except that for construction material that consists wholly or predominantly of iron or steel or a combination of both, the domestic content test is applied only to the iron and steel content of the construction materials, excluding COTS fasteners. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial product or to the construction materials or components listed by the Government as follows:

_____[Contracting Officer to list applicable excepted materials or indicate "none"]

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that-

(i) The cost of domestic construction material would be unreasonable.

(A) For domestic construction material that is not a critical item or does not contain critical components.

(1) The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent;

(2) For construction material that is not a COTS item and does not consist wholly or

predominantly of iron or steel or a combination of both, if the cost of a particular domestic construction material is determined to be unreasonable or there is no domestic offer received, and the low offer is for foreign construction material that is manufactured in the United States and does not exceed 55 percent domestic content, the Contracting Officer will treat the lowest offer of foreign construction material that exceeds 55 percent domestic content as a domestic offer and determine whether the cost of that offer is unreasonable by applying the evaluation factor listed in paragraph (b)(3)(i)(A)(1) of this clause.

(3) The procedures in paragraph (b)(3)(i)(A)(2) of this clause will no longer apply as of January 1, 2030.

(B) For domestic construction material that is a critical item or contains critical components.

(1) The cost of a particular domestic construction material that is a critical item or contains critical components, subject to the requirements of the Buy American statute, is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent plus the additional preference factor identified for the critical item or construction material containing critical components listed at FAR 25.105.

(2) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both, if the cost of a particular domestic construction material is determined to be unreasonable or there is no domestic offer received, and the low offer is for foreign construction material that does not exceed 55 percent domestic content, the Contracting Officer will treat the lowest foreign offer of construction material that is manufactured in the United States and exceeds 55 percent domestic content as a domestic offer, and determine whether the cost of that offer is unreasonable by applying the evaluation factor listed in paragraph (b)(3)(i)(B)(1) of this clause.

(3) The procedures in paragraph (b)(3)(i)(B)(2) of this clause will no longer apply as of January 1, 2030.

(ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential

established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute or Balance of Payments Program.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars)*
Item 1:			
Foreign construction material.	____	____	____
Domestic construction material.	____	____	____
Item 2:			
Foreign construction material.	____	____	____
Domestic construction material.	____	____	____

[* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued)].[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.][Include other applicable supporting information.]
(End of clause)

52.226-7 Drug-Free Workplace. 2024-05

Drug-Free Workplace (May 2024)

(a) Definitions. As used in this clause-

Controlled substance means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR

1308.11 - 1308.15.

Conviction means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

Criminal drug statute means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

Drug-free workplace means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

Employee means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

Individual means an offeror/contractor that has no more than one employee including the offeror /contractor.

(b) The Contractor, if other than an individual, shall-within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration-

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about-

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will-

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 26.505, render the Contractor subject to suspension of contract payments, termination of the contract

for default, and suspension or debarment.

(End of clause)

52.226-8	Encouraging Contractor Policies to Ban Text Messaging While Driving.	2024-05

Encouraging Contractor Policies to Ban Text Messaging While Driving (MAY 2024)

(a) Definitions. As used in this clause-

"Driving"-

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

Text messaging means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, dated October 1, 2009.

(c) The Contractor is encouraged to-

(1) Adopt and enforce policies that ban text messaging while driving-

(i) Company-owned or rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as-

(i) Establishment of new rules and programs or reevaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

(End of clause)

52.227-1 Authorization and Consent. 2020-06

Authorization and Consent (Jun 2020)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent-

(1) Embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract; or

(2) Used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of

this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. the entire liability to the Government for infringement of a United States patent shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts that are expected to exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation (FAR) 2.101 on the date of subcontract award. However, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, does not affect this authorization and consent.

(End of clause)

52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement.	2020-06

Notice and Assistance Regarding Patent and Copyright Infringement (Jun 2020)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in the Contractor's possession pertaining to such claim or suit. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that are expected to exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation (FAR) 2.101 on the date of subcontract award.

(End of clause)

52.228-2	Additional Bond Security.	1997-10

Additional Bond Security (Oct 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if-

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government;

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

(End of clause)

52.228-5	Insurance-Work on a Government Installation.	1997-01

Insurance-Work on a Government Installation (Jan 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective-

(1) For such period as the laws of the State in which this contract is to be performed prescribe; or

(2) Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11	Individual Surety-Pledge of Assets.	2021-02

Individual Surety-Pledge of Assets (Feb 2021)

(a)The Contractor shall obtain from each person acting as an individual surety on a performance bond or a payment bond-

(1)A pledge of assets that meets the eligibility, valuation, and security requirements described in the Federal Acquisition Regulation (FAR) 28.203-1; and

(2)Standard Form 28, Affidavit of Individual Surety.

(b)The Contracting Officer may release a portion of the security interest on the individual surety's assets based upon substantial performance of the Contractor's obligations under its performance bond. The security interest in support of a performance bond shall be maintained-

(1) Contracts for the construction, alteration, or repair of any public building or public work of the Federal Government exceeding $150,000 (40 U.S.C. 3131). Until completion of any warranty period, or for 1 year following final payment, whichever is later.

(2) Contracts subject to alternative payment protection (see FAR 28.102-1(b)(1)). For the full contract performance period plus 1 year.

(3) Other contracts not subject to the requirements of paragraph (b)(1) of this clause. Until completion of any warranty period, or for 90 days following final payment, whichever is later.

(c)A surety's assets pledged in support of a payment bond may be released to a subcontractor or supplier upon Government receipt of a Federal district court judgment, or a sworn statement by the subcontractor or supplier that the claim is correct along with a notarized authorization of the release by the surety stating that it approves of such release. The security interest on the individual surety's assets in support of a payment bond shall be maintained-

(1) Contracts for the construction, alteration, or repair of any public building or public work of the Federal Government exceeding $150,000 which require performance and payment bonds (40 U.S.C. 3131). For 1 year following final payment, or until resolution of all pending claims filed against the payment bond during the 1-year period following final payment, whichever is later.

(2) Contracts subject to alternative payment protection (see FAR 28.102-1(b)(1)). For the full contract performance period plus 1 year.

(3)Other contracts not subject to the requirements of paragraph (c)(1) of this clause. For 90 days following final payment.

(d)The Contracting Officer may allow the Contractor to substitute an individual surety, for a

performance or payment bond, after contract award. The Contractor shall comply with the requirements of paragraph (a) of this clause within the timeframe established by the Contracting Officer.

(End of clause)

52.228-12	Prospective Subcontractor Requests for Bonds.	2022-12

Prospective Subcontractor Requests for Bonds (Dec 2022)

In accordance with section 806(a)(3) of Pub. L. 102-190, as amended by sections 2091 and 8105 of Pub. L. 103-355 (10 U.S.C. 4601 note prec.), upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to 40 U.S.C. chapter 31, subchapter III, Bonds, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

52.228-14	Irrevocable Letter of Credit.	2014-11

Irrevocable Letter of Credit (Nov 2014)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or

condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and-

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to 40 U.S.C. chapter 31, subchapter III, Bonds, the later of-

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to 40 U.S.C. chapter 31, subchapter III, Bonds, the later of-

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d)

(1) Only federally insured financial institutions rated investment grade by a commercial rating service shall issue or confirm the ILC.

(2) Unless the financial institution issuing the ILC had letter of credit business of at least $25 million in the past year, ILCs over $5 million must be confirmed by another acceptable financial institution that had letter of credit business of at least $25 million in the past year.

(3) The Offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institutions have the required credit rating as of the date of issuance of the ILC.

(4) The current rating for a financial institution is available through any of the following rating services registered with the U.S. Securities and Exchange Commission (SEC) as a Nationally Recognized Statistical Rating Organization (NRSRO). NRSRO's can be located at the website http://www.sec.gov/answers/nrsro.htm maintained by the SEC.

(e) The following format shall be used by the issuing financial institution to create an ILC:

____ [Issuing Financial Institution's Letterhead or Name and Address]
Issue Date ____
Irrevocable Letter of Credit No. ____
Account party's name ____
Account party's address ____
For Solicitation No. ____ (for reference only)
To: [U.S. Government agency]
[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States $____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on ____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of

Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. ____ (Insert version in effect at the time of ILC issuance, e.g., "Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of ____ [State of confirming financial institution, if any, otherwise State of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

____ [Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

[Confirming Financial Institution's Letterhead or Name and Address] ____
(Date) ____
Our Letter of Credit Advice Number ____
Beneficiary: ____ [U.S. Government agency]
Issuing Financial Institution: ____
Issuing Financial Institution's LC No.: ____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by ____ [name of issuing financial institution] for drawings of up to United States dollars ____/U.S. $____ and expiring with our close of business on ____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at ____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. ____ (Insert version in effect at the time of ILC issuance, e.g., "Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of ____ [State of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

____ [Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

Sight Draft

____ [City, State]

(Date) ____

____[Name and address of financial institution]

Pay to the order of ____ [Beneficiary Agency]

the sum of United States $____←

This draft is drawn under Irrevocable Letter of Credit No. ____.

____ [Beneficiary Agency]

____ [By]

(End of clause)

52.228-17	Individual Surety-Pledge of Assets (Bid Guarantee).	2021-02

Individual Surety-Pledge of Assets (Feb 2021)

(a)Offerors shall obtain from each person acting as an individual surety on a bid guarantee-

(1)A pledge of assets that meets the eligibility, valuation, and security requirements described in the Federal Acquisition Regulation (FAR) 28.203-1; and

(2)Standard Form 28, Affidavit of Individual Surety.

(b)The Offeror shall include with its offer the information required at paragraph (a) of this provision within the timeframe specified in the provision at FAR 52.228-1, Bid Guarantee, or as otherwise established by the Contracting Officer.

(c)The Contracting Officer may release the security interest on the individual surety's assets in support of a bid guarantee based upon evidence that the offer supported by the individual surety will not result in contract award.

(End of provision)

52.229-3 Federal, State, and Local Taxes. 2013-02

Federal, State, and Local Taxes (Feb 2013)

(a) As used in this clause-

After-imposed Federal tax means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

After-relieved Federal tax means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

All applicable Federal, State, and local taxes and duties means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

Contract date means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

Local taxes includes taxes imposed by a possession or territory of the United States, Puerto Rico, or the Northern Mariana Islands, if the contract is performed wholly or partly in any of those areas.

(b)

(1) The contract price includes all applicable Federal, State, and local taxes and duties, except as provided in subparagraph (b)(2)(i) of this clause.

(2) Taxes imposed under 26 U.S.C. 5000C may not be-

(i) Included in the contract price; nor

(ii) Reimbursed.

(c) The Government will increase the contract price by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The Government will decrease the contract price by the amount of any after-relieved Federal tax.

(e) The Government will decrease the contract price by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) The Government will not adjust the contract price under this clause unless the amount of the adjustment exceeds $250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or

decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government will, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-11	Tax on Certain Foreign Procurements-Notice and Representation.	2020-06

Tax on Certain Foreign Procurements-Notice and Representation (Jun 2020)

(a) Definitions. As used in this provision-

Foreign person means any person other than a United States person.

Specified Federal procurement payment means any payment made pursuant to a contract with a foreign contracting party that is for goods, manufactured or produced, or services provided in a foreign country that is not a party to an international procurement agreement with the United States. For purposes of the prior sentence, a foreign country does not include an outlying area of the United States.

United States person as defined in 26 U.S.C. 7701(a)(30) means

(1) A citizen or resident of the United States;

(2) A domestic partnership;

(3) A domestic corporation;

(4) Any estate (other than a foreign estate, within the meaning of 26 U.S.C. 701(a)(31)); and

(5) Any trust if-

(i) A court within the United States is able to exercise primary supervision over the administration of the trust; and

(ii) One or more United States persons have the authority to control all substantial decisions of the trust.

(b) Unless exempted, there is a 2 percent tax of the amount of a specified Federal procurement payment on any foreign person receiving such payment. See 26 U.S.C. 5000C and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.

(c) Exemptions from withholding under this provision are described at 26 CFR 1.5000C-1(d)(5) through (7). The Offeror may claim an exemption from the withholding by using the Department of the Treasury Internal Revenue Service (IRS) Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available at www.irs.gov/w14. Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the 26 U.S.C. 5000C tax are adjudicated by the IRS as the 26 U.S.C. 5000C tax is a tax matter, not a contract issue. The IRS Form W-14 is provided to the acquiring agency rather than to the IRS.

(d) For purposes of withholding under 26 U.S.C. 5000C, the Offeror represents that

(1) It [ ] is [ ] is not a foreign person; and

(2) If the Offeror indicates "is" in paragraph (d)(1) of this provision, then the Offeror represents that-I am claiming on the IRS Form W-14 [ ] a full exemption, or [ ] partial or no exemption [Offeror must select one] from the excise tax.

(e) If the Offeror represents it is a foreign person in paragraph (d)(1) of this provision, then-

(1) The clause at FAR 52.229-12, Tax on Certain Foreign Procurements, will be included in any resulting contract; and

(2) The Offeror shall submit with its offer the IRS Form W-14. If the IRS Form W-14 is not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent of each payment.

(f) If the Offeror selects "is" in paragraph (d)(1) and "partial or no exemption" in paragraph (d)(2) of this provision, the Offeror will be subject to withholding in accordance with the clause at FAR 52.229-12, Tax on Certain Foreign Procurements, in any resulting contract.

(g) A taxpayer may, for a fee, seek advice from the IRS as to the proper tax treatment of a transaction. This is called a private letter ruling. Also, the IRS may publish a revenue ruling, which is an official interpretation by the IRS of the Internal Revenue Code, related statutes, tax treaties, and regulations. A revenue ruling is the conclusion of the IRS on how the law is applied to a specific set of facts. For questions relating to the interpretation of the IRS regulations go to https://www.irs.gov/help/tax-law-questions.

(End of provision)

52.232-5	Payments under Fixed-Price Construction Contracts.	2014-05

Payments under Fixed-Price Construction Contracts (May 2014)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if-

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that-

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of Chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

____ (Name)

____ (Title)

____ (Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall-

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until-

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as-

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after-

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of1940 (31 U.S.C.3727 and 41 U.S.C. 6305).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under paragraph (d)(2) of this clause shall be-

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

(End of clause)

52.232-12 Advance Payments. (Deviation 2026-O0038) 2026-02

Advance Payments (Feb 2026) (Deviation 2026-O0038)

(a) Requirements for payment. Advance payments will be made under this contract (1) upon submission of properly certified invoices or vouchers by the Contractor, and approval by the administering office, ____ [Insert the name of the office designated under agency procedures], or (2) under a letter of credit. The amount of the invoice or voucher submitted plus all advance payments previously approved shall not exceed $____ If a letter of credit is used, the Contractor shall withdraw cash only when needed for disbursements acceptable under this contract and report cash disbursements and balances as required by the administering office. The Contractor shall apply terms similar to this clause to any advance payments to subcontractors.

(b) Special account. Until (1) the Contractor has liquidated all advance payments made under the contract and related interest charges and (2) the administering office has approved in writing the release of any funds due and payable to the Contractor, all advance payments and other payments under this contract shall be made by check payable to the Contractor marked for deposit only in the Contractor's special account with the ____ [insert the name of the financial institution]. None of the funds in the special account shall be mingled with other funds of the Contractor. Withdrawals from the special account may be made only by check of the Contractor countersigned by the Contracting Officer or a Government countersigning agent designated in writing by the Contracting Officer.

(c) Use of funds. The Contractor may withdraw funds from the special account only to pay for properly allocable, allowable, and reasonable costs for direct materials, direct labor, and indirect costs. Other withdrawals require approval in writing by the administering office. Determinations of whether costs are properly allocable, allowable, and reasonable shall be in accordance with generally accepted accounting principles, subject to any applicable subparts of part 31 of the Federal Acquisition Regulation.

(d) Repayment to the Government. At any time, the Contractor may repay all or any part of the

funds advanced by the Government. Whenever requested in writing to do so by the administering office, the Contractor shall repay to the Government any part of unliquidated advance payments considered by the administering office to exceed the Contractor's current requirements or the amount specified in paragraph (a) above. If the Contractor fails to repay the amount requested by the administering office, all or any part of the unliquidated advance payments may be withdrawn from the special account by check signed by only the countersigning agent and applied to reduction of the unliquidated advance payments under this contract.

(e) Maximum payment. When the sum of all unliquidated advance payments, unpaid interest charges, and other payments exceed ____ percent of the contract price, the Government shall withhold further payments to the Contractor. On completion or termination of the contract, the Government shall deduct from the amount due to the Contractor all unliquidated advance payments and all interest charges payable. If previous payments to the Contractor exceed the amount due, the excess amount shall be paid to the Government on demand. For purposes of this paragraph, the contract price shall be considered to be the stated contract price of $____, less any subsequent price reductions under the contract, plus (1) any price increases resulting from any terms of this contract for price redetermination or escalation, and (2) any other price increases that do not, in the aggregate, exceed $____ [Insert an amount not higher than 10 percent of the stated contract amount inserted in this paragraph]. Any payments withheld under this paragraph shall be applied to reduce the unliquidated advance payments. If full liquidation has been made, payments under the contract shall resume.

(f) Interest.

(1) The Contractor shall pay interest to the Government on the daily unliquidated advance payments at the daily rate specified in subparagraph (f)(3) of this clause. Interest shall be computed at the end of each calendar month for the actual number of days involved. For the purpose of computing the interest charge-

(i) Advance payments shall be considered as increasing the unliquidated balance as of the date of the advance payment check;

(ii) Repayments by Contractor check shall be considered as decreasing the unliquidated balance as of the date on which the check is received by the Government authority designated by the Contracting Officer; and

(iii) Liquidations by deductions from Government payments to the Contractor shall be considered as decreasing the unliquidated balance as of the date of the check for the reduced

payment.

(2) Interest charges resulting from the monthly computation shall be deducted from payments, other than advance payments, due the Contractor. If the accrued interest exceeds the payment due, any excess interest shall be carried forward and deducted from subsequent payments. Interest carried forward shall not be compounded. Interest on advance payments shall cease to accrue upon satisfactory completion or termination of the contract for the convenience of the Government. The Contractor shall charge interest on advance payments to subcontractors in the manner described above and credit the interest to the Government. Interest need not be charged on advance payments to nonprofit educational or research subcontractors for experimental, developmental, or research work.

(3) If interest is required under the contract, the Contracting Officer shall determine a daily interest rate based on the higher of

(i) the published prime rate of the financial institution (depository) in which the special account is established or

(ii) the rate established by the Secretary of the Treasury under Pub. L. 92-41 (41 U.S.C. 7109 (b)). The Contracting Officer shall revise the daily interest rate during the contract period in keeping with any changes in the cited interest rates.

(4) If the full amount of interest charged under this paragraph has not been paid by deduction or otherwise upon completion or termination of this contract, the Contractor shall pay the remaining interest to the Government on demand.

(g) Financial institution agreement. Before an advance payment is made under this contract, the Contractor shall transmit to the administering office, in the form prescribed by the administering office, an agreement in triplicate from the financial institution in which the special account is established, clearly setting forth the special character of the account and the responsibilities of the financial institution under the account. The Contractor shall select a financial institution that is a member bank of the Federal Reserve System, an "insured" bank within the meaning of the Federal Deposit Insurance Corporation Act (12 U.S.C. 1811), or a credit union insured by the National Credit Union Administration.

(h) Lien on Special Bank Account. The Government shall have a lien upon any balance in the special account paramount to all other liens. The Government lien shall secure the repayment of any advance payments made under this contract and any related interest charges.

(i) Lien on property under contract.

(1) All advance payments under this contract, together with interest charges, shall be secured, when made, by a lien in favor of the Government, paramount to all other liens, on the supplies or other things covered by this contract and on all material and other property acquired for or allocated to the performance of this contract, except to the extent that the Government by virtue of any other terms of this contract, or otherwise, shall have valid title to the supplies, materials, or other property as against other creditors of the Contractor.

(2) The Contractor shall identify, by marking or segregation, all property that is subject to a lien in favor of the Government by virtue of any terms of this contract in such a way as to indicate that it is subject to a lien and that it has been acquired for or allocated to performing this contract. If, for any reason, the supplies, materials, or other property are not identified by marking or segregation, the Government shall be considered to have a lien to the extent of the Government's interest under this contract on any mass of property with which the supplies, materials, or other property are commingled. The Contractor shall maintain adequate accounting control over the property on its books and records.

(3) If, at any time during the progress of the work on the contract, it becomes necessary to deliver to a third person any items or materials on which the Government has a lien, the Contractor shall notify the third person of the lien and shall obtain from the third person a receipt in duplicate acknowledging the existence of the lien. The Contractor shall provide a copy of each receipt to the Contracting Officer.

(4) If, under the termination clause, the Contracting Officer authorizes the Contractor to sell or retain termination inventory, the approval shall constitute a release of the Government's lien to the extent that-

(i) The termination inventory is sold or retained; and

(ii) The sale proceeds or retention credits are applied to reduce any outstanding advance payments.

(j) Insurance.

(1) The Contractor shall maintain with responsible insurance carriers-

(i) Insurance on plant and equipment against fire and other hazards, to the extent that similar properties are usually insured by others operating plants and properties of similar character in

the same general locality;

(ii) Adequate insurance against liability on account of damage to persons or property; and

(iii) Adequate insurance under all applicable workers' compensation laws.

(2) Until work under this contract has been completed and all advance payments made under the contract have been liquidated, the Contractor shall-

(i) Maintain this insurance;

(ii) Maintain adequate insurance on any materials, parts, assemblies, subassemblies, supplies, equipment, and other property acquired for or allocable to this contract and subject to the Government lien under paragraph (i) of this clause; and

(iii) Furnish any evidence with respect to its insurance that the administering office may require.

(k) Default.

(1) If any of the following events occurs, the Government may, by written notice to the Contractor, withhold further withdrawals from the special account and further payments on this contract:

(i) Termination of this contract for a fault of the Contractor.

(ii) A finding by the administering office that the Contractor has failed to-

(A) Observe any of the conditions of the advance payment terms;

(B) Comply with any material term of this contract;

(C) Make progress or maintain a financial condition adequate for performance of this contract;

(D) Limit inventory allocated to this contract to reasonable requirements; or

(E) Avoid delinquency in payment of taxes or of the costs of performing this contract in the ordinary course of business.

(iii) The appointment of a trustee, receiver, or liquidator for all or a substantial part of the

Contractor's property, or the institution of proceedings by or against the Contractor for bankruptcy, reorganization, arrangement, or liquidation.

(iv) The service of any writ of attachment, levy of execution, or commencement of garnishment proceedings concerning the special account.

(v) The commission of an act of bankruptcy.

(2) If any of the events described in subparagraph (k)(1) of this clause continue for 30 days after the written notice to the Contractor, the Government may take any of the following additional actions:

(i) Withdraw by checks payable to the Treasurer of the United States, signed only by the countersigning agency, all or any part of the balance in the special account and apply the amounts to reduce outstanding advance payments and any other claims of the Government against the Contractor.

(ii) Charge interest, in the manner prescribed in paragraph (f) of this clause, on outstanding advance payments during the period of any event described in subparagraph (k)(1) of this clause.

(iii) Demand immediate repayment by the Contractor of the unliquidated balance of advance payments.

(iv) Take possession of and, with or without advertisement, sell at public or private sale all or any part of the property on which the Government has a lien under this contract and, after deducting any expenses incident to the sale, apply the net proceeds of the sale to reduce the unliquidated balance of advance payments or other Government claims against the Contractor.

(3) The Government may take any of the actions described in subparagraphs (k) (1) and (2) of this clause it considers appropriate at its discretion and without limiting any other rights of the Government.

(l) Prohibition against assignment. Notwithstanding any other terms of this contract, the Contractor shall not assign this contract, any interest therein, or any claim under the contract to any party.

(m) Information and access to records. The Contractor shall furnish to the administering office (1) monthly or at other intervals as required, signed or certified balance sheets and profit and

loss statements together with a report on the operation of the special account in the form prescribed by the administering office; and (2) if requested, other information concerning the operation of the Contractor's business. The Contractor shall provide the authorized Government representatives proper facilities for inspection of the Contractor's books, records, and accounts.

(n) Other security. The terms of this contract are considered to provide adequate security to the Government for advance payments; however, if the administering office considers the security inadequate, the Contractor shall furnish additional security satisfactory to the administering office, to the extent that the security is available.

(o) Representations. The Contractor represents the following:

(1) The balance sheet, the profit and loss statement, and any other supporting financial statements furnished to the administering office fairly reflect the financial condition of the Contractor at the date shown or the period covered, and there has been no subsequent materially adverse change in the financial condition of the Contractor.

(2) No litigation or proceedings are presently pending or threatened against the Contractor, except as shown in the financial statements.

(3) The Contractor has disclosed all contingent liabilities, except for liability resulting from the renegotiation of defense production contracts, in the financial statements furnished to the administering office.

(4) None of the terms in this clause conflict with the authority under which the Contractor is doing business or with the provision of any existing indenture or agreement of the Contractor.

(5) The Contractor has the power to enter into this contract and accept advance payments, and has taken all necessary action to authorize the acceptance under the terms of this contract.

(6) The assets of the Contractor are not subject to any lien or encumbrance of any character except for current taxes not delinquent, and except as shown in the financial statements furnished by the Contractor. There is no current assignment of claims under any contract affected by these advance payment provisions.

(7) All information furnished by the Contractor to the administering office in connection with each request for advance payments is true and correct.

(8) These representations shall be continuing and shall be considered to have been repeated

by the submission of each invoice for advance payments.

(p) Covenants. To the extent the Government considers it necessary while any advance payments made under this contract remain outstanding, the Contractor, without the prior written consent of the administering office, shall not-

(1) Mortgage, pledge, or otherwise encumber or allow to be encumbered, any of the assets of the Contractor now owned or subsequently acquired, or permit any preexisting mortgages, liens, or other encumbrances to remain on or attach to any assets of the Contractor which are allocated to performing this contract and with respect to which the Government has a lien under this contract;

(2) Sell, assign, transfer, or otherwise dispose of accounts receivable, notes, or claims for money due or to become due;

(3) Declare or pay any dividends, except dividends payable in stock of the corporation, or make any other distribution on account of any shares of its capital stock, or purchase, redeem, or otherwise acquire for value any of its stock, except as required by sinking fund or redemption arrangements reported to the administering office incident to the establishment of these advance payment provisions;

(4) Sell, convey, or lease all or a substantial part of its assets;

(5) Acquire for value the stock or other securities of any corporation, municipality, or governmental authority, except direct obligations of the United States;

(6) Make any advance or loan or incur any liability as guarantor, surety, or accommodation endorser for any party;

(7) Permit a writ of attachment or any similar process to be issued against its property without getting a release or bonding the property within 30 days after the entry of the writ of attachment or other process;

(8) Pay any remuneration in any form to its directors, officers, or key employees higher than rates provided in existing agreements of which notice has been given to the administering office; accrue excess remuneration without first obtaining an agreement subordinating it to all claims of the Government; or employ any person at a rate of compensation over $____ a year;

(9) Change substantially the management, ownership, or control of the corporation;

(10) Merge or consolidate with any other firm or corporation, change the type of business, or engage in any transaction outside the ordinary course of the Contractor's business as presently conducted;

(11) Deposit any of its funds except in a bank or trust company insured by the Federal Deposit Insurance Corporation or a credit union insured by the National Credit Union Administration;

(12) Create or incur indebtedness for advances, other than advances to be made under the terms of this contract, or for borrowings;

(13) Make or covenant for capital expenditures exceeding $____ in total;

(14) Permit its net current assets, computed in accordance with generally accepted accounting principles, to become less than $____; or

(15) Make any payments on account of the obligations listed below, except in the manner and to the extent provided in this _____[Contracting officer to list the pertinent obligations.] .

(End of clause)

52.232-17 Interest. 2014-05

Interest (May 2014)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Certified Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S. C. 7109, which is applicable to the period in which the amount becomes due, as provided in paragraph (e) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(b) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(c) Final Decisions. The Contracting Officer will issue a final decision as required by 33.211 if-

(1) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt in a timely manner;

(2) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(3) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(d) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(e) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(f) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on-

(1) The date on which the designated office receives payment from the Contractor;

(2) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(3) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(g) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

52.232-18 Availability of Funds. 1984-04

Availability of Funds (Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

52.232-23 Assignment of Claims. 2014-05

Assignment of Claims (May 2014)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C.3727, 41 U.S.C.6305 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all

unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

52.232-27	Prompt Payment for Construction Contracts.	2017-01

Prompt Payment for Construction Contracts (Jan 2017)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments-

(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.

(A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).

(A) The due date for making such payments is the later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the Contractor.

(2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.

(B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer-System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer-Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(xi) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The prompt payment regulations at 5 CFR1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on

amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(6) Additional interest penalty.

(i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if-

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)

(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall-

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) If there is no postmark or the postmark is illegible-

(1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause-

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to-

(i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and

(ii) Require each of its subcontractors to include such clauses in their subcontracts with each

lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that-

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if-

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall-

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and-

(i) Make such payment within-

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph (e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon-

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying-

(A) The amounts withheld under paragraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until-

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.

(f) Third-party deficiency reports-

(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with 40 U.S.C. 3133, asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause-

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall-

(i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under 41 U.S.C. 7109 in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying-

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the

amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

(l) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall-

(1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the-

(i) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(ii) Affected contract number and delivery order number if applicable;

(iii) Affected line item or subline item, if applicable; and

(iv) Contractor point of contact.

(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(End of clause)

52.232-32 Performance-Based Payments. 2012-04

Performance-Based Payments (Apr 2012)

(a) Amount of payments and limitations on payments. Subject to such other limitations and conditions as are specified in this contract and this clause, the amount of payments and limitations on payments shall be specified in the contract's description of the basis for payment.

(b) Contractor request for performance-based payment. The Contractor may submit requests for payment of performance-based payments not more frequently than monthly, in a form and manner acceptable to the Contracting Officer. Unless otherwise authorized by the Contracting Officer, all performance-based payments in any period for which payment is being requested shall be included in a single request, appropriately itemized and totaled. The Contractor's request shall contain the information and certification detailed in paragraphs (l) and (m) of this clause.

(c) Approval and payment of requests.

(1) The Contractor shall not be entitled to payment of a request for performance-based payment prior to successful accomplishment of the event or performance criterion for which payment is requested. The Contracting Officer shall determine whether the event or performance criterion for which payment is requested has been successfully accomplished in accordance with the terms of the contract. The Contracting Officer may, at any time, require the Contractor to substantiate the successful performance of any event or performance criterion which has been or is represented as being payable.

(2) A payment under this performance-based payment clause is a contract financing payment under the Prompt Payment clause of this contract and not subject to the interest penalty provisions of the Prompt Payment Act. The designated payment office will pay approved requests on the ____[Contracting Officer insert day as prescribed by agency head; if not prescribed, insert "30th"] day after receipt of the request for performance-based payment by the designated payment office. However, the designated payment office is not required to provide payment if the Contracting Officer requires substantiation as provided in paragraph (c)(1) of this clause, or inquires into the status of an event or performance criterion, or into any of the conditions listed in paragraph (a) of this clause, or into the Contractor certification. The payment period will not begin until the Contracting Officer approves the request.

(3) The approval by the Contracting Officer of a request for performance-based payment does not constitute an acceptance by the Government and does not excuse the Contractor from performance of obligations under this contract.

(d) Liquidation of performance-based payments.

(1) Performance-based finance amounts paid prior to payment for delivery of an item shall be liquidated by deducting a percentage or a designated dollar amount from the delivery payment. If the performance-based finance payments are on a delivery item basis, the liquidation amount for each such line item shall be the percent of that delivery item price that was previously paid under performance-based finance payments or the designated dollar amount. If the performance-based finance payments are on a whole contract basis, liquidation shall be by either predesignated liquidation amounts or a liquidation percentage.

(2) If at any time the amount of payments under this contract exceeds any limitation in this contract, the Contractor shall repay to the Government the excess. Unless otherwise determined by the Contracting Officer, such excess shall be credited as a reduction in the unliquidated performance-based payment balance(s), after adjustment of invoice payments and balances for any retroactive price adjustments.

(e) Reduction or suspension of performance-based payments. The Contracting Officer may reduce or suspend performance-based payments, liquidate performance-based payments by deduction from any payment under the contract, or take a combination of these actions after finding upon substantial evidence any of the following conditions:

(1) The Contractor failed to comply with any material requirement of this contract (which

includes paragraphs (h) and (i) of this clause).

(2) Performance of this contract is endangered by the Contractor's-

(i) Failure to make progress; or

(ii) Unsatisfactory financial condition.

(3) The Contractor is delinquent in payment of any subcontractor or supplier under this contract in the ordinary course of business.

(f) Title.

(1) Title to the property described in this paragraph (f) shall vest in the Government. Vestiture shall be immediately upon the date of the first performance-based payment under this contract, for property acquired or produced before that date. Otherwise, vestiture shall occur when the property is or should have been allocable or properly chargeable to this contract.

(2) "Property," as used in this clause, includes all of the following described items acquired or produced by the Contractor that are or should be allocable or properly chargeable to this contract under sound and generally accepted accounting principles and practices:

(i) Parts, materials, inventories, and work in process;

(ii) Special tooling and special test equipment to which the Government is to acquire title;

(iii) Nondurable (i.e., noncapital) tools, jigs, dies, fixtures, molds, patterns, taps, gauges, test equipment and other similar manufacturing aids, title to which would not be obtained as special tooling under paragraph (f)(2)(ii) of this clause; and

(iv) Drawings and technical data, to the extent the Contractor or subcontractors are required to deliver them to the Government by other clauses of this contract.

(3) Although title to property is in the Government under this clause, other applicable clauses of this contract (e.g., the termination clauses) shall determine the handling and disposition of the property.

(4) The Contractor may sell any scrap resulting from production under this contract, without requesting the Contracting Officer's approval, provided that any significant reduction in the value of the property to which the Government has title under this clause is reported in writing to the Contracting Officer.

(5) In order to acquire for its own use or dispose of property to which title is vested in the Government under this clause, the Contractor shall obtain the Contracting Officer's advance approval of the action and the terms. If approved, the basis for payment (the events or performance criteria) to which the property is related shall be deemed to be not in compliance with the terms of the contract and not payable (if the property is part of or needed for performance), and the Contractor shall refund the related performance-based payments in accordance with paragraph (d) of this clause.

(6) When the Contractor completes all of the obligations under this contract, including liquidation of all performance-based payments, title shall vest in the Contractor for all property (or the proceeds thereof) not-

(i) Delivered to, and accepted by, the Government under this contract; or

(ii) Incorporated in supplies delivered to, and accepted by, the Government under this contract and to which title is vested in the Government under this clause.

(7) The terms of this contract concerning liability for Government-furnished property shall not apply to property to which the Government acquired title solely under this clause.

(g) Risk of loss. Before delivery to and acceptance by the Government, the Contractor shall bear the risk of loss for property, the title to which vests in the Government under this clause, except to the extent the Government expressly assumes the risk. If any property is lost (see 45.101), the basis of payment (the events or performance criteria) to which the property is related shall be deemed to be not in compliance with the terms of the contract and not payable (if the property is part of or needed for performance), and the Contractor shall refund the related performance-based payments in accordance with paragraph (d) of this clause.

(h) Records and controls. The Contractor shall maintain records and controls adequate for administration of this clause. The Contractor shall have no entitlement to performance-based payments during any time the Contractor's records or controls are determined by the Contracting Officer to be inadequate for administration of this clause.

(i) Reports and Government access. The Contractor shall promptly furnish reports, certificates,

financial statements, and other pertinent information requested by the Contracting Officer for the administration of this clause and to determine that an event or other criterion prompting a financing payment has been successfully accomplished. The Contractor shall give the Government reasonable opportunity to examine and verify the Contractor's records and to examine and verify the Contractor's performance of this contract for administration of this clause.

(j) Special terms regarding default. If this contract is terminated under the Default clause, (1) the Contractor shall, on demand, repay to the Government the amount of unliquidated performance-based payments, and (2) title shall vest in the Contractor, on full liquidation of all performance-based payments, for all property for which the Government elects not to require delivery under the Default clause of this contract. The Government shall be liable for no payment except as provided by the Default clause.

(k) Reservation of rights.

(1) No payment or vesting of title under this clause shall-

(i) Excuse the Contractor from performance of obligations under this contract; or

(ii) Constitute a waiver of any of the rights or remedies of the parties under the contract.

(2) The Government's rights and remedies under this clause-

(i) Shall not be exclusive, but rather shall be in addition to any other rights and remedies provided by law or this contract; and

(ii) Shall not be affected by delayed, partial, or omitted exercise of any right, remedy, power, or privilege, nor shall such exercise or any single exercise preclude or impair any further exercise under this clause or the exercise of any other right, power, or privilege of the Government.

(l) Content of Contractor's request for performance-based payment. The Contractor's request for performance-based payment shall contain the following:

(1) The name and address of the Contractor;

(2) The date of the request for performance-based payment;

(3) The contract number and/or other identifier of the contract or order under which the request is made;

(4) Such information and documentation as is required by the contract's description of the basis for payment; and

(5) A certification by a Contractor official authorized to bind the Contractor, as specified in paragraph (m) of this clause.

(m) Content of Contractor's certification. As required in paragraph (l)(5) of this clause, the Contractor shall make the following certification in each request for performance-based payment:

I certify to the best of my knowledge and belief that-

(1) This request for performance-based payment is true and correct; this request (and attachments) has been prepared from the books and records of the Contractor, in accordance with the contract and the instructions of the Contracting Officer;

(2) (Except as reported in writing on ____), all payments to subcontractors and suppliers under this contract have been paid, or will be paid, currently, when due in the ordinary course of business;

(3) There are no encumbrances (except as reported in writing on ____) against the property acquired or produced for, and allocated or properly chargeable to, the contract which would affect or impair the Government's title;

(4) There has been no materially adverse change in the financial condition of the Contractor since the submission by the Contractor to the Government of the most recent written information dated ____; and

(5) After the making of this requested performance-based payment, the amount of all payments for each deliverable item for which performance-based payments have been requested will not exceed any limitation in the contract, and the amount of all payments under the contract will not exceed any limitation in the contract.

(End of clause)

52.232-33	Payment by Electronic Funds Transfer-System for Award Management.	2018-10

Payment by Electronic Funds Transfer-System for Award Management (Oct 2018)

(a) Method of payment.

(1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either-

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the System for Award Management (SAM). In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to SAM.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in SAM is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into SAM; and any invoice or contract financing request shall be deemed

not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers.

(1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for-

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and-

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in SAM and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a

financial institution properly recognized under an assignment of claims pursuant to subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(i) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in SAM.

(End of clause)

52.232-39	Unenforceability of Unauthorized Obligations.	2013-06

Unenforceability of Unauthorized Obligations (Jun 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:

(1) Any such clause is unenforceable against the Government.

(2) Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.

(3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(End of clause)

52.232-40	Providing Accelerated Payments to Small Business Subcontractors.	2023-03

Providing Accelerated Payments to Small Business Subcontractors (Mar 2023)

(a)

(1) In accordance with 31 U.S.C. 3903 and 10 U.S.C. 3801, within 15 days after receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

(2) The Contractor agrees to make such payments to its small business subcontractors without

any further consideration from or fees charged to the subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial products or commercial services.

(End of clause)

52.233-1	Disputes. (Deviation 2026-O0038)	2026-02

Disputes (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Claim means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under 41 U.S.C. chapter 71 until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under 41 U.S.C. chapter 71. The submission may be converted to a claim under 41 U.S.C. chapter 71, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

Defective certification means a certification that alters or otherwise deviates from the language in paragraph (d)(2)(iii) of this clause or which is not executed by a person authorized to bind the contractor with respect to the claim. Failure to certify must not be deemed to be a defective certification.

(b) This contract is subject to 41 U.S.C. chapter 71, Contract Disputes.

(c) Except as provided in 41 U.S.C. chapter 71, all disputes arising under or relating to this contract must be resolved under this clause.

(d)

(1) A claim by the Contractor must be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor must be subject to a written decision by the Contracting Officer.

(2)

(i) The Contractor must provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding $100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification must state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision must be final unless the Contractor appeals or files a suit as provided in 41 U.S.C. chapter 71.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor

must inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h)

(1) The Government must pay interest on the amount found due and unpaid from the date that-

(i) The Contracting Officer receives the claim (certified, if required); or

(ii) Payment otherwise would be due, if that date is later, until the date of payment.

(2) For claims having defective certifications, interest must be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims must be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which applies to the period during which the Contracting Officer receives the claim and then at the rate that applies for each 6-month period as fixed by the Treasury Secretary while the claim is pending.

(i) The Contractor must proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract. The Contractor must comply with any decision of the Contracting Officer.

(End of clause)

52.233-1	Disputes. (Deviation 2026-O0038) (Alternate I)	2026-02	Alternate I	2026-02

Alternate I (Feb 2026) (Deviation 2026-O0038). As prescribed in 33.205-9(a), substitute the following paragraph (i) for paragraph (i) of the basic clause:

(i) The Contractor must proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

52.233-3 Protest after Award. (Deviation 2026-O0038) 2026-02

Protest after Award (Feb 2026) (Deviation 2026-O0038)

(a) Upon receipt of a stop-work order, the Contractor must immediately comply with its terms and take all reasonable steps to minimize incurring costs allocable to the work covered by the order during the period of work stoppage. After receiving the final decision in the protest, the Contracting Officer must either-

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor must resume work. The Contracting Officer must make an equitable adjustment in the delivery schedule or contract price, or both, and the contract must be modified, in writing, accordingly, if-

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer must allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer must allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

(End of clause)

52.233-4	Applicable Law for Breach of Contract Claim. (Deviation 2026-O0038)	2026-02

Applicable Law for Breach of Contract Claim (Feb 2026) (Deviation 2026-O0038)

United States law will apply to resolve any claim of breach of this contract.

(End of clause)

52.236-2	Differing Site Conditions. (Deviation 2026-O0038)	2026-02

Differing Site Conditions (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) Latent physical conditions or subsurface conditions at the site which differ materially from those indicated in this contract; or

(2) Unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

(b)

(1) The Contracting Officer will investigate the site conditions promptly after receiving such a notice.

(2) If the conditions materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract an equitable adjustment must be made under this clause.

(c) No request for an equitable adjustment to the contract under this clause will be allowed, unless the Contractor has given the written notice required.

(d) No request for an equitable adjustment to the contract for differing site conditions will be allowed if made after final payment under this contract.

(End of clause)

52.236-3	Site Investigation and Conditions Affecting the Work. (Deviation 2026-O0038)	2026-02

Site Investigation and Conditions Affecting the Work (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the

nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including-

(1) Conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) The availability of labor, water, electric power, and roads;

(3) Uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) The conformation and conditions of the ground; and

(5) The character of equipment and facilities needed preliminary to and during work performance.

(b) The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(c) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

52.236-5	Material and Workmanship. (Deviation 2026-O0038)	2026-02

Material and Workmanship (Feb 2026) (Deviation 2026-O0038)

(a)

(1) Equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract.

(2) References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

(3) The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery, mechanical, and other equipment to be incorporated into the work.

(1) When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment.

(2) When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work.

(i) When requesting approval, the Contractor shall provide appropriate and required information concerning the material or articles.

(ii) When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval are installed or used at the risk of subsequent rejection.

(c) Work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any

employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(End of clause)

52.236-6	Superintendence by the Contractor. (Deviation 2026-O0038)	2026-02

Superintendence by the Contractor (Feb 2026) (Deviation 2026-O0038)

During performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on site a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)

52.236-7	Permits and Responsibilities. (Deviation 2026-O0038)	2026-02

Permits and Responsibilities (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work.

(b) The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence.

(c) The Contractor shall be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

52.236-8	Other Contracts. (Deviation 2026-O0038)	2026-02

Other Contracts (Feb 2026) (Deviation 2026-O0038)

(a) The Government may award other contracts for work at or near the site of the work under this contract. The Contractor shall cooperate and coordinate with-

(1) Other contractors; and

(2) Government employees.

(b) The Contractor shall adapt scheduling and performance of the work under this contract to accommodate the performance of other contractors. The Contractor's scheduling and performance shall not delay or interfere with the performance of work by other contractors or Government employees.

(End of clause)

52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements. (Deviation 2026-O0038)	2026-02

Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall preserve and protect structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed, and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so. If any limbs or branches of trees are broken during contract performance, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage and, in the event of damage resulting from non-compliance with this contract or failure to exercise reasonable care in performing the work, shall promptly repair existing improvements and utilities at or near the work site, on adjacent property of a third party, and on or near transportation paths and routes. The Contractor shall repair any damage, including those that are the property of a third party.

(c) If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

52.236-10	Operations and Storage Areas. (Deviation 2026-O0038)	2026-02

Operations and Storage Areas (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall confine all activities and operations on site to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b)

(1) Temporary buildings (e.g., storage sheds, shops, offices) and utilities-

(i) May be erected by the Contractor only with the approval of the Contracting Officer; and

(ii) Shall only be built with labor and materials furnished by the Contractor without additional expense to the Government.

(2) The temporary buildings and utilities are the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work.

(3) The temporary buildings and utilities may be abandoned and need not be removed, with written consent of the Contracting Officer.

(c) The Contractor shall, as prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation.

(End of clause)

52.236-11	Use and Possession Prior to Completion. (Deviation 2026-O0038)	2026-02

Use and Possession Prior to Completion (Feb 2026) (Deviation 2026-O0038)

(a) The Government has the right to take possession of or use any completed or partially completed part of the work.

(1) Before taking possession of or using any work, the Contracting Officer will furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of

the work that the Government intends to take possession of or use.

(2) Failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract.

(3) The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b)

(1) While the Government has such possession or use, the Contractor is relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities".

(2) If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

52.236-12	Cleaning Up. (Deviation 2026-O0038)	2026-02

Cleaning Up (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall keep the work area, including storage areas, in a clean, neat, orderly condition, and free from accumulations of waste materials.

(b) Before completing the work, the Contractor shall remove from the site any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government.

(End of clause)

52.236-13	Accident Prevention. (Deviation 2026-O0038)	2026-02

Accident Prevention (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall provide and maintain work environments and procedures that-

(1) Safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) Avoid interruptions of Government operations and delays in project completion dates; and

(3) Control costs in the performance of this contract.

(b) In addition, for contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR part 1926 and 29 CFR part 1910 ; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d)

(1) If the Contracting Officer becomes aware of any noncompliance with these requirements or any condition that poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer will notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action.

(2) This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required.

(3) After receiving the notice, the Contractor shall immediately take corrective action.

(4) If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken.

(5) The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop-work order issued under this clause.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e), in subcontracts.

(End of clause)

52.236-14	Availability and Use of Utility Services. (Deviation 2026-O0038)	2026-02

Availability and Use of Utility Services (Feb 2026) (Deviation 2026-O0038)

(a) The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract.

(b) Unless otherwise provided in the contract, the Contractor shall pay for all utility costs.

(c) The Contractor, at its expense and in a workmanlike manner, shall install and maintain all

necessary temporary connections, distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges.

(d) Before final acceptance by the Government, the Contractor shall remove the temporary connections, distribution lines, meters, and associated paraphernalia.

(End of clause)

52.236-15	Schedules for Construction Contracts. (Deviation 2026-O0038)	2026-02

Schedules for Construction Contracts (Feb 2026) (Deviation 2026-O0038)

(a)

(1) Within five days after the work commences on the contract or another period of time determined by the Contracting Officer, the Contractor shall prepare and submit to the Contracting Officer for approval a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the work (including acquiring materials, plant, and equipment).

(2) The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period.

(3) If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall continually update the actual progress in the schedule and shall submit it to the Contracting Officer by the means prescribed in the contract for transmittals or as directed by the Contracting Officer.

(c)

(1) If the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to recover lost time and execute in accordance with the approved schedule, without additional cost to the Government.

(2) Such steps may include increasing the number of shifts, overtime operations, days of work, and/or the amount of construction plant.

(3) The Contractor shall submit, for approval, supplementary schedule(s) that demonstrate how the lost time will be recovered.

(d) If the Contractor does not recover the lost time, the Contracting Officer may determine that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

52.236-16	Quantity Surveys. (Deviation 2026-O0038)	2026-02

Quantity Surveys (Feb 2026) (Deviation 2026-O0038)

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(1) The Government will conduct the original and final surveys and make the computations based on them.

(2)

(i) The Contractor shall conduct the surveys for any periods for which progress payments are

requested and shall make the computations based on these surveys.

(ii) All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.

(b) Upon completing a survey, the Contractor shall promptly provide the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, which may be used by the Contracting Officer to determine the amount of progress payments.

(c) The Contractor shall retain copies of all such material furnished to the Contracting Officer.

(End of clause)

52.236-17	Layout of Work. (Deviation 2026-O0038)	2026-02

Layout of Work (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall lay out its work from Government-established base lines and benchmarks provided on the drawings.

(b) The Contractor shall be responsible for all measurements in connection with the layout.

(c) The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required for the layout.

(d) The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer.

(e)

(1) The Contractor shall be responsible for maintaining and preserving all stakes and other

marks established by the Contracting Officer until authorized to remove them.

(2) If such marks are destroyed by the Contractor, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(End of clause)

52.236-21	Specifications and Drawings for Construction. (Deviation 2026-O0038)	2026-02

Specifications and Drawings for Construction (Feb 2026) (Deviation 2026-O0038)

(a) The Contractor shall keep at the site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto.

(b) Anything mentioned in the specifications and not shown on the drawings or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both.

(1) In case of difference between drawings and specifications, the specifications shall govern.

(2) In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing.

(3) Any adjustment by the Contractor without such a determination shall be at its own risk and expense.

(c) The Contracting Officer will furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(d)

(1) Words, such as, "directed", "required", "ordered", "designated", "prescribed", or words of like import when used, in the specifications or on the drawings are intended to mean the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer.

(2) Words, such as, "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or 'acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(e) Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place", that is "furnished and installed".

(f) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i. e., form, fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(g)

(1) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review.

(2) Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission.

(h) The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor.

(1) Any work done before such approval shall be at the Contractor's risk.

(2) Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the

requirements of this contract, except with respect to variations described and approved in accordance with paragraph (i) of this clause.

(i)

(1) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission.

(2) If the Contracting Officer approves any such variation, the Contracting Officer will issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(j) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

(End of clause)

52.242-5	Payments to Small Business Subcontractors.	2017-01

Payments to Small Business Subcontractors (Jan 2017)

(a) Definitions. As used in this clause-

Reduced payment means a payment that is for less than the amount agreed upon in a subcontract in accordance with its terms and conditions, for supplies and services for which the Government has paid the prime contractor.

Untimely payment means a payment that is more than 90 days past due under the terms and conditions of a subcontract, for supplies and services for which the Government has paid the prime contractor.

(b) Notice. The Contractor shall notify the Contracting Officer, in writing, not later than 14 days after-

(1) A small business subcontractor was entitled to payment under the terms and conditions of the subcontract; and

(2) The Contractor-

(i) Made a reduced or untimely payment to the small business subcontractor; or

(ii) Failed to make a payment, which is now untimely.

(c) Content of notice. The Contractor shall include the reason(s) for making the reduced or untimely payment in any notice required under paragraph (b) of this clause.

(End of clause)

52.242-13 Bankruptcy. 1995-07

Bankruptcy (July 1995)

In the event the contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the contracting officer responsible for administering the contract. This notification shall be furnished within fivedays of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of government contract numbers and contracting offices for all government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 Suspension of Work. 1984-04

Suspension of Work (Apr 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1)by an act of the Contracting Officer in the administration of this contract, or (2)by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract.

(c) A claim under this clause shall not be allowed-

(1) For any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and

(2) Unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

52.243-4	Changes. (Deviation 2026-O0038)	2026-02

Changes (Feb 2026) (Deviation 2026-O0038)

(a)

(1) At any time, the Contracting Officer may issue a written order, identified as a change order, to make changes in the work within the scope of the contract, including changes-

(i) In the specifications (including drawings and designs);

(ii) In the method or manner of performance of the work;

(iii) In the Government-furnished property or services; or

(iv) Directing acceleration in the performance of the work.

(2) If there are any sureties, the Contracting Officer does not need to notify them of a written order.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating-

(1) The date, circumstances, and source of the order; and

(2) That the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or

not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e)

(1) The Contractor must assert its right to an adjustment under this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of proposal within 30 days, unless this period is extended by the Government, after-

(i) Receipt of a written change order under paragraph (a) of this clause; or

(ii) The furnishing of a written notice under paragraph (b) of this clause.

(2) The statement of proposal for adjustment may be included in the notice under paragraph (b) of this clause.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

52.243-5	Changes and Changed Conditions. (Deviation 2026-O0038)	2026-02

Changes and Changed Conditions (Feb 2026) (Deviation 2026-O0038)

(a) The Contracting Officer may order changes in the drawings and specifications within the scope of the contract in writing.

(b) The Contractor shall promptly notify the Contracting Officer, in writing, of subsurface or latent physical conditions differing materially from those indicated in this contract or unknown unusual physical conditions at the site before proceeding with the work.

(c) If changes under paragraph (a) of this clause or conditions under paragraph (b) of this clause increase or decrease the cost of, or time required for performing the work, the Contracting Officer shall make an equitable adjustment (see paragraph (d) of this clause) upon submittal of a proposal for adjustment (hereafter referred to as proposal) by the Contractor before final payment under the contract.

(d) The Contracting Officer shall not make an equitable adjustment under paragraph (b) of this clause unless-

(1) The Contractor has submitted the required written notice and the Contracting Officer has received the notice; or

(2) The Contracting Officer waives the requirement for written notice.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause.

(End of clause)

52.244-5 Competition in Subcontracting. 2024-08

Competition in Subcontracting (Aug 2024)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the DoD Mentor-Protégé Program (10 U.S.C. 4902), the Contractor may award subcontracts under this contract on a noncompetitive basis to its protégés.

(End of clause)

52.244-6	Subcontracts for Commercial Products and Commercial Services. (Deviation 2026-O0038)	2026-04

Subcontracts for Commercial Products and Commercial Services (Apr 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Commercial product, commercial service and nondevelopmental item have the meanings contained in Federal Acquisition Regulation (FAR) 2.101.

Subcontract has the meaning at FAR 44.401

(b) Requirements.

(1) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial products, commercial services, or non-developmental items as components of items to be supplied under this contract.

(2) If a clause in the following table is included in the contract, the Contractor shall insert the clause in subcontracts for commercial products or commercial services and must flow down the requirements of the clause to subcontracts as indicated in the specific clause:

Number	Title	Date
52.203-13	Contractor Code of Business Ethics and Conduct	NOV 2021
52.203-17	Contractor Employee Whistleblower Rights	NOV 2023
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	JAN 2017
52.204-9	Personal Identity Verification of Contractor Personnel	

JAN 2011

52.219-8 * Utilization of Small Business Concerns JAN 2025

52.222-35 Equal Opportunity for Veterans JUN 2020

52.222-36 Equal Opportunity for Workers with Disabilities JUN 2020

52.222-37 Employment Reports on Veterans JUN 2020

52.222-40 Notification of Employee Rights Under the National Labor Relations Act DEC 2010

52.222-41 Service Contract Labor Standards AUG 2018

52.222-50 Combating Trafficking in Persons NOV 2021

52.222-50 with Alt I Combating Trafficking in Persons, with its Alternate I MAR 2015

52.222-51 Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements MAY 2014

52.222-53 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements MAY 2014

52.222-54 Employment Eligibility Verification JAN 2025

52.222-62 Paid Sick Leave Under Executive Order 13706 JAN 2022

52.222-90 Addressing DEI Discrimination by Federal Contractors APR 2026

52.224-3 Privacy Training JAN 2017

52.224-3 with Alt I Privacy Training, with Alternate I JAN 2017

52.225-26 Contractors Performing Private Security Functions Outside the United States OCT 2016

52.232-40 Providing Accelerated Payments to Small Business Subcontractors MAR 2023

52.240-91 Security Prohibitions and Exclusions DATE

52.240-91 with Alt I Security Prohibitions and Exclusions, with its Alternate I DATE

52.240-92 Security Requirements DATE

52.240-92 with Alt II Security Requirements, with its Alternate II DATE

52.247-64 Preference for Privately Owned U.S.-Flag Commercial Vessels NOV 2021

* Include only if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds the applicable threshold specified in FAR 19.109(a) on the date of subcontract award, the subcontractor must include 52.219-8 in

lower tier subcontracts that offer subcontracting opportunities.

(c) Subcontracts. The Contractor shall include the terms of this clause, including this paragraph (c), in subcontracts awarded under this contract.

(End of clause)

52.246-12 Inspection of Construction. 1996-08

Inspection of Construction (Aug 1996)

(a) Definition."Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not-

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this- section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from

any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may-

(1) By contract or otherwise, replace or correct the work and charge the cost to the Contractor; or

(2) Terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

(End of clause)

52.246-13	Inspection-Dismantling, Demolition, or Removal of Improvements.	1996-08

Inspection-Dismantling, Demolition, or Removal of Improvements (Aug 1996)

(a) Unless otherwise designated by the specifications, all workmanship performed under the contract is subject to Government inspection at all times and places where dismantling or demolition work is being performed. The Contractor shall furnish promptly, and at no increase in contract price, all reasonable facilities, labor, and materials necessary for safe and convenient inspection by the Government. The Government shall perform inspections in a manner that will not unduly delay the work.

(b) The Contractor is responsible for damage to property caused by defective workmanship. The Contractor shall promptly segregate and remove from the premises any unsatisfactory facilities, materials, and equipment used in contract performance, and promptly replace them with satisfactory items. If the Contractor fails to proceed at once in a workmanlike manner with performance of the work or with the correction of defective workmanship, the Government may-

(1) By contract or otherwise, replace the facilities, materials, and equipment or correct the workmanship and charge the cost to the Contractor; and

(2) Terminate for default the Contractor's right to proceed. The Contractor and any surety shall be liable, to the extent specified in the contract for any damage or cost of repair or replacement.

(End of clause)

52.246-21	Warranty of Construction.	1994-03

Warranty of Construction (Mar 1994)

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of-

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall-

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

52.248-3 Value Engineering-Construction. 2025-10

Value Engineering-Construction (Oct 2025)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) of this clause.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

Collateral savings, as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

Contractor's development and implementation costs, as used in this clause, means those costs

the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

Government costs, as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

Instant contract savings, as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) of this clause).

Value engineering change proposal (VECP) means a proposal that-

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change-

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in paragraphs (c)(1) through (7) of this clause. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) of this clause.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action.

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a

modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing-

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by-

(i) 45 percent for fixed-price contracts; or

(ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to-

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or $100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of $90,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) of this clause, the Contractor's allowable development and implementation costs shall include any subcontractor's

allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering-Construction clause of contract ____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in part 27 of the Federal Acquisition Regulation.)

(End of clause)

52.249-2	Termination for Convenience of the Government (Fixed-Price). (Alternate I)	2012-04	Alternate I	1996-09

Alternate I (Sept 1996). If the contract is for construction, substitute the following paragraph (g) for paragraph (g) of the basic clause:

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under

paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of-

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(1)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

52.249-2	Termination for Convenience of the Government (Fixed-Price).	2012-04

Termination for Convenience of the Government (Fixed-Price) (Apr 2012)

(a) The Government may terminate performance of work under this contract in whole or, from

time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government-

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property

of the types referred to in paragraph (b)(6) of this clause; provided, however, that the Contractor (i)is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in paragraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be

agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under paragraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of-

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under paragraph (g)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including-

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly

assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value as determined by the Contracting Officer, for the loss of the Government property.

(i) The cost principles and procedures of part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted-

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)

(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App.1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

(End of clause)

52.249-10	Default (Fixed-Price Construction).	1984-04

Default (Fixed-Price Construction) (Apr 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's

right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the- work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if-

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include-

(i) Acts of God or of the public enemy,

(ii) Acts of the Government in either its sovereign or contractual capacity,

(iii) Acts of another Contractor in the performance of a contract with the Government,

(iv) Fires,

(v) Floods,

(vi) Epidemics,

(vii) Quarantine restrictions,

(viii) Strikes,

(ix) Freight embargoes,

(x) Unusually severe weather, or

(xi) Delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

(d) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.249-14 Excusable Delays. 1984-04

Excusable Delays (Apr 1984)

(a) Except for defaults of subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be deemed to be in default,- unless-

(1) The subcontracted supplies or services were obtainable from other sources;

(2) The Contracting Officer ordered the Contractor in writing to purchase these supplies or services from the other source; and

(3) The Contractor failed to comply reasonably with this order.

(c) Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the Government under the termination clause of this contract.

(End of clause)

52.252-2	Clauses Incorporated by Reference.	1998-02

Clauses Incorporated By Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

Revolutionary Federal Acquisition Regulation Overhaul (RFO):

https://www.acquisition.gov/far-overhaul

Department of Defense FAR Supplement (DFARS) RFO Class Deviations:

https://www.acq.osd.mil/dpap/dars/dfars_far_overhaul_class_deviations.html

USACE Acquisition Instruction (UAI):

https://www.usace.army.mil/Business-With-Us/Contracting/Resources/

(End of clause)

52.252-4	Alterations in Contract.	1984-04

Alterations in Contract (Apr 1984)

Portions of this contract are altered as follows:

____ ____ ____

(End of clause)

52.252-6 Authorized Deviations in Clauses. 2020-11

Authorized Deviations in Clauses (Nov 2020)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any **RFO/DFARS Overhaul** (48 CFR **2**) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

DFARS Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.201-7000	Contracting Officer's Representative.	1991-12		

CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) Definition. "Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7000	Requirements Relating to Compensation of Former DoD Officials.	2011-09

REQUIREMENTS RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2011)

(a) Definition. "Covered DoD official," as used in this clause, means an individual that-

(1) Leaves or left DoD service on or after January 28, 2008; and

(2)(i) Participated personally and substantially in an acquisition as defined in 41 U.S.C. 131 with a value in excess of $10 million, and serves or served-

(A) In an Executive Schedule position under subchapter II of chapter 53 of Title 5, United States Code;

(B) In a position in the Senior Executive Service under subchapter VIII of chapter 53 of Title 5, United States Code; or

(C) In a general or flag officer position compensated at a rate of pay for grade O-7 or above

under section 201 of Title 37, United States Code; or

(ii) Serves or served in DoD in one of the following positions: program manager, deputy program manager, procuring contracting officer, administrative contracting officer, source selection authority, member of the source selection evaluation board, or chief of a financial or technical evaluation team for a contract in an amount in excess of $10 million.

(b) The Contractor shall not knowingly provide compensation to a covered DoD official within 2 years after the official leaves DoD service, without first determining that the official has sought and received, or has not received after 30 days of seeking, a written opinion from the appropriate DoD ethics counselor regarding the applicability of post-employment restrictions to the activities that the official is expected to undertake on behalf of the Contractor.

(c) Failure by the Contractor to comply with paragraph (b) of this clause may subject the Contractor to rescission of this contract, suspension, or debarment in accordance with 41 U.S. C. 2105(c).

(End of clause)

252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies.	2023-01

PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE- CONTRACT-RELATED FELONIES (JAN 2023)

(a) Definitions. As used in this clause-

(1) "Arising out of a contract with the DoD" means any act in connection with-

(i) Attempting to obtain;

(ii) Obtaining; or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nolo contendere, for which sentence has been imposed.

(3) "Date of conviction" means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988 , of fraud or any other felony arising out of a contract with the DoD is prohibited from serving-

(1) In a management or supervisory capacity on this contract;

(2) On the board of directors of the Contractor;

(3) As a consultant, agent, or representative for the Contractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of the Contractor with regard to this contract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 4656 provides that the Contractor shall be subject to a criminal penalty of not more than $500,000 if convicted of knowingly-

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 4656, the Government may consider other available remedies, such as-

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify-

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and

(4) An explanation of why a waiver is in the interest of national security.

(g) Subcontracts. The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial products, commercial services, or commercial components.

(h) Pursuant to 10 U.S.C. 4656(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone 301-937-1542; www.ojp.usdoj.gov/BJA/grant/DPFC.html.

(End of clause)

252.203-7002	Requirement to Inform Employees of Whistleblower Rights.	2022-12

REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS

(DEC 2022)

(a) The Contractor shall inform its employees in writing, in the predominant native language of the workforce, of contractor employee whistleblower rights and protections under 10 U.S.C. 4701, as described in subpart 203.9 of the Defense Federal Acquisition Regulation Supplement.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts.

(End of clause)

252.203-7003	Agency Office of the Inspector General.	2019-08

203.1004
AGENCY OFFICE OF THE INSPECTOR GENERAL (AUG 2019)

The agency office of the Inspector General referenced in paragraphs (c) and (d) of FAR clause 52.203-13, Contractor Code of Business Ethics and Conduct, is the DoD Office of Inspector General at the following address:

Department of Defense Office of Inspector General Administrative Investigations Contractor Disclosure Program 4800 Mark Center Drive, Suite 14L25 Alexandria, VA 22350-1500
https://www.dodig.mil/Programs/Contractor-Disclosure-Program/
(End of clause)

252.203-7004	Display of Hotline Posters.	2023-01

203.1004
DISPLAY OF HOTLINE POSTERS (JAN 2023)

(a) Definition. As used in this clause-

"United States," means the 50 States, the District of Columbia, and outlying areas.

(b) Display of hotline poster(s).

(1)(i) The Contractor shall display prominently the DoD fraud, waste, and abuse hotline poster prepared by the DoD Office of the Inspector General, in effect at time of contract award, in common work areas within business segments performing work under Department of Defense (DoD) contracts.

(ii) For contracts performed outside the United States, when security concerns can be appropriately demonstrated, the contracting officer may provide the contractor the option to publicize the program to contractor personnel in a manner other than public display of the poster, such as private employee written instructions and briefings.

(2) If the contract is funded, in whole or in part, by Department of Homeland Security (DHS) disaster relief funds and the work is to be performed in the United States, the DHS fraud hotline poster shall be displayed in addition to the DoD hotline poster. If a display of a DHS fraud hotline poster is required, the Contractor may obtain such poster from-

(i) DHS Office of Inspector General/MAIL STOP 0305, Attn: Office of Investigations - Hotline, 245 Murray Lane SW, Washington, DC 20528-0305; or

(ii) Via the internet at https://www.oig.dhs.gov/assets/Hotline/DHS_OIG_Hotline-optimized.jpg.

(c)(1) The DoD hotline poster may be obtained from: Defense Hotline, The Pentagon, Washington, D.C. 20301-1900, or is also available via the internet at https://www.dodig.mil /Resources/Posters-and-Brochures/.

(2) If a significant portion of the employee workforce does not speak English, then the poster is to be displayed in the foreign languages that a significant portion of the employees speak.

(3) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the required poster at the website.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed the threshold specified in Defense Federal Acquisition Regulation Supplement 203.1004(b)(2)(ii) on the date of subcontract award, except

when the subcontract is for the acquisition of a commercial product or commercial service.

(End of clause)

252.204-7003	Control of Government Personnel Work Product.	1992-04

CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the Contractor.

(End of clause)

252.204-7004	Antiterrorism Awareness Training for Contractors.	2023-01

ANTITERRORISM AWARENESS TRAINING FOR CONTRACTORS (JAN 2023)

(a) Definition. As used in this clause-

"Military installation" means a base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a military department or, in the case of an activity in a foreign country, under the operational control of the Secretary of a military department or the Secretary of Defense (see 10 U.S.C. 2801(c)(4)).

(b) Training. Contractor personnel who require routine physical access to a Federally-controlled

facility or military installation shall complete Level I antiterrorism awareness training within 30 days of requiring access and annually thereafter. In accordance with Department of Defense Instruction O-2000.16 Volume 1, DoD Antiterrorism (AT) Program Implementation: DoD AT Standards, Level I antiterrorism awareness training shall be completed-

(1) Through a DoD-sponsored and certified computer or web-based distance learning instruction for Level I antiterrorism awareness; or

(2) Under the instruction of a Level I antiterrorism awareness instructor.

(c) Additional information. Information and guidance pertaining to DoD antiterrorism awareness training is available at https://jko.jten.mil/ or as otherwise identified in the performance work statement.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts, including subcontracts for commercial products and commercial services, when subcontractor performance requires routine physical access to a Federally-controlled facility or military installation.

(End of clause)

252.204-7009	Limitations on the Use or Disclosure of Third-Party Contractor Reported Cyber Incident Information.	2023-01

LIMITATIONS ON THE USE OR DISCLOSURE OF THIRD-PARTY CONTRACTOR REPORTED CYBER INCIDENT INFORMATION (JAN 2023)

(a) Definitions. As used in this clause-

"Compromise" means disclosure of information to unauthorized persons, or a violation of the security policy of a system, in which unauthorized intentional or unintentional disclosure, modification, destruction, or loss of an object, or the copying of information to unauthorized

media may have occurred.

"Controlled technical information" means technical information with military or space application that is subject to controls on the access, use, reproduction, modification, performance, display, release, disclosure, or dissemination. Controlled technical information would meet the criteria, if disseminated, for distribution statements B through F using the criteria set forth in DoD Instruction 5230.24, Distribution Statements on Technical Documents. The term does not include information that is lawfully publicly available without restrictions.

"Covered defense information" means unclassified controlled technical information or other information (as described in the Controlled Unclassified Information (CUI) Registry at http://www.archives.gov/cui/registry/category-list.html) that requires safeguarding or dissemination controls pursuant to and consistent with law, regulations, and Governmentwide policies, and is-

(1) Marked or otherwise identified in the contract, task order, or delivery order and provided to the contractor by or on behalf of DoD in support of the performance of the contract; or

(2) Collected, developed, received, transmitted, used, or stored by or on behalf of the contractor in support of the performance of the contract.

"Cyber incident" means actions taken through the use of computer networks that result in a compromise or an actual or potentially adverse effect on an information system and/or the information residing therein.

"Information system" means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.

"Media" means physical devices or writing surfaces including, but is not limited to, magnetic tapes, optical disks, magnetic disks, large-scale integration memory chips, and printouts onto which covered defense information is recorded, stored, or printed within a covered contractor information system.

"Technical information" means technical data or computer software, as those terms are defined in the clause at DFARS 252.227-7013, Rights in Technical Data-Other Than Commercial Products and Commercial Services, regardless of whether or not the clause is incorporated in this solicitation or contract. Examples of technical information include research and engineering data, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, technical orders, catalog-item identifications, data sets, studies and analyses and related information, and computer software executable code and source code.

(b) Restrictions. The Contractor agrees that the following conditions apply to any information it receives or creates in the performance of this contract that is information obtained from a third-party's reporting of a cyber incident pursuant to DFARS clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting (or derived from such information obtained under that clause):

(1) The Contractor shall access and use the information only for the purpose of furnishing advice or technical assistance directly to the Government in support of the Government's activities related to clause 252.204-7012, and shall not be used for any other purpose.

(2) The Contractor shall protect the information against unauthorized release or disclosure.

(3) The Contractor shall ensure that its employees are subject to use and non-disclosure obligations consistent with this clause prior to the employees being provided access to or use of the information.

(4) The third-party contractor that reported the cyber incident is a third-party beneficiary of the non-disclosure agreement between the Government and Contractor, as required by paragraph (b)(3) of this clause.

(5) A breach of these obligations or restrictions may subject the Contractor to-

(i) Criminal, civil, administrative, and contractual actions in law and equity for penalties, damages, and other appropriate remedies by the United States; and

(ii) Civil actions for damages and other appropriate remedies by the third party that reported the cyber incident, as a third party beneficiary of this clause.

(c) Subcontracts. The Contractor shall include this clause, including this paragraph (c), in subcontracts, or similar contractual instruments, for services that include support for the Government's activities related to safeguarding covered defense information and cyber incident reporting, including subcontracts for commercial products and commercial services, without alteration, except to identify the parties.

(End of clause)

252.204-7018	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services.	2023-01

PROHIBITION ON THE ACQUISITION OF COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES (JAN 2023)

(a) Definitions. As used in this clause-

"Covered defense telecommunications equipment or services" means-

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation, or any subsidiary or affiliate of such entities;

(2) Telecommunications services provided by such entities or using such equipment; or

(3) Telecommunications equipment or services produced or provided by an entity that the Secretary of Defense reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

"Covered foreign country" means-

(1) The People's Republic of China; or

(2) The Russian Federation.

"Covered missions" means-

(1) The nuclear deterrence mission of DoD, including with respect to nuclear command, control, and communications, integrated tactical warning and attack assessment, and continuity of Government; or

(2) The homeland defense mission of DoD, including with respect to ballistic missile defense.

"Critical technology" means-

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or

(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

"Substantial or essential component" means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. In accordance with section 1656 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91), the contractor shall not provide to the Government any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless the covered defense telecommunication equipment or services are covered by a waiver described in Defense Federal Acquisition Regulation Supplement 204.2104.

(c) Procedures. The Contractor shall review the list of excluded parties in the System for Award

Management (SAM) at https://www.sam.gov for entities that are excluded when providing any equipment, system, or service, to carry out covered missions, that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless a waiver is granted.

(d) Reporting.

(1) In the event the Contractor identifies covered defense telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, the Contractor shall report at https://dibnet.dod.mil the information in paragraph (d)(2) of this clause.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within 3 business days from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 30 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered defense telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services.

(End of clause)

252.204-7020	NIST SP 800-171 DoD Assessment Requirements.	2023-11

NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (NOV 2023)

(a) Definitions.

"Basic Assessment" means a contractor's self-assessment of the contractor's implementation of NIST SP 800-171 that-

(1) Is based on the Contractor's review of their system security plan(s) associated with covered contractor information system(s);

(2) Is conducted in accordance with the NIST SP 800-171 DoD Assessment Methodology; and

(3) Results in a confidence level of "Low" in the resulting score, because it is a self-generated score.

"Covered contractor information system" has the meaning given in the clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this contract.

"High Assessment" means an assessment that is conducted by Government personnel using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that-

(1) Consists of-

(i) A review of a contractor's Basic Assessment;

(ii) A thorough document review;

(iii) Verification, examination, and demonstration of a Contractor's system security plan to validate that NIST SP 800-171 security requirements have been implemented as described in the contractor's system security plan; and

(iv) Discussions with the contractor to obtain additional information or clarification, as needed; and

(2) Results in a confidence level of "High" in the resulting score.

"Medium Assessment" means an assessment conducted by the Government that-

(1) Consists of-

(i) A review of a contractor's Basic Assessment;

(ii) A thorough document review; and

(iii) Discussions with the contractor to obtain additional information or clarification, as needed; and

(2) Results in a confidence level of "Medium" in the resulting score.

(b) Applicability. This clause applies to covered contractor information systems that are required to comply with the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, in accordance with Defense Federal Acquisition Regulation System (DFARS) clause at 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this contract.

(c) Requirements. The Contractor shall provide access to its facilities, systems, and personnel necessary for the Government to conduct a Medium or High NIST SP 800-171 DoD Assessment, as described in NIST SP 800-171 DoD Assessment Methodology at https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf, if necessary.

(d) Procedures. Summary level scores for all assessments will be posted in the Supplier Performance Risk System (SPRS) (https://www.sprs.csd.disa.mil/) to provide DoD Components visibility into the summary level scores of strategic assessments.

(1) Basic Assessments. A contractor may submit, via encrypted email, summary level scores of Basic Assessments conducted in accordance with the NIST SP 800-171 DoD Assessment Methodology to webptsmh@navy.mil for posting to SPRS.

(i) The email shall include the following information:

(A) Version of NIST SP 800-171 against which the assessment was conducted.

(B) Organization conducting the assessment (e.g., Contractor self-assessment).

(C) For each system security plan (security requirement 3.12.4) supporting the performance of a DoD contract-

(1) All industry Commercial and Government Entity (CAGE) code(s) associated with the information system(s) addressed by the system security plan; and

(2) A brief description of the system security plan architecture, if more than one plan exists.

(D) Date the assessment was completed

(E) Summary level score (e.g., 95 out of 110, NOT the individual value for each requirement).

(F) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(ii) If multiple system security plans are addressed in the email described at paragraph (b)(1)(i) of this section, the Contractor shall use the following format for the report:

System Security Plan CAGE Codes supported by this plan Brief description of the plan architecture Date of assessment Total Score Date score of 110 will achieved

(1) Medium and High Assessments. DoD will post the following Medium and/or High Assessment summary level scores to SPRS for each system security plan assessed:

(i) The standard assessed (e.g., NIST SP 800-171 Rev 1).

(ii) Organization conducting the assessment, e.g., DCMA, or a specific organization (identified by Department of Defense Activity Address Code (DoDAAC)).

(iii) All industry CAGE code(s) associated with the information system(s) addressed by the system security plan.

(iv) A brief description of the system security plan architecture, if more than one system security plan exists.

(v) Date and level of the assessment, i.e., medium or high.

(vi) Summary level score (e.g., 105 out of 110, not the individual value assigned for each requirement).

(vii) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(e) Rebuttals.

(1) DoD will provide Medium and High Assessment summary level scores to the Contractor and offer the opportunity for rebuttal and adjudication of assessment summary level scores prior to posting the summary level scores to SPRS (see SPRS User's Guide https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf).

(2) Upon completion of each assessment, the contractor has 14 business days to provide additional information to demonstrate that they meet any security requirements not observed by the assessment team or to rebut the findings that may be of question.

(f) Accessibility.

(1) Assessment summary level scores posted in SPRS are available to DoD personnel, and are protected, in accordance with the standards set forth in DoD Instruction 5000.79, Defense-wide Sharing and Use of Supplier and Product Performance Information (PI).

(2) Authorized representatives of the Contractor for which the assessment was conducted may access SPRS to view their own summary level scores, in accordance with the SPRS Software User's Guide for Awardees/Contractors available at https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf.

(3) A High NIST SP 800-171 DoD Assessment may result in documentation in addition to that listed in this clause. DoD will retain and protect any such documentation as "Controlled Unclassified Information (CUI)" and intended for internal DoD use only. The information will be protected against unauthorized use and release, including through the exercise of applicable exemptions under the Freedom of Information Act (e.g., Exemption 4 covers trade secrets and commercial or financial information obtained from a contractor that is privileged or confidential).

(g) Subcontracts.

(1) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services (excluding commercially available off-the-shelf items).

(2) The Contractor shall not award a subcontract or other contractual instrument, that is subject to the implementation of NIST SP 800-171 security requirements, in accordance with DFARS clause 252.204-7012 of this contract, unless the subcontractor has completed, within the last 3 years, at least a Basic NIST SP 800-171 DoD Assessment, as described in https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf, for all covered contractor information systems relevant to its offer that are not part of an information technology service or system operated on behalf of the Government.

(3) If a subcontractor does not have summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) posted in SPRS, the subcontractor may conduct and submit a Basic Assessment, in accordance with the NIST SP 800-171 DoD Assessment Methodology, to webptsmh@navy.mil for posting to SPRS along with the information required by paragraph (d) of this clause.

(End of clause)

252.204-7021	Contractor Compliance with the Cybersecurity Maturity Model Certification Level Requirements.	2025-11

CONTRACTOR COMPLIANCE WITH THE CYBERSECURITY MATURITY MODEL CERTIFICATION LEVEL REQUIREMENTS (NOV 2025)

(a) *Definitions*. As used in this clause-

"Controlled unclassified information" means information the Government creates or possesses, or information an entity creates or possesses for or on behalf of the Government, that a law, regulation, or Governmentwide policy requires or permits an agency to handle using safeguarding or dissemination controls (32 CFR 2002.4(h)).

"Current" means-

(1) With regard to Conditional Cybersecurity Maturity Model Certification (CMMC) Status-

(i) Not older than 180 days for Conditional Level 2 (Self) assessments and Conditional Level 2 (certified third-party assessment organization (C3PAO)) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Conditional CMMC Status date (see 32 CFR 170.16 and 170.17); and

(B) A corresponding affirmation of continuous compliance by an affirming official (see 32 CFR 170.4); and

(ii) Not older than 180 days for Conditional Level 3 (Defense Industrial Base Cybersecurity Assessment Center (DIBCAC)) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Conditional CMMC Status date (see 32 CFR 170.18); and

(B) A corresponding affirmation of continuous compliance by an affirming official;

(2) With regard to Final CMMC Status-

(i) Not older than 1 year for Final Level 1 (Self), with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Final CMMC Status date (see 32 CFR 170.15); and

(B) A corresponding affirmation of continuous compliance, not older than 1 year, by an affirming official;

(ii) Not older than 3 years for Final Level 2 (Self) assessments and Final Level 2 (C3PAO) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Final CMMC Status date (see 32 CFR 170.16 and 170.17); and

(B) A corresponding affirmation of continuous compliance, not older than 1 year, by an affirming official; and

(iii) Not older than 3 years for Final Level 3 (DIBCAC) assessments, with-

(A) No changes in compliance with the requirements at 32 CFR part 170 since the Final CMMC Status date (see 32 CFR 170.18); and

(B) A corresponding affirmation of continuous compliance, not older than 1 year, by an affirming official; and

(3) With regard to affirmation of continuous compliance (32 CFR 170.22), not older than 1 year with no changes in compliance with the requirements at 32 CFR part 170.

"Cybersecurity Maturity Model Certification (CMMC) status" means the result of meeting or exceeding the minimum required score for the corresponding assessment. The potential statuses are as follows:

(1) Final Level 1 (Self).

(2) Conditional Level 2 (Self).

(3) Final Level 2 (Self).

(4) Conditional Level 2 (C3PAO).

(5) Final Level 2 (C3PAO).

(6) Conditional Level 3 (DIBCAC).

(7) Final Level 3 (DIBCAC).

"Cybersecurity Maturity Model Certification unique identifier (CMMC UID)" means 10 alpha-numeric characters assigned to each CMMC assessment and reflected in the Supplier Performance Risk System (SPRS) for each contractor information system.

"Federal contract information (FCI)" means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government. It does not include information provided by the Government to the public, such as on public websites, or simple transactional information, such as information necessary to process payments.

"Plan of action and milestones" means a document that identifies tasks to be accomplished. It details resources required to accomplish the elements of the plan, any milestones in meeting the tasks, and scheduled completion dates for the milestones, as defined in National Institute of Standards and Technology Special Publication 800-115 (32 CFR 170.21).

(b) *Framework*. The Cybersecurity Maturity Model Certification (CMMC) is a framework for assessing a contractor's compliance with applicable information security protections (see 32 CFR part 170).

(c) *Duplication*. The CMMC assessments will not duplicate efforts from any other comparable DoD assessment, except for rare circumstances when a reassessment may be necessary, for example, when there are indications of issues with cybersecurity and/or compliance with CMMC requirements.

(d) *Requirements*. The Contractor shall-

(1)(i) Have and maintain for the duration of the contract a current CMMC status at the following CMMC level, or higher: ***CMMC Level 1 (Self)*** for all information systems used in performance of the contract, task order, or delivery order that process, store, or transmit FCI or CUI; and

(ii) Consult 32 CFR 170.23 related to the flowdown of the CMMC requirements, and flow down the correct CMMC level to subcontracts and other contractual instruments;

(2) Only process, store, or transmit FCI or CUI on contractor information systems that have a CMMC status at the CMMC level required in paragraph (d)(1) of this clause, or higher;

(3) Complete on an annual basis, and maintain as current, an affirmation, by the affirming official (see 32 CFR 170.4), of continuous compliance with the requirements associated with the CMMC level required in paragraph (d)(1) of this clause in the Supplier Performance Risk System (SPRS) (*https://piee.eb.mil*) for each CMMC UID applicable to each of the contractor information systems that process, store, or transmit FCI or CUI and that are used in performance of the contract;

(4) Ensure all subcontractors and suppliers complete prior to subcontract award, and maintain on an annual basis, an affirmation, by the affirming official (see 32 CFR 170.4), of continuous compliance with the requirements associated with the CMMC level required for the subcontract or other contractual instrument for each of the subcontractor information systems that process, store, or transmit FCI or CUI and that are used in performance of the subcontract; and

(5) If the Contractor has a CMMC Status of Conditional, successfully close out a valid plan of action and milestones (32 CFR 170.21) to achieve a CMMC Status of Final.

(e) *Reporting*. The Contractor shall-

(1) Submit to the Contracting Officer-

(i) The CMMC UID(s) issued by SPRS for contractor information systems that will process, store, or transmit FCI or CUI during performance of the contract; and

(ii) Any changes in the CMMC UIDs generated in SPRS throughout the life of the contract, task order, or delivery order, if applicable;

(2) Enter into SPRS the results of a current self-assessment for each CMMC UID, not covered by a C3PAO assessment or DIBCAC assessment, applicable to each of the contractor information systems that process, store, or transmit FCI or CUI and that are used in performance of the contract; and

(3) Complete in SPRS on an annual basis and maintain as current an affirmation of continuous compliance by the affirming official (see 32 CFR 170.4) for each self-assessment, C3PAO assessment, or DIBCAC assessment required under the contract in SPRS.

(f) *Subcontracts*. The Contractor shall-

(1) Insert the substance of this clause, including this paragraph (f) and excluding paragraph (e)(1), in subcontracts and other contractual instruments, including those for the acquisition of commercial products or commercial services, excluding commercially available off-the-shelf items, if the subcontract or other contractual instrument will contain a requirement to process, store, or transmit FCI or CUI; and

(2) Prior to awarding a subcontract or other contractual instrument, ensure that the subcontractor has a current CMMC certificate or current CMMC status at the CMMC level that is appropriate for the information that is being flowed down to the subcontractor based on the requirements at 32 CFR 170.23.

(End of clause)

252.205-7000	Provision of Information to Cooperative Agreement Holders.	2024-10

PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (OCT 2024)

(a) Definition. As used in this clause-

"Cooperative agreement holder" means a State or local government; a nonprofit organization; a tribal organization (as defined in section 4(c) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304(l)); or an economic enterprise (as defined in section 3(e) of the Indian Financing Act of 1974 (25 U.S.C. 1452(e))) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Under Secretary of Defense for Acquisition and Sustainment to furnish procurement technical assistance to business entities (as defined in 10 U.S.C. 4951).

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

252.209-7004	Subcontracting with Firms that are Owned or Controlled by the Government of a Country that is a State Sponsor of Terrorism.	2019-05

SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A COUNTRY THAT IS A STATE SPONSOR OF TERRORISM (MAY 2019)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of the threshold specified in Federal Acquisition Regulation 9.405-2(b) on the date of subcontract award with a firm, or a subsidiary of a firm, that is identified in the Exclusions section of the System for Award Management (SAM Exclusions) as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a country that is a state sponsor of terrorism.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, in SAM Exclusions, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a country that is a state sponsor of terrorism. The notice must include the name of the proposed subcontractor and the compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion in SAM Exclusions.

(End of clause)

252.215-7002	Cost Estimating System	2025-01

Requirements.

COST ESTIMATING SYSTEM REQUIREMENTS (JAN 2025)

(a) Definitions.

"Acceptable estimating system" means an estimating system that complies with the system criteria in paragraph (d) of this clause, and provides for a system that-

(1) Is maintained, reliable, and consistently applied;

(2) Produces verifiable, supportable, documented, and timely cost estimates that are an acceptable basis for negotiation of fair and reasonable prices;

(3) Is consistent with and integrated with the Contractor's related management systems; and

(4) Is subject to applicable financial control systems.

"Estimating system" means the Contractor's policies, procedures, and practices for budgeting and planning controls, and generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards. Estimating system includes the Contractor's-

(1) Organizational structure;

(2) Established lines of authority, duties, and responsibilities;

(3) Internal controls and managerial reviews;

(4) Flow of work, coordination, and communication; and

(5) Budgeting, planning, estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.

"Material weakness" means a deficiency or combination of deficiencies in the internal control over information in contractor business systems, such that there is a reasonable possibility that

a material misstatement of such information will not be prevented, or detected and corrected, on a timely basis. A reasonable possibility exists when the likelihood of an event occurring is-

(1) Probable; or

(2) More than remote but less than likely (section 806 of Pub. L. 116-283).

(b) General. The Contractor shall establish, maintain, and comply with an acceptable estimating system.

(c) Applicability. Paragraphs (d) and (e) of this clause apply if the Contractor is a large business and either-

(1) In its fiscal year preceding award of this contract, received Department of Defense (DoD) prime contracts or subcontracts, totaling $50 million or more for which certified cost or pricing data were required; or

(2) In its fiscal year preceding award of this contract-

(i) Received DoD prime contracts or subcontracts totaling $10 million or more (but less than $50 million) for which certified cost or pricing data were required; and

(ii) Was notified, in writing, by the Contracting Officer that paragraphs (d) and (e) of this clause apply.

(d) System requirements.

(1) The Contractor shall disclose its estimating system to the Administrative Contracting Officer (ACO), in writing. If the Contractor wishes the Government to protect the data and information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission.

(2) An estimating system disclosure is acceptable when the Contractor has provided the ACO with documentation that-

(i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and

(ii) Provides sufficient detail for the Government to reasonably make an informed judgment

regarding the acceptability of the Contractor's estimating practices.

(3) The Contractor shall-

(i) Comply with its disclosed estimating system; and

(ii) Disclose significant changes to the cost estimating system to the ACO on a timely basis.

(4) The Contractor's estimating system shall provide for the use of appropriate source data, utilize sound estimating techniques and good judgment, maintain a consistent approach, and adhere to established policies and procedures. An acceptable estimating system shall accomplish the following functions:

(i) Establish clear responsibility for preparation, review, and approval of cost estimates and budgets.

(ii) Provide a written description of the organization and duties of the personnel responsible for preparing, reviewing, and approving cost estimates and budgets.

(iii) Ensure that relevant personnel have sufficient training, experience, and guidance to perform estimating and budgeting tasks in accordance with the Contractor's established procedures.

(iv) Identify and document the sources of data and the estimating methods and rationale used in developing cost estimates and budgets.

(v) Provide for adequate supervision throughout the estimating and budgeting process.

(vi) Provide for consistent application of estimating and budgeting techniques.

(vii) Provide for detection and timely correction of errors.

(viii) Protect against cost duplication and omissions.

(ix) Provide for the use of historical experience, including historical vendor pricing data, where appropriate.

(x) Require use of appropriate analytical methods.

(xi) Integrate data and information available from other management systems.

(xii) Require management review, including verification of compliance with the company's estimating and budgeting policies, procedures, and practices.

(xiii) Provide for internal review of, and accountability for, the acceptability of the estimating system, including the budgetary data supporting indirect cost estimates and comparisons of projected results to actual results, and an analysis of any differences.

(xiv) Provide procedures to update cost estimates and notify the Contracting Officer in a timely manner throughout the negotiation process.

(xv) Provide procedures that ensure subcontract prices are reasonable based on a documented review and analysis provided with the prime proposal, when practicable.

(xvi) Provide estimating and budgeting practices that consistently generate sound proposals that are compliant with the provisions of the solicitation and are adequate to serve as a basis to reach a fair and reasonable price.

(xvii) Have an adequate system description, including policies, procedures, and estimating and budgeting practices, that comply with the Federal Acquisition Regulation and Defense Federal Acquisition Regulation Supplement.

(e) Material weaknesses.

(1) The Contracting Officer will provide an initial determination to the Contractor, in writing, of any material weaknesses. The initial determination will describe the underlying deficiency in sufficient detail to allow the Contractor to understand the weakness or deficiency.

(2) The Contractor shall respond within 30 days to a written initial determination from the Contracting Officer that identifies material weaknesses in the Contractor's estimating system. If the Contractor disagrees with the initial determination, the Contractor shall state, in writing, its rationale for disagreeing.

(3) The Contracting Officer will evaluate the Contractor's response and notify the Contractor, in writing, of the Contracting Officer's final determination concerning-

(i) Remaining material weaknesses;

(ii) The adequacy of any proposed or completed corrective action; and

(iii) System disapproval, if the Contracting Officer determines that one or more material weaknesses remain.

(f) If the Contractor receives the Contracting Officer's final determination of material weaknesses, the Contractor shall, within 45 days of receipt of the final determination, either correct the material weaknesses or submit an acceptable corrective action plan showing milestones and actions to eliminate the material weaknesses.

(g) Withholding payments. If the Contracting Officer makes a final determination to disapprove the Contractor's estimating system, and the contract includes the clause at 252.242-7005, Contractor Business Systems, the Contracting Officer will withhold payments in accordance with that clause.

(End of clause)

252.222-7006	Restrictions on the Use of Mandatory Arbitration Agreements.	2023-01

RESTRICTIONS ON THE USE OF MANDATORY ARBITRATION AGREEMENTS (JAN 2023)

(a) Definitions. As used in this clause-

"Covered subcontractor" means any entity that has a subcontract valued in excess of $1 million, except a subcontract for the acquisition of commercial products or commercial services, including commercially available off-the-shelf items.

"Subcontract" means any contract, as defined in Federal Acquisition Regulation subpart 2.1, to furnish supplies or services for performance of this contract or a higher-tier subcontract thereunder.

(b) The Contractor-

(1) Agrees not to-

(i) Enter into any agreement with any of its employees or independent contractors that requires, as a condition of employment, that the employee or independent contractor agree to resolve through arbitration-

(A) Any claim under title VII of the Civil Rights Act of 1964; or

(B) Any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; or

(ii) Take any action to enforce any provision of an existing agreement with an employee or independent contractor that mandates that the employee or independent contractor resolve through arbitration-

(A) Any claim under title VII of the Civil Rights Act of 1964; or

(B) Any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; and

(2) Certifies, by signature of the contract, that it requires each covered subcontractor to agree not to enter into, and not to take any action to enforce, any provision of any existing agreements, as described in paragraph (b)(1) of this clause, with respect to any employee or independent contractor performing work related to such subcontract.

(c) The prohibitions of this clause do not apply with respect to a contractor's or subcontractor's agreements with employees or independent contractors that may not be enforced in a court of the United States.

(d) The Secretary of Defense may waive the applicability of the restrictions of paragraph (b) of this clause in accordance with Defense Federal Acquisition Regulation Supplement 222.7404.

(End of clause)

252.223-7001 Hazard Warning Labels. 1991-12

HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labelling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labelled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")	ACT
____	____
____	____
____	____

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror

shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7006	Prohibition on Storage, Treatment, and Disposal of Toxic or Hazardous Materials.	2014-09

PROHIBITION ON STORAGE, TREATMENT, AND DISPOSAL OF TOXIC OR HAZARDOUS MATERIALS-BASIC (SEP 2014)

(a) Definitions. As used in this clause-

"Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

"Toxic or hazardous materials" means-

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR Part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing, treating, or disposing of toxic or hazardous materials not owned by DoD on a DoD installation, except to the

extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense. A charge may be assessed for any storage or disposal authorized under any of the exceptions to 10 U.S.C. 2692. If a charge is to be assessed, then such assessment shall be identified elsewhere in the contract with payment to the Government on a reimbursable cost basis.

(c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that require, may require, or permit a subcontractor access to a DoD installation, at any subcontract tier.

(End of clause)

252.223-7008	Prohibition of Hexavalent Chromium.	2023-01

PROHIBITION OF HEXAVALENT CHROMIUM (JAN 2023)

(a) Definitions. As used in this clause-

"Homogeneous material" means a material that cannot be mechanically disjointed into different materials and is of uniform composition throughout.

(1) Examples of homogeneous materials include individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins, and surface coatings.

(2) Homogeneous material does not include conversion coatings that chemically modify the substrate.

"Mechanically disjointed" means that the materials can, in principle, be separated by mechanical actions such as unscrewing, cutting, crushing, grinding, and abrasive processes.

(b) Prohibition.

(1) Unless otherwise specified by the Contracting Officer, the Contractor shall not provide any

deliverable or construction material under this contract that-

(i) Contains hexavalent chromium in a concentration greater than 0.1 percent by weight in any homogenous material; or

(ii) Requires the removal or reapplication of hexavalent chromium materials during subsequent sustainment phases of the deliverable or construction material.

(2) This prohibition does not apply to hexavalent chromium produced as a by-product of manufacturing processes.

(c) If authorization for incorporation of hexavalent chromium in a deliverable or construction material is required, the Contractor shall submit a request to the Contracting Officer.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for commercial products or commercial services, that are for supplies, maintenance and repair services, or construction materials.

(End of clause)

252.223-7998	Prohibition on Procurement of Certain Items Containing Perfluorooctane Sulfonate or Perfluorooctanoic Acid. (Deviation 2022-O0010)	2023-04	Deviation 2022-O0010	2023-04

PROHIBITION ON PROCUREMENT OF CERTAIN ITEMS CONTAINING PERFLUOROOCTANE SULFONATE OR PERFLUOROOCTANOIC ACID (DEVIATION 2022-O0010) (APR 2023)

(a) Effective April 1, 2023, in accordance with section 333 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116-283), the Department of Defense may not procure any covered items that contain perfluorooctane sulfonate (PFOS) or

perfluorooctanoic acid (PFOA).

(b) A covered item means the following:

(1) Nonstick cookware or cooking utensils for use in galleys or dining facilities.

(2) Upholstered furniture, carpets, and rugs that have been treated with stain-resistant coatings.

(c) The Contractor shall not provide any covered items containing PFOS or PFOA in performance of this contract, task order, delivery order, or blanket purchase agreement order.

(d) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts for any covered item, including subcontracts for commercial products (including commercially available off-the-shelf items) and commercial services.

(End of clause)

252.225-7012	Preference for Certain Domestic Commodities.	2022-04

PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (APR 2022)

(a) Definitions. As used in this clause-

"Component" means any item supplied to the Government as part of an end product or of another component.

"End product" means supplies delivered under a line item of this contract.

"Qualifying country" means a country with a reciprocal defense procurement memorandum of understanding or international agreement with the United States in which both countries agree to remove barriers to purchases of supplies produced in the other country or services performed by sources of the other country, and the memorandum or agreement complies, where applicable, with the requirements of section 36 of the Arms Export Control Act (22 U.S.C. 2776)

and with 10 U.S.C. 2457. Accordingly, the following are qualifying countries:

Australia

Austria

Belgium

Canada

Czech Republic

Denmark

Egypt

Estonia

Finland

France

Germany

Greece

Israel

Italy

Japan

Latvia

Lithuania

Luxembourg

Netherlands

Norway

Poland

Portugal

Slovenia

Spain

Sweden

Switzerland

Turkey

United Kingdom of Great Britain and Northern Ireland.

"Structural component of a tent"-

(1) Means a component that contributes to the form and stability of the tent (e.g., poles, frames, flooring, guy ropes, pegs); and

(2) Does not include equipment such as heating, cooling, or lighting.

" United States " means the 50 States, the District of Columbia , and outlying areas.

"U.S.-flag vessel" means a vessel of the United States or belonging to the United States , including any vessel registered or having national status under the laws of the United States .

(b) The Contractor shall deliver under this contract only such of the following items, either as end products or components, that have been grown, reprocessed, reused, or produced in the United States :

(1) Food.

(2) Clothing and the materials and components thereof, other than sensors, electronics, or other items added to, and not normally associated with, clothing and the materials components

thereof. Clothing includes items such as outerwear, headwear, underwear, nightwear. footwear, hosiery, handwear, belts, badges, and insignia.

(3)(i) Tents and structural components of tents;

(ii) Tarpaulins; or

(iii) Covers.

(4) Cotton and other natural fiber products.

(5) Woven silk or woven silk blends.

(6) Spun silk yarn for cartridge cloth.

(7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics.

(8) Canvas products.

(9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles).

(10) Any item of individual equipment (Federal Supply Class 8465) manufactured from or containing fibers, yarns, fabrics, or materials listed in this paragraph (b).

(c) This clause does not apply-

(1) To items listed in section 25.104(a) of the Federal Acquisition Regulation, or other items for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;

(2) To incidental amounts of cotton, other natural fibers, or wool incorporated in an end product, for which the estimated value of the cotton, other natural fibers, or wool-

(i) Is not more than 10 percent of the total price of the end product; and

(ii) Does not exceed the threshold at Defense Federal Acquisition Regulation Supplement 225.7002-2(a);

(3) To waste and byproducts of cotton or wool fiber for use in the production of propellants and explosives;

(4) To foods, other than fish, shellfish, or seafood, that have been manufactured or processed in the United States , regardless of where the foods (and any component if applicable) were grown or produced. Fish, shellfish, or seafood manufactured or processed in the United States and fish, shellfish, or seafood contained in foods manufactured or processed in the United States shall be provided in accordance with paragraph (d) of this clause;

(5) To chemical warfare protective clothing produced in a qualifying country; or

(6) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if-

(i) The fabric is to be used as a component of an end product that is not a textile product. Examples of textile products, made in whole or in part of fabric, include-

(A) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);

(B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs /apparel/findings/tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;

(C) Upholstered seats (whether for household, office, or other use); and

(D) Parachutes (Federal Supply Class 1670); or

(ii) The fibers and yarns are para-aramid fibers and continuous filament para-aramid yarns manufactured in a qualifying country.

(d)(1) Fish, shellfish, and seafood delivered under this contract, or contained in foods delivered under this contract-

(i) Shall be taken from the sea by U.S.-flag vessels; or

(ii) If not taken from the sea, shall be obtained from fishing within the United States ; and

(2) Any processing or manufacturing of the fish, shellfish, or seafood shall be performed on a U. S.-flag vessel or in the United States .

(End of clause)

252.225-7013 Duty-Free Entry. 2025-08

DUTY-FREE ENTRY (AUG 2025)

(a) Definitions. As used in this clause-

"Component," means any item supplied to the Government as part of an end product or of another component.

"Customs territory of the United States" means the 50 States, the District of Columbia, and Puerto Rico.

"Eligible product" means-

(1) "Designated country end product," as defined in the Trade Agreements (either basic or alternate) clause of this contract;

(2) "Free Trade Agreement country end product," other than a "Bahraini end product," a "Moroccan end product," a Panamanian end product," or a "Peruvian end product," as defined in the Buy American-Free Trade Agreements-Balance of Payments Program (either basic or alternate II) clause of this contract, basic or its Alternate II; or

(3) "Free Trade Agreement country end product" other than a "Bahraini end product," "Korean end product," "Moroccan end product," "Panamanian end product," or "Peruvian end product," as defined in of the Buy American-Free Trade Agreements-Balance of Payments Program (either alternate IV or alternate V) clause of this contract.

"Qualifying country" and "qualifying country end product" have the meanings given in the Trade Agreements clause, the Buy American and Balance of Payments Program clause, or the Buy

American-Free Trade Agreements-Balance of Payments Program clause of this contract, basic or alternate.

(b) Except as provided in paragraph (i) of this clause, or unless supplies were imported into the customs territory of the United States before the date of this contract or the applicable subcontract, the price of this contract shall not include any amount for duty on-

(1) End items that are eligible products or qualifying country end products;

(2) Components (including, without limitation, raw materials and intermediate assemblies) produced or made in qualifying countries, that are to be incorporated in U.S.- made end products to be delivered under this contract; or

(3) Other supplies for which the Contractor estimates that duty will exceed $300 per shipment into the customs territory of the United States .

(c) The Contractor shall-

(1) Claim duty-free entry only for supplies that the Contractor intends to deliver to the Government under this contract, either as end items or components of end items; and

(2) Pay duty on supplies, or any portion thereof, that are diverted to nongovernmental use, other than-

(i) Scrap or salvage; or

(ii) Competitive sale made, directed, or authorized by the Contracting Officer.

(d) Except as the Contractor may otherwise agree, the Government will execute duty-free entry certificates and will afford such assistance as appropriate to obtain the duty-free entry of supplies-

(1) For which no duty is included in the contract price in accordance with paragraph (b) of this clause; and

(2) For which shipping documents bear the notation specified in paragraph (e) of this clause.

(e) For foreign supplies for which the Government will issue duty-free entry certificates in accordance with this clause, shipping documents submitted to Customs shall-

(1) Consign the shipments to the appropriate-

(i) Military department in care of the Contractor, including the Contractor's delivery address; or

(ii) Military installation; and

(2) Include the following information:

(i) Prime contract number and, if applicable, delivery order number.

(ii) Number of the subcontract for foreign supplies, if applicable.

(iii) Identification of the carrier.

(iv)(A) For direct shipments to a U.S. military installation, the notation: "UNITED STATES GOVERNMENT, DEPARTMENT OF DEFENSE Duty-Free Entry to be claimed pursuant to Section XXII, Chapter 98, Subchapter VIII, Item 9808.00.30 of the Harmonized Tariff Schedule of the United States. Upon arrival of shipment at the appropriate port of entry, District Director of Customs, please release shipment under 19 CFR Part 142 and notify Defense Contract Management Agency (DCMA) St. Louis, St. Louis, MO, ATTN: Duty Free Entry Team, 1222 Spruce Street, Room 9.300, St. Louis, MO 63103-2812, for execution of Customs Form 7501, 7501A, or 7506 and any required duty-free entry certificates."

(B) If the shipment will be consigned to other than a military installation, e.g., a domestic contractor's plant, the shipping document notation shall be altered to include the name and address of the contractor, agent, or broker who will notify DCMA St. Louis, Duty Free Entry Team, for execution of the duty-free entry certificate. (If the shipment will be consigned to a contractor's plant and no duty-free entry certificate is required due to a trade agreement, the Contractor shall claim duty-free entry under the applicable trade agreement and shall comply with the U.S. Customs Service requirements. No notification to DCMA St. Louis, Duty Free Entry Team, is required.)

(v) Gross weight in pounds (if freight is based on space tonnage, state cubic feet in addition to gross shipping weight).

(vi) Estimated value in U.S. dollars.

(vii) Activity address number of the contract administration office administering the prime

contract, e.g., for DCMA Dayton, S3605A.

(f) Preparation of customs forms.

(1)(i) Except for shipments consigned to a military installation, the Contractor shall-

(A) Prepare any customs forms required for the entry of foreign supplies into the customs territory of the United States in connection with this contract; and

(B) Submit the completed customs forms to the District Director of Customs, with a copy to DCMA St. Louis , Duty Free Entry Team for execution of any required duty-free entry certificates.

(ii) Shipments consigned directly to a military installation will be released in accordance with sections 10.101 and 10.102 of the U.S. Customs regulations.

(2) For shipments containing both supplies that are to be accorded duty-free entry and supplies that are not, the Contractor shall identify on the customs forms those items that are eligible for duty-free entry.

(g) The Contractor shall-

(1) Prepare (if the Contractor is a foreign supplier), or shall instruct the foreign supplier to prepare, a sufficient number of copies of the bill of lading (or other shipping document) so that at least two of the copies accompanying the shipment will be available for use by the District Director of Customs at the port of entry;

(2) Consign the shipment as specified in paragraph (e) of this clause; and

(3) Mark on the exterior of all packages--

(i) "UNITED STATES GOVERNMENT, DEPARTMENT OF DEFENSE"; and

(ii) The activity address number of the contract administration office administering the prime contract.

(h) The Contractor shall notify the Administrative Contracting Officer (ACO) in writing of any purchase of eligible products or qualifying country supplies to be accorded duty-free entry, that are to be imported into the customs territory of the United States for delivery to the Government

or for incorporation in end items to be delivered to the Government. The Contractor shall furnish the notice to the ACO immediately upon award to the supplier and shall include in the notice-

(1) The Contractor's name, address, and Commercial and Government Entity (CAGE) code;

(2) Prime contract number and, if applicable, delivery order number;

(3) Total dollar value of the prime contract or delivery order;

(4) Date of the last scheduled delivery under the prime contract or delivery order;

(5) Foreign supplier's name and address;

(6) Number of the subcontract for foreign supplies;

(7) Total dollar value of the subcontract for foreign supplies;

(8) Date of the last scheduled delivery under the subcontract for foreign supplies;

(9) List of items purchased;

(10) An agreement that the Contractor will pay duty on supplies, or any portion thereof, that are diverted to nongovernmental use other than-

(i) Scrap or salvage; or

(ii) Competitive sale made, directed, or authorized by the Contracting Officer;

(11) Country of origin; and

(12) Scheduled delivery date(s).

(i) This clause does not apply to purchases of eligible products or qualifying country supplies in connection with this contract if-

(1) The supplies are identical in nature to supplies purchased by the Contractor or any subcontractor in connection with its commercial business; and

(2) It is not economical or feasible to account for such supplies so as to ensure that the amount

of the supplies for which duty-free entry is claimed does not exceed the amount purchased in connection with this contract.

(j) The Contractor shall-

(1) Insert the substance of this clause, including this paragraph (j), in all subcontracts for-

(i) Qualifying country components; or

(ii) Nonqualifying country components for which the Contractor estimates that duty will exceed $200 per unit;

(2) Require subcontractors to include the number of this contract on all shipping documents submitted to Customs for supplies for which duty-free entry is claimed pursuant to this clause; and

(3) Include in applicable subcontracts-

(i) The name and address of the ACO for this contract;

(ii) The name, address, and activity address number of the contract administration office specified in this contract; and

(iii) The information required by paragraphs (h)(1), (2), and (3) of this clause.

(End of clause)

252.225-7048 Export-Controlled Items. 2013-06

EXPORT CONTROLLED ITEMS (JUNE 2013)

(a) Definition. "Export-controlled items," as used in this clause, means items subject to the Export Administration Regulations (EAR) (15 CFR Parts 730-774) or the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130). The term includes:

(1) "Defense items," defined in the Arms Export Control Act, 22 U.S.C. 2778(j)(4)(A), as defense articles, defense services, and related technical data, and further defined in the ITAR, 22 CFR Part 120.

(2) "Items," defined in the EAR as "commodities", "software", and "technology," terms that are also defined in the EAR, 15 CFR 772.1.

(b) The Contractor shall comply with all applicable laws and regulations regarding export-controlled items, including, but not limited to, the requirement for contractors to register with the Department of State in accordance with the ITAR. The Contractor shall consult with the Department of State regarding any questions relating to compliance with the ITAR and shall consult with the Department of Commerce regarding any questions relating to compliance with the EAR.

(c) The Contractor's responsibility to comply with all applicable laws and regulations regarding export-controlled items exists independent of, and is not established or limited by, the information provided by this clause.

(d) Nothing in the terms of this contract adds, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive orders, and regulations, including but not limited to-

(1) The Export Administration Act of 1979, as amended (50 U.S.C. App. 2401, et seq.);

(2) The Arms Export Control Act (22 U.S.C. 2751, et seq.);

(3) The International Emergency Economic Powers Act (50 U.S.C. 1701, et seq.);

(4) The Export Administration Regulations (15 CFR Parts 730-774);

(5) The International Traffic in Arms Regulations (22 CFR Parts 120-130); and

(6) Executive Order 13222, as extended.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts.

(End of clause)

252.225-7056	Prohibition Regarding Business Operations with the Maduro Regime.	2023-01

PROHIBITION REGARDING BUSINESS OPERATIONS WITH THE MADURO REGIME (JAN 2023)

(a) Definitions. As used in this clause-

"Agency or instrumentality of the government of Venezuela" means an agency or instrumentality of a foreign state as defined in 28 U.S.C. 1603(b), with each reference in section 1603(b) to a foreign state deemed to be a reference to Venezuela.

"Business operations" means engaging in commerce in any form, including acquiring, developing, maintaining, owning, selling, possessing, leasing, or operating equipment, facilities, personnel, products, services, personal property, real property, or any other apparatus of business or commerce.

"Government of Venezuela" means the government of any political subdivision of Venezuela, and any agency or instrumentality of the government of Venezuela.

"Person" means-

(1) A natural person, corporation, company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group;

(2) Any governmental entity or instrumentality of a government, including a multilateral development institution (as defined in section 1701(c)(3) of the International Financial Institutions Act (22 U.S.C. 262r(c)(3)); and

(3) Any successor, subunit, parent entity, or subsidiary of, or any entity under common ownership or control with, any entity described in paragraph (1) or (2) of this definition.

(b) Prohibition. In accordance with section 890 of the National Defense Authorization Act for Fiscal Year 2020 (Pub. L. 116-92), DoD is prohibited from entering into a contract for the procurement of products or services with any person that has business operations with an authority of the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government, unless the person has a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.

(c) The Contractor shall-

(1) Not have any business operations with an authority of the Maduro regime or the government of Venezuela that is not recognized as the legitimate government of Venezuela by the U.S. Government; or

(2) Have a valid license to operate in Venezuela issued by the Office of Foreign Assets Control of the Department of the Treasury.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for the acquisition of commercial products.

(End of clause)

252.225-7058	Postaward Disclosure of Employment of Individuals Who Work in the People's Republic of China.	2023-01

POSTAWARD DISCLOSURE OF EMPLOYMENT OF INDIVIDUALS WHO WORK IN THE PEOPLE'S REPUBLIC OF CHINA (JAN 2023)

(a) Definitions. As used in this clause-

"Covered contract" means any DoD contract or subcontract with a value in excess of $5 million, not including contracts for commercial products and commercial services.

"Covered entity" means any corporation, company, limited liability company, limited partnership, business trust, business association, or other similar entity, including any subsidiary thereof, performing work on a covered contract in the People's Republic of China, including by leasing or owning real property used in the performance of the covered contract in the People's Republic of China.

(b) Disclosure requirement.

(1) In accordance with section 855 of the National Defense Authorization Act for Fiscal Year 2022 (Pub. L. 117-81, 10 U.S.C. 4651 note prec.), DoD may not award, extend, or exercise an option on a covered contract with a covered entity unless such covered entity submits each required disclosure of its use of workforce and facilities in the People's Republic of China, if it employs one or more individuals who perform work in the People's Republic of China on a covered contract.

(2) If the Contractor is a covered entity, the Contractor shall disclose for the Government's fiscal years 2023 and 2024, the Contractor's employment of one or more individuals who perform work in the People's Republic of China on any covered contract. The disclosures shall include-

(i) The total number of such individuals who perform work in the People's Republic of China on the covered contracts funded by DoD; and

(ii) A description of the physical presence, including street address or addresses in the People's Republic of China, where work on the covered contract is performed.

(c) Subcontracts. The Contractor shall insert this clause, including this paragraph (c), without alteration other than to identify the appropriate parties, in all subcontracts that meet the definition of a covered contract.

(End of clause)

252.225-7060	Prohibition on Certain Procurements from the Xinjiang Uyghur Autonomous Region.	2023-06

PROHIBITION ON CERTAIN PROCUREMENTS FROM THE XINJIANG UYGHUR AUTONOMOUS REGION (JUN 2023)

(a) Definitions. As used in this clause-

"Forced labor" means any work or service that is exacted from any person under the menace of any penalty for nonperformance and that the worker does not offer to perform (10 U.S.C. 2496).

"XUAR" means the Xinjiang Uyghur Autonomous Region of the People's Republic of China (10 U.S.C. 2496).

(b) Prohibition. In accordance with 10 U.S.C. 4661, none of the funds appropriated or otherwise made available for DoD may be used to knowingly procure any products mined, produced, or manufactured wholly or in part by forced labor from XUAR or from an entity that has used labor from within or transferred from XUAR. The Contractor shall make a good faith effort to determine that forced labor from XUAR will not be used in the performance of this contract (section 855, Pub. L. 117-263).

(c) Subcontracts. The Contractor shall insert this clause, including this paragraph (c), without alteration other than to identify the appropriate parties, in subcontracts including subcontracts for commercial products, commercial services, and commercially available off-the-shelf items.

(End of clause)

252.226-7001	Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns.	2023-01

UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES,

AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS

(JAN 2023)

(a) Definitions. As used in this clause--

"Indian" means-

(1) Any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c); and

(2) Any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C. Chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1452(c).

"Interested party" means a contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

"Native Hawaiian small business concern" means an entity that is-

(1) A small business concern as defined in Section 3 of the Small Business Act (15 U.S.C. 632) and relevant implementing regulations; and

(2) Owned and controlled by a Native Hawaiian as defined in 25 U.S.C. 4221(9).

(b) The Contractor shall use its best efforts to give Indian organizations, Indian-owned

economic enterprises, and Native Hawaiian small business concerns the maximum practicable opportunity to participate in the subcontracts it awards, to the fullest extent consistent with efficient performance of the contract.

(c) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status.

(d) In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to-

(1)(i) For matters relating to Indian organizations or Indian-owned economic enterprises:

U.S. U.S. Department of the Interior

Bureau of Indian Affairs

Attn: Bureau Procurement Chief

12220 Sunrise Valley Drive

Reston , VA 20191

Phone: 703-390-6433

Website: https://www.bia.gov/

The BIA will determine the eligibility and will notify the Contracting Officer.

(2)(i) For matters relating to Native Hawaiian small business concerns:

Department of Hawaiian Home Lands

PO Box 1879

Honolulu , HI 96805

Phone: 808-620-9500

Website: http://dhhl.hawaii.gov/

The Department of Hawaiian Home Lands will determine the eligibility and will notify the Contracting Officer.

(e) No incentive payment will be made-

(1) While a challenge is pending; or

(2) If a subcontractor is determined to be an ineligible participant.

(f)(1) The Contractor, on its own behalf or on behalf of a subcontractor at any tier, may request an incentive payment in accordance with this clause.

(2) The incentive amount that may be requested is 5 percent of the estimated cost, target cost, or fixed price included in the subcontract at the time of award to the Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(3) In the case of a subcontract for commercial products or commercial services, the Contractor may receive an incentive payment only if the subcontracted items are produced or manufactured in whole or in part by an Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(4) The Contractor has the burden of proving the amount claimed and shall assert its request for an incentive payment prior to completion of contract performance.

(5) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the estimated cost, target cost, or fixed price included in the subcontract awarded to the Indian organization, Indian-owned economic enterprise, or Native Hawaiian small business concern.

(6) If the Contractor requests and receives an incentive payment on behalf of a subcontractor, the Contractor is obligated to pay the subcontractor the incentive amount.

(g) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts exceeding $500,000.

(End of clause)

252.232-7003	Electronic Submission of Payment Requests and Receiving Reports.	2018-12

ELECTRONIC SUBMISSION OF PAYMENT REQUESTS AND RECEIVING REPORTS (DEC 2018)

(a) Definitions. As used in this clause-

"Contract financing payment" means an authorized Government disbursement of monies to a contractor prior to acceptance of supplies or services by the Government.

(1) Contract financing payments include-

(i) Advance payments;

(ii) Performance-based payments;

(iii) Commercial advance and interim payments;

(iv) Progress payments based on cost under the clause at Federal Acquisition Regulation (FAR) 52.232-16, Progress Payments;

(v) Progress payments based on a percentage or stage of completion (see FAR 32.102(e)), except those made under the clause at FAR 52.232-5, Payments Under Fixed-Price Construction Contracts, or the clause at FAR 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts; and

(vi) Interim payments under a cost reimbursement contract, except for a cost reimbursement contract for services when Alternate I of the clause at FAR 52.232-25, Prompt Payment, is used.

(2) Contract financing payments do not include-

(i) Invoice payments;

(ii) Payments for partial deliveries; or

(iii) Lease and rental payments.

"Electronic form" means any automated system that transmits information electronically from the initiating system to affected systems.

"Invoice payment" means a Government disbursement of monies to a contractor under a contract or other authorization for supplies or services accepted by the Government.

(1) Invoice payments include-

(i) Payments for partial deliveries that have been accepted by the Government;

(ii) Final cost or fee payments where amounts owed have been settled between the Government and the contractor;

(iii) For purposes of subpart 32.9 only, all payments made under the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, and the clause at 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts; and

(iv) Interim payments under a cost-reimbursement contract for services when Alternate I of the clause at 52.232-25, Prompt Payment, is used.

(2) Invoice payments do not include contract financing payments.

"Payment request" means any request for contract financing payment or invoice payment submitted by the Contractor under this contract or task or delivery order.

"Receiving report" means the data prepared in the manner and to the extent required by Appendix F, Material Inspection and Receiving Report, of the Defense Federal Acquisition Regulation Supplement.

(b) Except as provided in paragraph (d) of this clause, the Contractor shall submit payment requests and receiving reports in electronic form using Wide Area WorkFlow (WAWF). The Contractor shall prepare and furnish to the Government a receiving report at the time of each

delivery of supplies or services under this contract or task or delivery order. .

(c) Submit payment requests and receiving reports to WAWF in one of the following electronic formats:

(1) Electronic Data Interchange.

(2) Secure File Transfer Protocol.

(3) Direct input through the WAWF website.

(d) The Contractor may submit a payment request and receiving report using methods other than WAWF only when-

(1) The Contractor has requested permission in writing to do so, and the Contracting Officer has provided instructions for a temporary alternative method of submission of payment requests and receiving reports in the contract administration data section of this contract or task or delivery order;

(2) DoD makes payment for commercial transportation services provided under a Government rate tender or a contract for transportation services using a DoD-approved electronic third party payment system or other exempted vendor payment/invoicing system (e.g., PowerTrack, Transportation Financial Management System, and Cargo and Billing System);

(3) DoD makes payment on a contract or task or delivery order for rendered health care services using the TRICARE Encounter Data System; or

(4) The Governmentwide commercial purchase card is used as the method of payment, in which case submission of only the receiving report in WAWF is required.

(e) Information regarding WAWF is available at https://wawf.eb.mil/.

(f) In addition to the requirements of this clause, the Contractor shall meet the requirements of the appropriate payment clauses in this contract when submitting payment requests.

(End of clause)

252.232-7007	Limitation of Government's Obligation.	2014-04

LIMITATION OF GOVERNMENT'S OBLIGATION (APR 2014)

(a) Contract line item(s) ____[Contracting Officer insert after negotiations] is/are incrementally funded. For this/these item(s), the sum of $ ____[Contracting Officer insert after negotiations] of the total price is presently available for payment and allotted to this contract. An allotment schedule is set forth in paragraph (j) of this clause.

(b) For item(s) identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those item(s) for the Government's convenience, approximates the total amount currently allotted to the contract. The Contractor is not authorized to continue work on those item(s) beyond that point. The Government will not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for those item(s) regardless of anything to the contrary in the clause entitled "Termination for Convenience of the Government." As used in this clause, the total amount payable by the Government in the event of termination of applicable contract line item(s) for convenience includes costs, profit, and estimated termination settlement costs for those item(s).

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (j) of this clause, the Contractor will notify the Contracting Officer in writing at least ninety days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount then allotted to the contract for performance of the applicable item(s). The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of applicable line items up to the next scheduled date for allotment of funds identified in paragraph (j) of this clause, or to a mutually agreed upon substitute date. The notification will also advise the Contracting Officer of the estimated amount of additional funds that will be required for the timely performance of the item(s) funded pursuant to this clause, for a subsequent period as may be specified in the allotment schedule in paragraph (j) of this clause or otherwise agreed to by the parties. If after such notification additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause

of this contract entitled "Termination for Convenience of the Government."

(d) When additional funds are allotted for continued performance of the contract line item(s) identified in paragraph (a) of this clause, the parties will agree as to the period of contract performance which will be covered by the funds. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and agreed substitute date, and the contract will be modified accordingly.

(e) If, solely by reason of failure of the Government to allot additional funds, by the dates indicated below, in amounts sufficient for timely performance of the contract line item(s) identified in paragraph (a) of this clause, the Contractor incurs additional costs or is delayed in the performance of the work under this contract and if additional funds are allotted, an equitable adjustment will be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the item(s), or in the time of delivery, or both. Failure to agree to any such equitable adjustment hereunder will be a dispute concerning a question of fact within the meaning of the clause entitled "Disputes."

(f) The Government may at any time prior to termination allot additional funds for the performance of the contract line item(s) identified in paragraph (a) of this clause.

(g) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default." The provisions of this clause are limited to the work and allotment of funds for the contract line item(s) set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded except with regard to the rights or obligations of the parties concerning equitable adjustments negotiated under paragraphs (d) and (e) of this clause.

(h) Nothing in this clause affects the right of the Government to terminate this contract pursuant to the clause of this contract entitled "Termination for Convenience of the Government."

(i) Nothing in this clause shall be construed as authorization of voluntary services whose acceptance is otherwise prohibited under 31 U.S.C. 1342.

(j) The parties contemplate that the Government will allot funds to this contract in accordance with the following schedule:

On execution of contract	$ ____
(month) (day), (year) ____	$ ____
(month) (day), (year) ____	$ ____

(month) (day), (year) ____ $ ____
(End of clause)

252.232-7010 Levies on Contract Payments. 2006-12

LEVIES ON CONTRACT PAYMENTS (DEC 2006)

(a) 26 U.S.C. 6331(h) authorizes the Internal Revenue Service (IRS) to continuously levy up to 100 percent of contract payments, up to the amount of tax debt.

(b) When a levy is imposed on a payment under this contract and the Contractor believes that the levy may result in an inability to perform the contract, the Contractor shall promptly notify the Procuring Contracting Officer in writing, with a copy to the Administrative Contracting Officer, and shall provide-

(1) The total dollar amount of the levy;

(2) A statement that the Contractor believes that the levy may result in an inability to perform the contract, including rationale and adequate supporting documentation; and

(3) Advice as to whether the inability to perform may adversely affect national security, including rationale and adequate supporting documentation.

(c) DoD shall promptly review the Contractor's assessment, and the Procuring Contracting Officer shall provide a written notification to the Contractor including-

(1) A statement as to whether DoD agrees that the levy may result in an inability to perform the contract; and

(2)(i) If the levy may result in an inability to perform the contract and the lack of performance will adversely affect national security, the total amount of the monies collected that should be returned to the Contractor; or

(ii) If the levy may result in an inability to perform the contract but will not impact national

security, a recommendation that the Contractor promptly notify the IRS to attempt to resolve the tax situation.

(d) Any DoD determination under this clause is not subject to appeal under the Contract Disputes Act.

(End of clause)

252.232-7012	Performance-Based Payments-Whole-Contract Basis.	2022-12

PERFORMANCE-BASED PAYMENTS-WHOLE-CONTRACT BASIS (DEC 2022)

(a) Performance-based payments shall form the basis for the contract financing payments provided under this contract, and shall apply to the whole contract. The performance-based payments schedule (Contract Attachment ____) describes the basis for payment, to include identification of the individual payment events, evidence of completion, and amount of payment due upon completion of each event.

(b) In accordance with 10 U.S.C. 3802(c), the Contractor's financial statements shall be in compliance with Generally Accepted Accounting Principles in order to receive performance-based payments.

(c)(1) The Contractor shall, in addition to providing the information required by FAR 52.232-32, submit information for all payment requests using the following format:

Current performance-based payment(s) event(s) addressed by this request:
Contractor shall identify- Amount Totals
(1a) Negotiated value of all previously completed performance-based payment(s) event(s); ____ ____
(1b) Negotiated value of the current performance-based payment(s) event (s); ____ ____
(1c) Cumulative negotiated value of performance-based payment(s) events completed to date (1a) + (1b); and ____ ____

(2) Total costs incurred to date. ____ ____

(2) Incurred cost is determined by the Contractor's accounting books and records, to which the Contractor shall provide access upon request of the Contracting Officer. An acceptable accounting system in accordance with DFARS 252.242-7006 is not required for reporting of incurred costs under this clause. If the Contractor's accounting system is not capable of tracking costs on a job order basis, the Contractor shall provide a realistic approximation of the allocation of incurred costs attributable to this contract in accordance with the Contractor's accounting system. FAR 52.232-32(m) does not require certification of incurred costs.

(d) Security for financing.

(1) Title to the property described in paragraph (f) of the clause at FAR 52.232-32, Performance-Based Payments, is the preferred security for receipt of performance-based payments.

(2)(i) If the Contractor's accounting system is not capable of identifying and tracking through the build cycle the property that is allocable and properly chargeable to this contract, the Contracting Officer may consider acceptance of one or a combination of the following alternative forms of security sufficient to constitute adequate security for the performance-based payments and so specify in the contract, consistent with FAR 32.202-4:

(A) A paramount lien on assets.

(B) An irrevocable letter of credit from a federally insured financial institution.

(C) A bond from a surety, acceptable in accordance with FAR part 28.

(D) A guarantee of repayment from a person or corporation of demonstrated liquid net worth, connected by significant ownership interest to the Contractor.

(E) Title to identified Contractor assets of adequate worth.

(ii) Paragraph (f) of the clause at FAR 52.232-32 does not apply to the extent that the Contractor and the Contracting Officer agree on alternative forms of security. In the event the Contractor fails to provide adequate security, as required in this contract, no financing payment will be made under this contract. Upon receipt of adequate security, financing payments will be made, including all previous payments to which the Contractor is entitled, in accordance with the terms of the provisions for contract financing. If at any time the Contracting Officer determines that the security provided by the Contractor is insufficient, the Contractor shall

promptly provide such additional security as the Contracting Officer determines necessary. In the event the Contractor fails to provide such additional security, the Contracting Officer may collect or liquidate such security that has been provided and suspend further payments to the Contractor; and the Contractor shall repay to the Government the amount of unliquidated financing payments as the Contracting Officer at his sole discretion deems repayable.

(End of clause)

252.236-7000	Modification Proposals--Price Breakdown.	1991-12

MODIFICATION PROPOSALS--PRICE BREAKDOWN (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown-

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for-

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for

subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

(End of clause)

252.236-7001	Contract Drawings and Specifications.	2000-08

CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall-

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
see plans and specifications	____	____
____	____	____
____	____	____
____	____	____
____	____	____

(End of clause)

252.236-7005 Airfield Safety Precautions. 1991-12

AIRFIELD SAFETY PRECAUTIONS (DEC 1991)

(a) Definitions. As used in this clause-

(1) "Landing areas" means-

(i) The primary surfaces, comprising the surface of the runway, runway shoulders, and lateral safety zones. The length of each primary surface is the same as the runway length. The width of each primary surface is 2,000 feet (1,000 feet on each side of the runway centerline);

(ii) The "clear zone" beyond the ends of each runway, i.e., the extension of the primary surface for a distance of 1,000 feet beyond each end of each runway;

(iii) All taxiways, plus the lateral clearance zones along each side for the length of the taxiways

(the outer edge of each lateral clearance zone is laterally 250 feet from the far or opposite edge of the taxiway, e.g., a 75-foot-wide taxiway would have a combined width of taxiway and lateral clearance zones of 425 feet); and

(iv) All aircraft parking aprons, plus the area 125 feet in width extending beyond each edge all around the aprons.

(2) "Safety precaution areas" means those portions of approach-departure clearance zones and transitional zones where placement of objects incident to contract performance might result in vertical projections at or above the approach-departure clearance, or the transitional surface.

(i) The "approach-departure clearance surface" is an extension of the primary surface and the clear zone at each end of each runway, for a distance of 50,000 feet, first along an inclined (glide angle) and then along a horizontal plane, both flaring symmetrically about the runway centerline extended.

(A) The inclined plane (glide angle) begins in the clear zone 200 feet past the end of the runway (and primary surface) at the same elevation as the end of the runway. It continues upward at a slope of 50:1 (1 foot vertically for each 50 feet horizontally) to an elevation of 500 feet above the established airfield elevation. At that point the plane becomes horizontal, continuing at that same uniform elevation to a point 50,000 feet longitudinally from the beginning of the inclined plane (glide angle) and ending there.

(B) The width of the surface at the beginning of the inclined plane (glide angle) is the same as the width of the clear zone. It then flares uniformly, reaching the maximum width of 16,000 feet at the end.

(ii) The "approach-departure clearance zone" is the ground area under the approach-departure clearance surface.

(iii) The "transitional surface" is a sideways extension of all primary surfaces, clear zones, and approach-departure clearance surfaces along inclined planes.

(A) The inclined plane in each case begins at the edge of the surface.

(B) The slope of the incline plane is 7:1 (1 foot vertically for each

7 feet horizontally). It continues to the point of intersection with the-

(1) Inner horizontal surface (which is the horizontal plane

150 feet above the established airfield elevation); or

(2) Outer horizontal surface (which is the horizontal plane

500 feet above the established airfield elevation), whichever is applicable.

(iv) The "transitional zone" is the ground area under the transitional surface. (It adjoins the primary surface, clear zone, and approach-departure clearance zone.)

(b) General.

(1) The Contractor shall comply with the requirements of this clause while-

(i) Operating all ground equipment (mobile or stationary);

(ii) Placing all materials; and

(iii) Performing all work, upon and around all airfields.

(2) The requirements of this clause are in addition to any other safety requirements of this contract.

(c) The Contractor shall-

(1) Report to the Contracting Officer before initiating any work;

(2) Notify the Contracting Officer of proposed changes to locations and operations;

(3) Not permit either its equipment or personnel to use any runway for purposes other than aircraft operation without permission of the Contracting Officer, unless the runway is-

(i) Closed by order of the Contracting Officer; and

(ii) Marked as provided in paragraph (d)(2) of this clause;

(4) Keep all paved surfaces, such as runways, taxiways, and hardstands, clean at all times and, specifically, free from small stones which might damage aircraft propellers or jet aircraft;

(5) Operate mobile equipment according to the safety provisions of this clause, while actually performing work on the airfield. At all other times, the Contractor shall remove all mobile equipment to locations-

(i) Approved by the Contracting Officer;

(ii) At a distance of at least 750 feet from the runway centerline, plus any additional distance; and

(iii) Necessary to ensure compliance with the other provisions of this clause; and

(6) Not open a trench unless material is on hand and ready for placing in the trench. As soon as practicable after material has been placed and work approved, the Contractor shall backfill and compact trenches as required by the contract. Meanwhile, all hazardous conditions shall be marked and lighted in accordance with the other provisions of this clause.

(d) Landing areas. The Contractor shall-

(1) Place nothing upon the landing areas without the authorization of the Contracting Officer;

(2) Outline those landing areas hazardous to aircraft, using (unless otherwise authorized by the Contracting Officer) red flags by day, and electric, battery-operated low-intensity red flasher lights by night;

(3) Obtain, at an airfield where flying is controlled, additional permission from the control tower operator every time before entering any landing area, unless the landing area is marked as hazardous in accordance with paragraph (d)(2) of this clause;

(4) Identify all vehicles it operates in landing areas by means of a flag on a staff attached to, and flying above, the vehicle. The flag shall be three feet square, and consist of a checkered pattern of international orange and white squares of 1 foot on each side (except that the flag may vary up to ten percent from each of these dimensions);

(5) Mark all other equipment and materials in the landing areas, using the same marking devices as in paragraph (d)(2) of this clause; and

(6) Perform work so as to leave that portion of the landing area which is available to aircraft free from hazards, holes, piles of material, and projecting shoulders that might damage an

airplane tire.

(e) Safety precaution areas. The Contractor shall-

(1) Place nothing upon the safety precaution areas without authorization of the Contracting Officer;

(2) Mark all equipment and materials in safety precaution areas, using (unless otherwise authorized by the Contracting Officer) red flags by day, and electric, battery-operated, low-intensity red flasher lights by night; and

(3) Provide all objects placed in safety precaution areas with a red light or red lantern at night, if the objects project above the approach-departure clearance surface or above the transitional surface.

(End of clause)

252.236-7013	Requirement for Competition Opportunity for American Steel Producers, Fabricators, and Manufacturers.	2023-01

REQUIREMENT FOR COMPETITION OPPORTUNITY FOR AMERICAN STEEL PRODUCERS, FABRICATORS, AND MANUFACTURERS (JAN 2023)

(a) Definition. "Construction material," as used in this clause, means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work.

(b) The Contractor shall provide American steel producers, fabricators, and manufacturers the opportunity to compete when acquiring steel as a construction material (e.g., steel beams, rods, cables, plates).

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in any

subcontract that involves the acquisition of steel as a construction material, including subcontracts for the acquisition of commercial products.

(End of clause)

252.243-7001	Pricing of Contract Modifications.	1991-12

PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR Part 31 and DFARS Part 231, in effect on the date of this contract, apply.

(End of clause)

252.243-7002	Requests for Equitable Adjustment.	2022-12

REQUESTS FOR EQUITABLE ADJUSTMENT (DEC 2022)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 3862(a), any request for equitable adjustment to contract

terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including-

(1) Certified cost or pricing data, if required, in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Data other than certified cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if certified cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to-

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustments under an incentive provision of the contract.

(End of clause)

252.246-7004	Safety of Facilities, Infrastructure, and Equipment for Military Operations.	2010-10

SAFETY OF FACILITIES, INFRASTRUCTURE, AND EQUIPMENT FOR MILITARY OPERATIONS (OCT 2010)

(a) Definitions. Discipline Working Group," as used in this clause, means representatives from the DoD Components, as defined in MIL-STD-3007F, who are responsible for the unification and maintenance of the Unified Facilities Criteria (UFC) documents for a particular discipline area.

(b) The Contractor shall ensure, consistent with the requirements of the applicable inspection clause in this contract, that the facilities, infrastructure, and equipment acquired, constructed, installed, repaired, maintained, or operated under this contract comply with Unified Facilities Criteria (UFC) 1-200-01 for-

(1) Fire protection;

(2) Structural integrity;

(3) Electrical systems;

(4) Plumbing;

(5) Water treatment;

(6) Waste disposal; and

(7) Telecommunications networks.

(c) The Contractor may apply a standard equivalent to or more stringent than UFC 1-200-01 upon a written determination of the acceptability of the standard by the Contracting Officer with the concurrence of the relevant Discipline Working Group.

(End of clause)

252.249-7000 Special Termination Costs. 1991-12

SPECIAL TERMINATION COSTS (DEC 1991)

(a) Definition. "Special termination costs," as used in this clause, means only costs in the following categories as defined in Part 31 of the Federal Acquisition Regulation (FAR)-

(1) Severance pay, as provided in FAR 31.205-6(g);

(2) Reasonable costs continuing after termination, as provided in FAR 31.205-42(b);

(3) Settlement of expenses, as provided in FAR 31.205-42(g);

(4) Costs of return of field service personnel from sites, as provided in FAR 31.205-35 and FAR 31.205-46(c); and

(5) Costs in paragraphs (a)(1), (2), (3), and (4) of this clause to which subcontractors may be entitled in the event of termination.

(b) Notwithstanding the Limitation of Cost/Limitation of Funds clause of this contract, the Contractor shall not include in its estimate of costs incurred or to be incurred, any amount for special termination costs to which the Contractor may be entitled in the event this contract is terminated for the convenience of the Government.

(c) The Contractor agrees to perform this contract in such a manner that the Contractor's claim for special termination costs will not exceed $____. The Government shall have no obligation to pay the Contractor any amount for the special termination costs in excess of this amount.

(d) In the event of termination for the convenience of the Government, this clause shall not be construed as affecting the allowability of special termination costs in any manner other than limiting the maximum amount of the costs payable by the Government.

(e) This clause shall remain in full force and effect until this contract is fully funded.

(End of clause)

Section 00 73 00 - Supplementary Conditions

Special Contract Requirements:

1) RFO provision 52.229-11 and RFO clause 52.229-12

RFO provision 52.229-11 and RFO clause 52.229-12 are included in this solicitation. This provision and clause concern the imposition of a 2 percent Federal excise tax withholding on any resultant contract award or payment request. This rule applies to Federal Government contracts for goods or services that are awarded to foreign persons - such as foreign contractors. It implements the Department of the Treasury's final regulations published in the Federal Register at 81 FR 55133 on August 18, 2016, under section 5000C of the Internal Revenue Code relating to the 2 percent tax on payments made by the U.S. Government to foreign persons pursuant to certain contracts.

Pursuant to the RFO 52.229-3 Federal, State, and Local Taxes, taxes imposed under 26 U.S.C. 5000 C may not be included in the contract price or reimbursed.

Exemptions from this excise tax must be claimed by an Offeror when it submits, with its offer, a U. S. Department of Treasury Internal Revenue Service (IRS) Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available via the internet at www.irs. gov/W14. If not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent on each contract payment. Failure to submit an IRS Form W-14 with each payment request will also result in an automatic withholding of 2 percent from the payment request.

When filling out the IRS Form W-14 the following information may be used to complete Part I, Lines 6 and 7.

Line 6 Contract/reference number: *W9126G26RA087*
Line 7 "Name and address of the acquiring agency":
Fort Worth District
819 Taylor Street, Rm 2A17
Fort Worth, TX 76102-033

Any exemption claimed and self-certified is subject to audit by the IRS. Any disputes concerning this tax are adjudicated by the IRS because the Section 5000C tax is a tax matter not a contract issue.

Offerors are encouraged to seek guidance from their own tax professionals for advice concerning the provision, clause, and exclusions exclusion/submission of IRS Form W-14. Additional information is also available at:

Notwithstanding the above, the USACE does not have a means of withholding this excise tax at this time. As a result, contractors are expected to comply with the instructions above and to properly complete and return the W-14 at proposal submission, and with each pay

application. Whether the contractor sets the money aside for future payment to the IRS, or makes payment to the IRS, is the contractor's discretion, based on its analysis of the regulations regarding the excise tax. In the event that USACE is able to withhold during contract performance, it will notify the contractor and make such a withholding (including any catch up withholdings); no advance notice is required to the contractor prior to the withholding. Under no circumstances is USACE liable for any tax not paid by the contractor. The contractor is liable for the tax, to the extent required by law, regardless of whether USACE makes a withholding.

RFO 29.204 expressly states that "[a]gencies merely withhold the tax (section 5000C tax) for the Internal Revenue Service (IRS). All substantive issues regarding the underlying section 5000C tax, e.g., the imposition of, and exemption from the tax, are matters under the jurisdiction of the IRS." Therefore, we cannot help you determine how the tax law applies to you. We strongly recommend that you contact the IRS and/or a tax professional should you have any questions of this nature. To be clear, this information does not constitute tax advice or a representation of your tax liability. Furnishing this information does not create liability for the USACE for any Federal, state, or local taxes applicable to the above-referenced contract or any other contract.

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For submission requirements and basis of evaluation:

Executed RFO Provision 52.229-11.

Completed IRS Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, if applicable. **If not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent on each payment**.

*** END OF NARRATIVE ***

DAVIS-BACON ACT (DBA) WAGE DETERMINATION

APPLICATION OF WAGE DECISIONS

Solicitation Number: W9126G26RA087
Project: B90176 Hangar Door Expansion (HADES)
Location: Ft Hood, Texas.
County, State: Bell County, Texas

Davis-Bacon Construction Wage Rate Requirements TX20260230, Building (does not include single family homes or apartments up to and including 4 stories). **Building Construction** includes the construction, alteration, or repair of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies and the associated installation of utilities and equipment, as well as incidental grading and paving.

Davis-Bacon Construction Wage Rate Requirements TX20260291, Highway (excluding tunnels, building structures in rest area projects and railroad construction; bascule, suspension and spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges). **Highway Construction** includes the construction, alteration, or repair of roads, streets, highways, runways, parking areas and most other paving work not incidental to building, residential, or heavy construction.

Davis-Bacon Construction Wage Rate Requirements TX20260007, Heavy, includes projects that cannot be classified as Building, Residential, or Highway. Heavy Construction is often further distinguished on the basis of the characteristic of particular projects, such as dredging, water and sewer lines, dams, major bridges, and flood control projects.

NOTE:

Payroll records are required, under the Davis-Bacon Act, to be submitted to the U.S. Army Corps of Engineers for all construction work performed.

The Wage Decision Number applicable to the work performed is to be shown on all certified payroll records submitted. If multiple wage decisions are utilized within a pay period, so annotate clearly those work hours and rates-of-pay per the applicable wage decision under which the work was performed.

"General Decision Number: TX20260230 05/18/2026

State: Texas

Construction Types: Building

Counties: Texas Counties of
Bell

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

BOIL0074-003 01/01/2025

	Rates	Fringes
BOILERMAKER	$ 33.17	24.92

ENGI0178-005 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR ((3) HYDRAULIC CRANES 59 TONS AND UNDER)	$ 32.35	13.10
POWER EQUIPMENT OPERATOR ((1) TOWER CRANE)	$ 32.85	13.10

IRON0084-011 06/01/2024

	Rates	Fringes
IRONWORKER: ORNAMENTAL	$ 28.26	8.13

PLUM0286-011 09/01/2025

	Rates	Fringes
PIPEFITTER (EXCLUDES HVAC PIPE INSTALLATION)	$ 37.15	16.92

SUTX2014-005 07/21/2014

	Rates	Fringes
TRUCK DRIVER: WATER TRUCK	$ 12.00	4.11
TRUCK DRIVER: SEMI-TRAILER TRUCK	$ 12.50	0.00
TRUCK DRIVER: FLATBED TRUCK	$ 19.65	8.57
TRUCK DRIVER: DUMP TRUCK	$ 11.50	1.10
TILE SETTER	$ 14.74	0.00
TILE FINISHER	$ 11.22	0.00
SPRINKLER FITTER (FIRE SPRINKLERS)	$ 15.46	0.00
SHEET METAL WORKER, EXCLUDES HVAC DUCT INSTALLATION	$ 14.89	1.55
SHEET METAL WORKER (HVAC DUCT INSTALLATION ONLY)	$ 18.71	4.90
ROOFER	$ 13.75	0.00
PLUMBER, EXCLUDES HVAC PIPE INSTALLATION	$ 21.18	7.57
PAINTER: BRUSH, ROLLER, AND SPRAY	$ 15.00	0.81
OPERATOR: ROLLER	$ 13.11	0.00
OPERATOR: PAVER (ASPHALT, AGGREGATE, AND CONCRETE)	$ 16.03	0.00
OPERATOR: MECHANIC	$ 17.52	3.33
OPERATOR: LOADER	$ 13.88	0.44

OPERATOR: GRADER/BLADE	$ 14.34	1.68
OPERATOR: FORKLIFT	$ 14.00	0.00
OPERATOR: DRILL	$ 16.22	0.34
OPERATOR: BULLDOZER	$ 18.29	1.31
OPERATOR: BOBCAT/SKID STEER/SKID LOADER	$ 13.93	0.00
OPERATOR: BACKHOE/EXCAVATOR/TRACKHOE	$ 13.10	1.24
LABORER: ROOF TEAROFF	$ 11.28	0.00
LABORER: PIPELAYER	$ 12.49	2.13
LABORER: MASON TENDER - CEMENT/CONCRETE	$ 9.93	0.00
LABORER: MASON TENDER - BRICK	$ 9.98	0.00
LABORER: COMMON OR GENERAL	$ 10.53	0.00
IRONWORKER, STRUCTURAL	$ 18.35	4.90
IRONWORKER, REINFORCING	$ 13.35	0.00
INSULATOR - MECHANICAL (DUCT, PIPE & MECHANICAL SYSTEM INSULATION)	$ 19.77	7.13
HVAC MECHANIC (INSTALLATION OF HVAC UNIT ONLY)	$ 16.01	1.56
HVAC MECHANIC (HVAC PIPE INSTALLATION ONLY)	$ 15.50	0.00
ELECTRICIAN, EXCLUDES LOW VOLTAGE WIRING	$ 20.50	2.71
ELECTRICIAN (LOW VOLTAGE WIRING ONLY)	$ 28.28	2.44
DRYWALL HANGER AND METAL STUD INSTALLER	$ 14.59	0.00
CEMENT MASON/CONCRETE FINISHER	$ 14.00	0.00
CARPENTER, EXCLUDES DRYWALL HANGING, AND METAL STUD INSTALLATION	$ 17.28	1.71
BRICKLAYER	$ 19.09	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ⿰SU⿰, ⿰UAVG⿰, ⿰SA⿰, or ⿰SC⿰ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ⿰SU⿰ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative

Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

"

"General Decision Number: TX20260291 05/18/2026

State: Texas

Construction Types: Highway

Counties: Texas Counties of
Atascosa, Bandera, Bastrop, Bell, Bexar,
Brazos, Burleson, Caldwell, Comal,
Coryell, Guadalupe, Hays, Kendall,
Lampasas, McLennan, Medina, Robertson,
Travis, Williamson and Wilson

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SATX2025-004 11/15/2023

	Rates	Fringes
WORK ZONE BARRICADE SERVICER	$ 17.75	0.00
WELDER	$ 23.38	0.00
TRUCK DRIVER, TANDEM AXLE TRACTOR WITH SEMI TRAILER	$ 21.71	0.00
TRUCK DRIVER, SINGLE OR TANDEM AXLE DUMP TRUCK	$ 20.91	0.00
TRUCK DRIVER, SINGLE AXLE	$ 19.70	0.00
TRUCK DRIVER LOWBOY FLOAT	$ 25.96	0.00
TRAFFIC SIGNAL/LIGHT POLE WORKER	$ 21.99	0.00
SPREADER BOX OPERATOR	$ 19.31	0.00
SIGN ERECTOR	$ 17.52	0.00
SERVICER	$ 23.75	0.00
SCRAPER OPERATOR	$ 17.52	0.00
ROLLER OPERATOR, OTHER	$ 17.52	0.00
ROLLER OPERATOR, ASPHALT	$ 20.24	0.00
REINFORCING STEEL WORKER	$ 22.46	0.00
RECLAIMER/PULVERIZER OPERATOR	$ 19.05	0.00
PIPELAYER	$ 19.23	0.00
PAVEMENT MARKING MACHINE OPERATOR	$ 22.00	0.00
PAINTER, STRUCTURES	$ 23.76	0.00
OFF ROAD HAULER	$ 17.52	0.00
MOTOR GRADER OPERATOR, ROUGH	$ 22.95	0.00
MOTOR GRADER OPERATOR, FINE GRADE	$ 26.56	0.00
MILLING MACHINE OPERATOR	$ 21.73	0.00
MECHANIC	$ 26.15	0.00
LOADER/BACKHOE OPERATOR	$ 20.32	0.00
LABORER, UTILITY	$ 19.05	0.00
LABORER, COMMON	$ 17.52	0.00
FRONT END LOADER OPERATOR, OVER 3 CY	$ 20.20	0.00
FRONT END LOADER OPERATOR, 3 CY OR LESS	$ 20.33	0.00
FOUNDATION DRILL OPERATOR, TRUCK MOUNTED	$ 24.28	0.00
FORM SETTER, PAVING & CURB	$ 19.18	0.00
FORM BUILDER/SETTER, STRUCTURES	$ 20.63	0.00
FLAGGER	$ 15.52	0.00
EXCAVATOR OPERATOR, OVER 50,000 POUNDS	$ 22.90	0.00
EXCAVATOR OPERATOR, 50,000 POUNDS OR LESS	$ 22.93	0.00
ELECTRICIAN	$ 30.54	0.00

DIRECTIONAL DRILLING OPERATOR.....$ 25.19 0.00
DIRECTIONAL DRILLING LOCATOR.....$ 21.39 0.00
CRAWLER TRACTOR OPERATOR.....$ 20.92 0.00
CRANE OPERATOR, LATTICE BOOM OVER 80 TONS.....$ 28.87 0.00
CRANE OPERATOR, LATTICE BOOM 80 TONS OR LESS.....$ 26.47 0.00
CRANE OPERATOR, HYDRAULIC 80 TONS OR LESS.....$ 29.24 0.00
CONCRETE SAW OPERATOR.....$ 25.97 0.00
CONCRETE PAVEMENT FINISHING MACHINE OPERATOR.....$ 22.81 0.00
CONCRETE FINISHER, PAVING AND STRUCTURES.....$ 20.61 0.00
BROOM OR SWEEPER OPERATOR.....$ 18.09 0.00
BOOM TRUCK OPERATOR.....$ 27.82 0.00
ASPHALT RAKER.....$ 19.40 0.00
ASPHALT PAVING MACHINE OPERATOR.....$ 22.12 0.00
ASPHALT DISTRIBUTOR OPERATOR.....$ 24.07 0.00
AGRICULTURAL TRACTOR OPERATOR.....$ 19.14 0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular

rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ⿰SU⿱, ⿰UAVG⿱, ⿰SA⿱, or ⿰SC⿱ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ⿰SU⿱ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

⿰SU⿱ wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ⿰SA⿱ identifier indicates that the classifications and

prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ⍰SA⍰ identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

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"General Decision Number: TX20260007 05/18/2026

State: Texas

Construction Types: Heavy

Counties: Texas Counties of
Atascosa, Bandera, Bastrop, Bell, Bexar,
Brazos, Burleson, Caldwell, Comal,
Coryell, Guadalupe, Hays, Kendall,
Lampasas, McLennan, Medina, Robertson,
Travis, Williamson and Wilson

HEAVY (excluding tunnels and dams, not to be used for work on Sewage or Water Treatment Plants or Lift / Pump Stations in Bell, Coryell, McLennan and Willi

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SUTX2011-006 08/03/2011

	Rates	Fringes
WELDER	$ 15.97	0.00
TRUCK DRIVER: TANDEM AXLE TRACTOR W/SEMI TRAILER	$ 12.81	0.00
TRUCK DRIVER: SINGLE OR TANDEM AXLE DUMP TRUCK	$ 11.68	0.00
TRUCK DRIVER (SINGLE AXLE)	$ 11.79	0.00
TRUCK DRIVER (OFF ROAD HAULER)	$ 11.88	0.00
TRUCK DRIVER (LOWBOY-FLOAT)	$ 15.66	0.00
TRAFFIC SIGNALIZATION: TRAFFIC SIGNAL INSTALLATION, (TRAFFIC SIGNAL/LIGHT POLE WORKER)	$ 16.00	0.00
STEEL WORKER (STRUCTURAL)	$ 19.29	0.00
STEEL WORKER (REINFORCING)	$ 14.00	0.00
SERVICER	$ 14.51	0.00
POWER EQUIPMENT OPERATOR: SCRAPER	$ 12.27	0.00
POWER EQUIPMENT OPERATOR: MOTOR GRADER, ROUGH	$ 14.63	0.00
POWER EQUIPMENT OPERATOR: MOTOR GRADER, FINE GRADE	$ 18.51	0.00
POWER EQUIPMENT OPERATOR: MECHANIC	$ 17.10	0.00
POWER EQUIPMENT OPERATOR: FRONT END LOADER, 3 CY OR LESS	$ 13.04	0.00
POWER EQUIPMENT OPERATOR: FOUNDATION DRILL, TRUCK MOUNTED	$ 16.93	0.00
POWER EQUIPMENT OPERATOR: CRAWLER TRACTOR	$ 15.67	0.00
POWER EQUIPMENT OPERATOR: BROOM OR SWEEPER	$ 11.04	0.00
POWER EQUIPMENT OPERATOR: BOOM TRUCK	$ 18.36	0.00
POWER EQUIPMENT OPERATOR: ASPHALT DISTRIBUTOR	$ 15.55	0.00
POWER EQUIPMENT OPERATOR: (TRENCHING MACHINE, HEAVY)	$ 18.48	0.00
POWER EQUIPMENT OPERATOR: (SPREADER BOX)	$ 14.04	0.00
POWER EQUIPMENT OPERATOR: (ROLLER, OTHER)	$ 10.50	0.00
POWER EQUIPMENT OPERATOR: (ROLLER, ASPHALT)	$ 12.78	0.00
POWER EQUIPMENT OPERATOR: (RECLAIMER/PULVERIZER)	$ 12.88	0.00
POWER EQUIPMENT OPERATOR: (PAVEMENT MARKING MACHINE)	$ 19.17	0.00
POWER EQUIPMENT OPERATOR: (MILLING MACHINE)	$ 14.18	0.00
POWER EQUIPMENT OPERATOR: (LOADER/BACKHOE)	$ 14.12	0.00
POWER EQUIPMENT OPERATOR: (FRONT END LOADER, OVER 3 CY)	$ 13.21	0.00
POWER EQUIPMENT OPERATOR: (EXCAVATOR OVER 50,000 LBS)	$ 17.71	0.00
POWER EQUIPMENT OPERATOR: (EXCAVATOR 50,000 LBS OR LESS)	$ 12.88	0.00
POWER EQUIPMENT OPERATOR: (DIRECTIONAL DRILLING OPERATOR)	$ 17.24	0.00
POWER EQUIPMENT OPERATOR: (DIRECTIONAL DRILLING LOCATOR)	$ 11.67	0.00
POWER EQUIPMENT OPERATOR: (CRANE, LATTICE BOOM OVER 80 TONS)	$ 19.38	0.00
POWER EQUIPMENT OPERATOR: (CRANE, LATTICE BOOM 80 TONS OR LESS)	$ 15.87	0.00
POWER EQUIPMENT OPERATOR: (CRANE, HYDRAULIC 80 TONS OR LESS)	$ 18.36	0.00
POWER EQUIPMENT OPERATOR: (CONCRETE PAVEMENT FINISHING MACHINE)	$ 15.48	0.00
POWER EQUIPMENT OPERATOR: (ASPHALT PAVING MACHINE)	$ 14.36	0.00
POWER EQUIPMENT OPERATOR: (AGRICULTURAL TRACTOR)	$ 12.69	0.00
PAINTER (STRUCTURES)	$ 18.34	0.00
LABORER: PIPELAYER	$ 12.79	0.00
LABORER: ASPHALT RAKER	$ 12.12	0.00
LABORER (WORK ZONE BARRICADE SERVICER)	$ 11.85	0.00
LABORER (LABORER, UTILITY)	$ 12.27	0.00
LABORER (LABORER, COMMON)	$ 10.50	0.00
LABORER (FLAGGER)	$ 9.45	0.00
FORM BUILDER/FORM SETTER (STRUCTURES)	$ 12.87	0.00
FORM BUILDER/FORM SETTER (PAVING & CURB)	$ 12.94	0.00
ELECTRICIAN	$ 26.35	0.00
CEMENT MASON/CONCRETE FINISHER (PAVING AND STRUCTURES)	$ 12.56	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ⁄SU⁄, ⁄UAVG⁄, ⁄SA⁄, or ⁄SC⁄ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ⁄SU⁄ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that

classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the SA identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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c) an initial WHD letter setting forth a position on a wage determination matter
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U.S. Department of Labor
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2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

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Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

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END OF GENERAL DECISION

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1.2 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (OCT 1989) (ER 415-1-15)(52.0001-4038 1/96)

a. This provision establishes the procedure for evaluating requests for time extensions resulting from unusually severe weather. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

(1) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

(2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the contractor.

b. The following schedule of monthly anticipated adverse weather delays due to precipitation and temperature is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. Wind is not considered in the Monthly Anticipated Adverse Weather Calendar Day Schedule.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORK DAYS BASED ON (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
4	4	4	4	6	4	3	3	4	4	3	4

c. Upon receipt of the Notice to Proceed (NTP) and continuing throughout the contract, the contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the contractor's scheduled work day.

d. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph "b", above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause entitled "Default (Fixed Price Construction)."

1.3 WORK RESTRICTIONS

1.3.1 Working Hours

Normal working hours are Monday through Friday, 0700 to 1700 hours. Requests to work at times other than the stated working hours, including scheduled utility outages discussed below, shall be submitted to the Contracting Officer for approval. Contractor shall not work outside of

the above stated working hours without prior written approval of the Contracting Officer.

1.3.2 Security Requirements

1.3.2.1 Installation Entrance Requirements

Entrance requirements to the Installation are specified in Section 01 35 10.00 44 SPECIAL PROJECT PROCEDURES FOR FORT HOOD (FORMERLY KNOWN AS FORT CAVAZOS).

In addition to the requirements specified in Section 01 35 10.00 44 and for the duration of this Contract, access to Fort Hood will be delayed between 5 minutes to 30 minutes or more due to increased security precautions, including the checking of vehicle occupants' IDs, vehicle manifests, and the searching of all vehicles. Any general or specific threat to the safety of those working or living at the Installation could result in longer waiting times at the access points to the Installation.

The following are the minimum requirements for contractor employees entering Fort Hood:

a. One form of picture ID.

b. A memo from the construction company on their letterhead stating the reason for entry, contract number, and the location at Fort Hood where the jobsite is located.

c. All delivery trucks must have a bill of lading and delivery truck drivers must have a picture ID.

1.3.3 Identification of Employees

The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

Contractor personnel shall wear visible Contractor-furnished employee identification badges while physically on the Installation. Each badge shall include, as a minimum, the company name, employee name, photograph, Contract Title, Contract Number, and the expiration date of the badge.

1.4 UTILITIES

1.4.1 Payment for Utility Services

Water, sewer, gas, electricity, and refuse services are available for use during contract performance. The Contractor shall be responsible for coordinating, obtaining, and paying for utility services required for construction operations, unless otherwise specified in the contract. Charges for utility services shall be at the rates established by the applicable utility provider.

Electricity and gas utility systems are privately owned and operated by Dominion Privatization Texas LLC. Water and sewer utility systems are privately owned and operated by American Water Enterprises (AWE).

For additional requirements, refer to Section 01 35 10.00 44 SPECIAL PROJECT PROCEDURES FOR FORT HOOD (FORMERLY KNOWN AS FORT CAVAZOS).

Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.4.2 Coordination

The Contractor shall coordinate with local phone company for contractor telephone and internet service during construction.

1.4.3 Outages

The Contractor shall coordinate all requests for utility outages with the Contracting Officer in writing 14 days prior to date of requested outage:

a. Water and sewer outages shall be held to a maximum duration of 4 hours unless otherwise approved in writing.

b. Gas and electrical outages are prohibited. Connections to gas and electrical lines shall be connected Hot without an outage. The Contractor shall submit a Work Plan for Electrical Connections 14 calendar days before the requested connections.

c. All utility outages shall be scheduled only on Saturdays, Sundays, or holidays unless specific approval is otherwise received.

1.5 PAPERLESS CONTRACT SUBMISSION

a. GENERAL INFORMATION ON PAPERLESS CONTRACT SUBMISSION

The goal is to reduce waste, decrease time, decrease associated costs, and to streamline most file transmission procedures.

b. METHODS OF DIGITAL SUBMISSION

This contract shall use digital submission methods to the greatest extent practicable. Acceptable methods are as follows, in order of precedence:

1. RMS - will be used to the greatest extent practicable. Some items may not be submittable via RMS due to program constraints. Those items shall use an alternate method. All ENGR 4025’s shall be generated and submitted in RMS.

2. Secure, Password Protected Web-Based System Access must be allowed and approved by the Government Representative. This method shall not be used for security sensitive documents.

3. E-mail – Items not submitted via RMS, as discussed above, shall be submitted via e-mail, if possible. E-mail limitations for file size must be considered prior to submission.

4. CD/DVD – Will be accepted if no other method is possible and upon prior approval.

c. ITEMS TO BE SUBMITTED VIA HARDCOPY

Product samples, color boards, and any other item not feasible to submit digitally, shall be submitted hard copy. ENGR 4025 shall be submitted digitally always. The Government reserves the right to request hard copy submission on any item, if deemed necessary. Contractor shall be prepared to provide requested hard copy at any time.

1.6 CONTRACTOR PERFORMANCE EVALUATIONS

In accordance with ER 415-1-17, Construction Contractor Performance Evaluations, the Government will evaluate the Contractor's performance throughout contract execution and upon completion of the work. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. For construction contracts awarded at or above $750,000.00, the USACE will evaluate contractor’s performance and prepare a performance report using the Contractor Performance Assessment Reporting System (CPARS), which is now a web-based system. After an evaluation (interim or final) is written up by the USACE, the contractor will have the ability to access, review and comment on the evaluation for a period of 60 days. Accessing and using CPARS requires specific software, called PKI certification, which is installed on the user’s computer. The certification is a Department of Defense requirement and was implemented to provide security in electronic transactions. The certification software could cost approximately $110 - $125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor. Current information about the PKI certification process and for contacting vendors can be found on the web site: http://www.cpars.csd.disa.mil/. If the Contractor wishes to participate in the performance evaluation process, access to CPARS and PKI certification is the sole responsibility of the Contractor.

1.7 CONTRACTOR PAYROLL RECORD

Contractor shall be required to log payrolls for all their own employees and subcontractors utilizing ENG Form 3180. Each subcontractor requires a separate ENG 3180 for their payrolls. The Contractor shall maintain the ENG 3180, along with the payrolls, on site and available for review by the Contracting Officer's Representative. The ENG 3180's shall be updated weekly as payrolls are submitted. After making copies for their files, the Contractor is required to submit the originals of each week’s payrolls to the Resident Office. Before final payment, the Contractor shall provide the completed ENG 3180’s to the Contracting Officer's Representatives.

1.8 CONTRACTOR SUPPLY and USE OF ELECTRONIC SOFTWARE FOR PROCESSING WAGE RATE REQUIREMENTS CERTIFIED LABOR PAYROLLS

(a) The contractor is required to use a commercially-available electronic system to process and submit certified payrolls electronically to the Government. The requirements for preparing, processing and providing certified labor payrolls are established by the Wage Rate Requirements statute.

(b) The contractor shall be responsible for obtaining and providing for all access, licenses, and other services required to provide for receipt, processing, certifying, electronically transmitting to the Government, and storing weekly payrolls and other data required for the contractor to comply with the Wage Rate Requirements statute. When the contractor uses an electronic payroll system, the electronic payroll service shall be used by the contractor to prepare, process, and maintain the relevant payrolls and basic records during all work under this construction contract and the

electronic payroll service shall be capable of preserving these payrolls and related basic records for the required 3 years after contract completion. The contractor shall obtain and provide electronic system access to the Government, as required to comply with the Wage Rate Requirements over the duration of this construction contract. The access shall include electronic review access by the Government contract administration office to the electronic payroll processing system used by the contractor.

(c) The contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria:

(1) commercially available;

(2) compliant with appropriate Wage Rate Requirements statute payroll provisions ;

(3) able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract

(4) capable of producing an Excel spreadsheet-compatible electronic output of weekly payroll records for export in an Excel spreadsheet;

(5) demonstrated security of data and data entry rights;

(6) ability to produce contractor-certified electronic versions of weekly payroll data;

(7) ability to identify erroneous entries and track the date/time of all versions of the certified Wage Rate Requirements statute payrolls submitted to the government over the life of the contract;

(8) capable of generating a durable record copy, that is, a CD or DVD and PDF file record of data from the system database at end of the contract closeout. This durable record copy of data from the electronic payroll processing system shall be provided to the Government during contract closeout.

(d) All contractor-incurred costs related to the contractor's provision and use of an electronic payroll processing service shall be included in the contractor's price for the overall work under the contract. The costs for compliance with the Wage Rate Requirements statute by using electronic payroll processing services shall not be a separately bid or reimbursed item under this contract.

1.9 ADDITIONAL CONTRACTOR PAYROLL RECORD

(1) The Fort Worth District requires the contractor and all sub-contractors to use an electronic payroll system meeting the requirements above referenced and the following.

(a) The Certified Labor Payrolls must be tracked electronically via WEB-based software and all data must be submitted via WEB. Payroll guidelines, "Instructions to Contractors on Contract Labor Requirements, published as "Appendix A, SWFP 1185-1-1" (also known as the Green book), will be provided to advise/inform contractors how these labor provisions will be administered and enforced.

(b) The WEB-based software must be capable of downloading data directly

from existing electronic payrolls, track workers to ensure that overtime is being paid when overtime status is reached on Government contracts whether on one or multiple contracts or different sub-contractors. The software must track apprentices and journeyman ratios, create and track SF-1444 "Request for Authorization of Additional Classification and Rate", track workers by name/address/with or without Social Security Numbers, allow automated redaction of information appearing on payroll statements for agency response to Freedom of Information Act (FOIA requests), and provide free online training by the software provider to any user of the software.

(c) The software must allow fringe benefit statement to track fringe benefits "whether cash or into an approved plan, fund, or program. If the fringe benefits are paid into a plan, fund, or program the company's name (receiving benefits), phone number, and address shall be listed on the Statement of Compliance Form (DD Form 879 or WH-347).

(d) Software must provide a method of tracking standard and non-standard deductions such as restitution, alimony, child support, and allow for custom entries. Method of tracking must list the deductions on the statement of compliance or be listed as an attachment.

(e) The Contractor is required to provide the updated 3180's and notify the Contracting Officer's Representatives weekly by email when the current payrolls are complete and ready for inspection/review on the WEB. Before final payment, the Contractor shall provide the completed ENG For 3180's and 3 disks (CD/DVD) which include complete copies of the Contractor and sub-contractor's payrolls/attachments, to the Contracting Officer's Representatives.

(2) Electronic copies of electronically/manually signed forms/memos/letters such as SF 1413 Statement of Acknowledgement (sub-contractor agreement), SF-1444 "Request for Authorization of Additional Classification and Rate", employee deduction authorization, certification of apprentices and trainees shall be provided to the Contracting Officer's Representative .

1.10 STREET CLOSINGS

The Contractor shall coordinate all requests for street closings with the Contracting Officer in writing 21 days prior to date of requested outage:

a. One lane traffic shall be maintained at all times (except that a total closing may be allowed for specific 8-hour periods).

b. The final street repair shall be completed within 14 days after the start of any street crossing. Any part of the street returned to service prior to final repair shall be maintained smooth with hot-mix cold-lay surface course.

c. Open cuts across paved roads and streets for utility crossings will not be allowed. Utility crossings will be accomplished by boring or jacking procedures only.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

SECTION 01 01 10.00 44

AT/OPSEC

PART 1 GENERAL

1.1 SUMMARY

This Section covers project requirements applicable to Antiterrorism and Operations Security.

1.2 Antiterrorism/Operations Security FORM 6055

1. General security requirements and guidance: The security requirements described below apply to all contract personnel (including employees of the prime Contractor (“Contractor”) and all subcontractor employees) supporting the performance requirements of this contract. The Contractor is responsible for compliance with these security requirements. Questions regarding security matters shall be addressed to the designated Government representative (e.g., Contracting Officer Representative (COR), Requiring Activity (RA) representative, or Contracting Officer (if a COR or other RA representative is not appointed)). Contract personnel are critical to the overall security and safety of US Army Corps of Engineers (USACE) installations, facilities and activities, and security awareness training contributes to those efforts. The Department of Defense (DoD) and Army security training requirements specified below, if applicable, are performance requirements; all applicable contract personnel shall complete initial training within 30 days of contract award or the date new contract personnel begin performance on the contract. Within five business days from the completion of training, the Contractor shall provide written documentation (e.g., email or memorandum) to the Government representative. The documentation shall include the names of contract personnel trained and which training they completed; the Contractor shall maintain training records as part of their contract files and be prepared to provide copies of training certificates to the Government representative. Contractor personnel and vehicles are subject to search when entering federal installations. Additionally, all contract personnel shall comply with Force Protection Condition (FPCON) measures, Random Antiterrorism Measures (commonly referred to as “RAMs”), and Health Protection Condition (HPCON) measures. The Contractor is responsible for meeting performance requirements during elevated FPCON and/or HPCON levels in accordance with applicable RA plans and procedures --this includes identifying mission essential and non-mission essential personnel. In addition to the changes otherwise authorized by the changes clause of this contract, should the FPCON or HPCON levels at any individual facility or installation change, the Government may implement security changes that affect contract personnel. The Contractor shall ensure all contract personnel are aware of their security responsibilities, including any site-specific requirements identified in local policies or procedures.

2. Antiterrorism (AT) Level I training: All contract personnel requiring routine access to Army installations, facilities, and controlled access areas, or requiring network access shall complete initial and annual refresher AT Level I awareness training. Online AT Level I awareness

training is available at https://jko.jten.mil/ (website subject to change).

3. Physical security and access control requirements: All contract personnel requiring physical access to a federal installation or facility shall comply with the access control procedures of that location. Contract personnel requiring unescorted access to meet contract performance requirements on a DoD installation in the US shall be vetted by the installation/facility Provost Marshal/Directorate of Emergency Services/Security Office using the National Crime Information Center-Interstate Identification Index (commonly referred to as "NCIC-III") and Terrorist Screening Database (commonly referred to as "TSDB"). Contract personnel shall comply with all personal identity verification requirements specified in installation/facility policies and procedures. Contract personnel who do not meet requirements for unescorted access to USACE facilities shall coordinate escorted access with the Government representative, as needed. Contract personnel who receive keys, access cards, or lock combinations that provide access to government-owned property shall comply with key and lock control procedures of the RA.

4. N/A

5. N/A.

6. Suspicious Activity Reporting training (e.g. iWATCH, CorpsWatch, or See Something, Say Something): All contract personnel shall receive initial and annual refresher training from the RA representative on the local suspicious activity reporting program. This locally developed training provides contract personnel with general information on suspicious behavior, and guidance on reporting suspicious activity to the project manager, security representative or law enforcement entity.

7. N/A

8. N/A

9. N/A

10. N/A

11. N/A

12. N/A

13. Escorting in classified and/or sensitive areas: In accordance with applicable regulations, all contract personnel who do not possess the appropriate security clearance or access privileges will be escorted in areas where they may be exposed to classified information or operations, sensitive information or activities, or restricted areas.

14. Pre-screen candidates using E-Verify Program: The Contractor shall comply with all applicable Federal employment eligibility verification requirements for employees assigned to perform work under this contract. Contractors enrolled in the E-Verify program shall use E-Verify (https://www.e-verify.gov/) (website subject to change) to confirm the employment eligibility of newly hired employees and those assigned to perform work under this contract, as required by applicable laws, regulations, and program requirements. An initial list of verified eligible candidates shall be provided to the COR no later than three business days after contract award. For contracts involving individual

personnel, the individual shall complete Form I-9, Employment Eligibility Verification, and submit required documentation to the Contracting Officer for inclusion in the official contract file.

15. N/A

16. N/A

-- End of Section --

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

View Location Map

Progress and Completion Pictures

Field Office Overhead

Accounting Practice

Delegation Of Authority

SD-11 Closeout Submittals

High-Resolution Exterior Panoramic Photographs

1.3 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.

1.4 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 20 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. Submit with the

monthly invoice one set of digital photographs in the agency construction management system of record, cumulative of all photos to date. Indicate photographs demonstrating environmental procedures. Provide photographs for each month in a separate monthly directory and 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.

1.4.1 High-Resolution Exterior Panoramic Photographs

Construction Contractor shall provide high resolution, brochure quality construction completion photos with a panoramic view of the entire facility exterior. Photos shall be clear of construction caution tape, debris, vehicles, trash cans, dumpsters etc. Photos shall be provided in electronic file and delivered to National Program Manager prior to BOD or Construction Completion Date, whichever is earlier

1.5 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 law.

1.6 SUPERVISION

1.6.1 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 Contracting Officer may request proof of the superintendent's qualifications at any point in the project if the performance of the superintendent is in question.

1.6.2 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 job-site at all times during the performance of Contract work. In addition, if a Quality Control (QC) representative is required on the Contract, then that individual must also have fluent English communication skills.

1.6.3 Duties

The project superintendent is primarily responsible for managing subcontractors and coordinating day-to-day production and schedule adherence on the project. The superintendent is required to attend Red Zone meetings, partnering meetings, and quality control meetings. The superintendent or qualified alternative must be on-site at all times during the performance of this contract until the work is completed and accepted. The project superintendent may not serve as the SSHO or the QC

Manager.

1.6.4 Non-Compliance Actions

The Project Superintendent is subject to removal by the Contracting Officer for non-compliance with requirements specified in the contract and for failure to manage the project to ensure timely completion. Furthermore, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders is acceptable as the subject of claim for extension of time or excess costs or damages by the Contractor.

1.7 Field Office Overhead

Notice to Offerors: You must declare below the accounting practice that you apply to contracts to calculate field office overhead for all change orders, modifications, and requests for equitable adjustment. Pursuant to Federal Acquisition Regulation (FAR) Parts 31.105(d)(3) and 31.203(d)(1), an accounting practice that varies from modification to modification is not allowable. Select one of the following:

a. If you use Time Distribution Base for Per Diem Rate practice, see "Field Office Overhead - Per Diem Rate" listed below.

b. If you use Direct Cost Distribution Base for a Percentage Mark-up practice, see "Field Office Overhead - Percentage Markup", listed below.

c. If you choose Other Accounting Practice That is Allowed Under the FAR and That Uses a Single Distribution Base, you must describe the accounting practice in sufficient detail below to allow the Contracting Officer to determine what accounting practice is being utilized by your company and that it complies with the criteria for acceptable accounting practices as set out in FAR Parts 31.105(d)(3) and 31.203(d)(1).

d. Contractor must declare the Accounting Practice to apply to this contract, in writing, within 10 days after Notice to Proceed is received.

1.7.1 Field Office Overhead - Per Diem Rate

The Contracting Officer shall make an equitable adjustment and modify the contract in writing for any change to the contract, issued pursuant to the Changes clause or otherwise, for which the Government is responsible, and which causes either an increase or decrease in the Contractor's costs as to time or performance under the contract. Under such an equitable adjustment, the Contractor's field office overhead shall be an allowable cost, in accordance with the Contractor's accounting practice as identified by the Contractor.

The Contractor shall declare which standard form of accounting practice it applies to field overhead costs: if a contractor indicates that it follows a per diem basis, no overhead percentage markup rate for office overhead costs shall be allowed.

Under such an equitable adjustment, the Contractor shall be reimbursed for field office overhead on a per diem basis when the completion of the contract is extended by reason of the change issued under any clause,

except the Default clause, subject to the Contractor substantiating the variable expense by providing a detailed breakdown of its proposed increase or decrease of costs as required by the Contract. Applicable contract clauses are contained in Section 00 72 00 CONTRACT CLAUSES. No payment of field office overhead on a per diem basis shall be allowed for any change when the completion of the contract is not extended by reason of the change.

1.7.2 Field Office Overhead - Percentage Markup

The Contracting Officer shall make an equitable adjustment and modify the contract in writing for any change to the contract, issued pursuant to the Changes clause or otherwise, for which the Government is responsible, and which causes either an increase or decrease in the Contractor's costs as to time or performance under the contract. Under such an equitable adjustment, the Contractor's field office overhead shall be an allowable cost, in accordance with the Contractor's accounting practice as identified by the Contractor.

The Contractor shall declare which standard form of accounting practice it applies to field overhead costs: if a contractor indicates that it follows a percentage basis, no per diem rate for office overhead costs shall be allowed.

Under such an equitable adjustment, payment of office overhead costs shall be allowed for any change on a percentage markup basis regardless of whether the completion of the contract is, or, is not, extended by reason of the change, except for modifications issued pursuant to the Default Clause. The Contractor shall provide a detailed breakdown of its proposed increase or decrease of costs as required by Contract Clause. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.8 Delegation of Authority

Submit separate letters of authority for each individual with delegated authority to negotiate and/or sign documents on behalf of the contractor for this contract. Provide name, title, telephone number, and email address for each individual and state their delegated authorities, to include authority limits where applicable, for the following items:

a. Serial Letters
b. Price Proposals
c. Authority to Negotiate (time and/or cost)
d. Contract Modifications
e. Prompt Payment Certification
f. Certified Payroll Documents
g. Safety incident notices and forms
h. CPARS performance evaluations
i. Release of Claims
j. Delegation of Competent Person and/or Qualified Person

Each letter submitted shall include the individual's acknowledgement of their delegated authority and shall include the individual's handwritten signature and electronic signature.

Submit the letters within 10 days after receipt of Notice to Proceed.

Update the authority delegations, in writing, when changes in personnel or delegated authority occur.

1.9 PRECONSTRUCTION CONFERENCE

Immediately after award, prior to commencing any work at the site, coordinate with the Contracting Officer a time and place to meet for the Preconstruction Conference. The conference must take place within 35 calendar days after award of the contract, but prior to commencement of any work at the site. The purpose of this conference is to discuss and develop a mutual understanding of the administrative requirements of the Contract including but not limited to: daily reporting, invoicing, value engineering, safety, base-access, outage requests, hot work permits, schedule requirements, quality control, schedule of prices or earned value report, shop drawings, submittals, cybersecurity, prosecution of the work, government acceptance, final inspections and contract close-out and the processes for joint risk management between the Contractor and Government. Contractor must present and discuss their basic approach to scheduling the construction work and any required phasing.

1.10 PARTNERING

To most effectively accomplish this Contract, the Contractor and Government must form a cohesive partnership with the common goal of drawing on the strength of each organization in an effort to achieve a successful project that includes joint risk management, is without safety mishaps, conforming to the Contract, within budget and on schedule. The partnering team must consist of personnel from both the Government and Contractor including project level and corporate level leadership positions. Key Personnel from the supported command, end user, , Contractor, key subcontractors and the Designer of Record (DOR) (regardless of whether the contract is a design-build or a design-bid-build) are required to participate in the Partnering process.

1.10.1 Team-Led (Informal) Partnering

a. The Contracting Officer will coordinate the initial Team-Led (Informal) Partnering Session with key personnel of the project team, including Contractor and Government personnel. The Partnering Session will be co-led by the Resident Engineer or Project Engineer and Contractor's Project Manager.

b. The Initial Team-led Partnering session may be held concurrently with the Pre-Construction meeting. Partnering sessions will be held at a location mutually agreed to by the Contracting Officer and the Contractor, typically at a conference room on-base or at the Contractor's temporary trailer.

c. The Partners will determine the frequency of the follow-on sessions.

d. Participants will bear their own costs for meals, lodging and transportation associated with Partnering.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

SECTION 01 32 01.00 10

PROJECT SCHEDULE

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.

AACE INTERNATIONAL (AACE)

AACE 29R-03	(2011) Forensic Schedule Analysis
AACE 52R-06	(2006) Time Impact Analysis - As Applied in Construction
AACE 84R-13	(2015) Planning and Accounting for Adverse Weather

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 67-17	(2017) Schedule Delay Analysis

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11	(2017) Administration -- Project Schedules

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Project Scheduler Qualifications; G,

Preliminary Project Schedule; G,

Initial Project Schedule; G,

Periodic Schedule Update; G,

1.3 PROJECT SCHEDULER QUALIFICATIONS

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating and production of reports. The Designated Project Scheduler must have prepared and maintained at least three previous construction schedules for projects of similar size and complexity to this contract, using Primavera P6. Representative must have a comprehensive knowledge of CPM scheduling

principles and application.

PART 2 PRODUCTS

2.1 SOFTWARE

The scheduling software utilized to produce and update the schedules required herein must be capable of meeting all requirements of this specification.

2.1.1 Government Default Software

The Government uses Primavera P6. Ensure exported schedule files are compatible with the version of P6 used by the Government.

2.1.2 Contractor Software

Scheduling software used by the contractor must be commercially available from the software vendor for purchase with vendor software support agreements available. The software routine used to create the required sdef file must be created and supported by the software manufacturer.

2.1.2.1 Primavera

If Primavera P6 is selected for use, provide the "xer" export file in a version of P6 importable by the Government system. Verify at the SEKO meeting which version of P6 is in use by the Government. Export the schedule in a version of P6 no newer than that used by the Government.

2.1.2.2 Other Than Primavera

If the Contractor chooses software other than Primavera P6, that is compliant with this specification, provide for the Government's use two licenses, two computers, and training for two Government employees in the use of the software. These computers will be stand-alone and not connected to Government network. Computers and licenses will be returned at project completion.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule as specified herein. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. Show in the schedule the proposed sequence to perform the work and dates contemplated for starting and completing all schedule activities. The scheduling of the entire project is required. The scheduling of construction is the responsibility of the Contractor. Contractor management personnel must actively participate in its development. Subcontractors, and suppliers working on the project must also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool. Use the Critical Path Method (CPM) of network calculation to generate all Project Schedules. Prepare each Project Schedule using the Precedence Diagram Method (PDM).

3.1.1 Scheduling Expectations Kickoff Meeting(SEKO)

In conjunction with the post award conference or pre construction

conference the Government and the Contractor will hold a separate and distinct Scheduling Expectations Kickoff Meeting(SEKO). The intent of this meeting is for the Government to review with the contractor the requirements of the scheduling specification, communicate the Government's expectations regarding schedule development and management, and answer any questions the Contractor may have regarding the schedule requirements.

3.2 BASIS FOR PAYMENT AND COST LOADING

The schedule is the basis for determining contract earnings during each update period and therefore the amount of each progress payment. The aggregate value of all activities coded to a contract CLIN must equal the value of the CLIN. Match the progress payment "Pay Period Thru" date in RMS to the schedule data date.

3.2.1 Activity Cost Loading

Activity cost loading must be reasonable and without front-end loading. Activities with a negative cost loading is not allowed. Provide additional documentation to demonstrate reasonableness if requested by the Contracting Officer.

3.2.2 Cost Loading of Submittals

No costs are to be assigned to activities for the preparation, review, or approval of submittals, except as described under paragraph COST LOADING OF CLOSEOUT ACTIVITIES, paragraph AS-BUILT DRAWINGS, and paragraph O&M MANUALS.

3.2.3 Withholdings / Payment Rejection

Failure to meet the requirements of this specification may result in the disapproval of the preliminary, initial, or periodic schedule updates and subsequent rejection of payment requests until compliance is met.

In the event that the Contracting Officer directs schedule revisions and those revisions have not been included in subsequent Project Schedule revisions or updates, the Contracting Officer may withhold 10 percent of pay request amount from each payment period until such revisions to the project schedule have been made.

3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

3.3.1 Level of Detail Required

Develop the Project Schedule to the appropriate level of detail to address major milestones and to allow for satisfactory project planning and execution. Failure to develop the Project Schedule to an appropriate level of detail will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

3.3.2 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Non-procurement activities Original Durations (OD) are not to exceed 20 workdays or 30 calendar days.

3.3.3 Procurement Activities

Include in the schedule activities associated with the critical submittals and their approvals, procurement, fabrication, and delivery of long lead materials, equipment, fabricated assemblies, and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days.

3.3.4 Mandatory Activities

Include the following activities in the initial project schedule and all updates.

a. Submission, review and acceptance of SD-01 Preconstruction Submittals (individual activity for each).

b. Submission, review and acceptance of features requiring design completion

c. Submission of mechanical/electrical/information systems layout drawings.

d. Submission and approval of O & M manuals.

e. Submission and approval of as-built drawings.

f. Submission and approval of DD1354 data and installed equipment lists.

g. Submission and approval of testing and air balance (TAB).

h. Submission of TAB specialist design review report.

i. Submission and approval of fire protection specialist.

j. Submission and approval of Building Commissioning Plan, Controls testing plan, test data, and reports: Develop the schedule logic associated with testing and commissioning of mechanical systems to a level of detail consistent with the contract commissioning requirements. All tasks associated with building testing and commissioning will be completed prior to submission of building commissioning report and subsequent contract completion.

   These activities may include but are not limited to: air and water balancing, building commissioning -functional performance testing, controls testing, and performance verification testing. Include other systems testing, if required. Include additional commissioning requirements noted elsewhere in the Contract as required in the schedule and discuss during the SEKO meeting, noted in paragraph SCHEDULING EXPECTATIONS KICKOFF MEETING (SEKO).

k. Contractor's pre-final inspection.

m. Correction of punch list from Contractor's pre-final inspection.

n. Government's pre-final inspection.

o. Correction of punch list from Government's pre-final inspection.

p. Final inspection.

3.3.5 Government Activities

Show in schedule, Government and other agency activities that could impact progress. These activities include, but are not limited to approvals, environmental permit approvals by State regulators, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.6 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11. This exact structure is mandatory. Develop and assign all Activity Codes to activities as detailed herein.

The SDEF format is as follows:

Field	Activity Code	Length	Description
1	WRKP	3	Workers per day
2	RESP	4	Responsible party
3	AREA	4	Area of work
4	MODF	6	Modification Number
5	BIDI	6	Bid Item (CLIN)
6	PHAS	2	Phase of work
7	CATW	1	Category of work
8	FOW	20	Feature of work*

*Some systems require that FEATURE OF WORK values be placed in several activity code fields. The notation shown is for Primavera P6. Refer to the specific software guidelines with respect to the FEATURE OF WORK field requirements.

3.3.6.1 Workers Per Day (WRKP)

Assign Workers per Day for all field construction or direct work activities, if directed by the Contracting Officer. Workers per day is based on the average number of workers expected each day to perform a task for the duration of that activity.

3.3.6.2 Responsible Party Coding (RESP)

Assign responsibility code for all activities to the Prime Contractor, Subcontractor(s) or Government agency(ies) responsible for performing the activity.

a. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, environmental permit approvals by State regulators, Government Furnished Property/Equipment

(GFP) and Notice to Proceed (NTP) for phasing requirements.

b. Activities cannot have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and GOVT (for USACE).

3.3.6.3 Area of Work Coding (AREA)

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities cannot have more than one Work Area Code.

3.3.6.4 Modification Number (MODF)

Assign a Modification Number Code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by Contracting Officer. Key all Code values to the Government's modification numbering system. An activity can have only one Modification Number Code.

3.3.6.5 Bid Item Coding (BIDI)

Assign a Bid Item Code to all activities using the Contract Line Item Number (CLIN) to which the activity belongs, even when an activity is not cost loaded. An activity can have only one BIDI Code.

3.3.6.6 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities. Examples of phase of work are procurement phase and construction phase. Each activity can have only one Phase of Work code.

If the contract specifies phasing with separately defined performance periods, identify a Phase Code to allow filtering and organizing the schedule accordingly.

3.3.6.7 Category of Work Coding (CATW)

Assign a Category of Work Code to all activities. Category of Work Codes include, but are not limited to construction submittal, procurement, fabrication, weather sensitive installation, non-weather sensitive installation, start-up, and testing activities. Each activity can have no more than one Category of Work Code.

3.3.6.8 Feature of Work Coding (FOW)

Assign a Feature of Work Code to appropriate activities based on the Definable Feature of Work to which the activity belongs based on the approved QC plan.

Definable Feature of Work is defined in Section 01 45 00 QUALITY CONTROL. An activity can have only one Feature of Work Code.

3.3.7 Contract Milestones and Constraints

Milestone activities are to be used for significant project events including, but not limited to, project phasing, project start and end activities, or interim completion dates. The use of artificial float constraints such as "zero free float" or "zero total float" are prohibited.

Mandatory constraints that ignore or affect network logic are prohibited. No constrained dates are allowed in the schedule other than those specified herein. Submit additional constraints to the Contracting Officer for approval on a case by case basis.

3.3.7.1 Project Start Date Milestone and Constraint

The first activity in the project schedule must be a start milestone titled "NTP Received," which must have a "Start On" constraint date equal to the date that the NTP is received.

3.3.7.2 End Project Finish Milestone and Constraint

The last activity in the schedule must be a finish milestone titled "End Project."

Constrain the project schedule to the Contract Completion Date in such a way that if the schedule calculates an early finish, then the float calculation for "End Project" milestone reflects positive float on the longest path. If the project schedule calculates a late finish, then the "End Project" milestone float calculation reflects negative float on the longest path.

3.3.7.3 Interim Completion Dates and Constraints

Constrain contractually specified interim completion dates to show negative float when the calculated late finish date of the last activity in that phase is later than the specified interim completion date.

3.3.7.3.1 Start Phase

Use a start milestone as the first activity for a project phase. Call the start milestone "Start Phase X" where "X" refers to the phase of work.

3.3.7.3.2 End Phase

Use a finish milestone as the last activity for a project phase. Call the finish milestone "End Phase X" where "X" refers to the phase of work.

3.3.8 Adverse Weather

Ensure anticipated adverse weather is accounted for in the Project Schedule. AACE 84R-13 provides methodologies for techniques in planning for adverse weather. If a method other than a weather calendar is proposed, discuss the reason during the SEKO meeting.

3.3.9 Calendars

Schedule activities on a Calendar to which the activity logically belongs. Develop calendars to accommodate any contract defined work period such as a 7-day calendar for Government Acceptance activities,

concrete cure times, etc. Develop the default Calendar to match the physical work plan with non-work periods identified including weekends and holidays. Develop Seasonal Calendar(s) and assign to seasonally affected activities as applicable.

If a weather calendar is used its implementation and execution is to be in accordance with AACE 84R-13

3.3.10 Open Ended Logic

Only two open ended activities are allowed: the first activity "NTP Received" is to have no predecessor logic, and the last activity -"End Project" is to have no successor logic. Except as noted above, each activity must have at least a start-to-start or finish-to-start relationship with its predecessor and a finish-to-finish or finish-to-start relationship with its successor.

Predecessor open ended logic may be allowed in a time impact analyses upon the Contracting Officer's approval.

3.3.11 Default Progress Data Disallowed

Actual Start and Finish dates must not automatically update with default mechanisms included in the scheduling software. Updating of the percent complete and the remaining duration of any activity must be independent functions. Disable program features that calculate one of these parameters from the other. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process must match those dates provided in the Contractor Quality Control Reports. Failure to document the AS and AF dates in the Daily Quality Control report will result in disapproval of the Contractor's schedule.

3.3.12 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Address out of sequence progress or logic changes in the Narrative Report and in the periodic schedule update meetings.

3.3.13 Added and Deleted Activities

Do not delete activities from the project schedule or add new activities to the schedule without approval from the Contracting Officer. Activity ID and description changes are considered new activities and cannot be changed without Contracting Officer approval.

3.3.14 Original Durations

Activity Original Durations (OD) must be reasonable to perform the work item. OD changes are prohibited unless justification is provided and approved by the Contracting Officer.

3.3.15 Leads, Lags, and Start to Finish Relationships

Lags must be reasonable as determined by the Government and not used in place of realistic original durations, must not be in place to

artificially absorb or create float, or to replace proper schedule logic.

a. Leads (negative lags) are prohibited.

b. Start to Finish (SF) relationships are prohibited.

3.3.16 Retained Logic

Schedule calculations must retain the logic between predecessors and successors ("retained logic" mode) even when the successor activity(s) starts and the predecessor activity(s) has not finished (out-of-sequence progress). Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") are not be allowed.

3.3.17 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete to allow for proper schedule management, subject to COR approval.. The Government may withhold funds in the pay application for the remaining punch list work until the punch list corrections have been completed and verified by the Government.

3.3.18 Remaining Duration

Update the remaining duration for each activity based on the number of estimated workdays it will take to complete the activity. Remaining duration may not mathematically correlate with percentage found under paragraph entitled Percent Complete. The remaining duration for unstarted activities are not to be less than its original duration.

3.3.19 Cost Loading of Closeout Activities

Cost load the "Correction of punch list from Government pre-final inspection" activity(ies) not less than 1 percent of the present contract value. Activity(ies) may be declared 100 percent complete upon the Government's verification of completion and correction of all punch list work identified during Government pre-final inspection(s).

3.3.19.1 As-Built Drawings

Cost load an activity for final as-built drawings with an amount of $35,000, or 1% of the present construction value up to $200,000, whichever is the greater. No payment will be made on this activity until the final as-built drawing deliverables have been approved by the Government.

3.3.19.2 O & M Manuals

Cost load an activity for O&M manuals with an amount of $20,000, or 1% of the present construction value up to $200,000, whichever is the greater. No payment will be made on this activity until submittal and approval of all O&M manuals are complete.

3.3.20 Early Completion Schedule and the Right to Finish Early

An Early Completion Schedule is an Initial Project Schedule (IPS) that indicates all scope of the required contract work will be completed before the contractually required completion date.

a. No IPS indicating an Early Completion will be accepted without being fully resource-loaded (including crew sizes and manhours) and the Government agreeing that the schedule is reasonable and achievable.

b. The Government is under no obligation to accelerate work items it is responsible for to ensure that the early completion is met nor is it responsible to modify incremental funding (if applicable) for the project to meet the contractor's accelerated work.

3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data reports and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS. If the Contractor fails or refuses to furnish the information and schedule updates as set forth herein, the Contractor will be deemed not to have provided an estimate upon which a progress payment can be made.

Review comments made by the Government on the schedule(s) do not relieve the Contractor from compliance with requirements of the Contract Documents.

3.4.1 Preliminary Project Schedule Submission

Within 7 calendar days after the NTP is received, submit the Preliminary Project Schedule defining the planned operations detailed for the first 90 calendar days for approval. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 45 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. The Preliminary Project Schedule may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required plan and program preparations, submissions and approvals identified in the contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) permitting activities and other non-construction activities intended to occur within the first 45 calendar days. Government acceptance of all other specified Program and Plan approvals must occur prior to any planned construction activities. Code activities that are summary in nature, after the first 90 calendar days, with the following activity codes: Bid Item (CLIN) code (BIDI), Responsibility Code (RESP), and Feature of Work code (FOW).

3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 30 calendar days after notice to proceed is issued. The schedule must demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. No payment will be made for work items not fully detailed in the Project Schedule.

3.4.3 Periodic Schedule Updates

Update the Project Schedule on a regular basis, monthly at a minimum. Provide a draft Periodic Schedule Update for review at the schedule update meetings as prescribed in the paragraph PERIODIC SCHEDULE UPDATE MEETINGS. These updates will enable the Government to assess Contractor's progress.

a. Update information including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete. Updated information is subject to the approval of the Government at the meeting.

b. AS and AF dates must match the date(s) reported on the Contractor's Quality Control Report for an activity start or finish.

3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

3.5.1 Electronic Scheduling Data

Provide electronic scheduling data containing the current project schedule and all previously submitted schedules in the format of the scheduling software (e.g. .xer). Also include the Narrative Report and all required Schedule Reports. The electronic file is to identify the type of schedule (Preliminary, Initial, Update), full contract number, Data Date and schedule file name. Each schedule must have a unique file name and use project specific settings. The file naming convention is to be determined at SEKO meeting.

3.5.2 Narrative Report

Provide a Narrative Report with each schedule submission. The Schedule Narrative Report is a "stand alone" report in PDF or Word format. Title the report "Schedule Narrative Report". Show the Report date, schedule name, and contract number on the first page. Indicate who is responsible for the schedule update and narrative report. Provide a brief description of the Project Scope. The Narrative Report is expected to communicate to the Government the thorough analysis of the schedule output and the plans to compensate for problems, either current or potential, which are revealed through that analysis. Include the following information at a minimum in the Narrative Report:

a. Identify and discuss the work scheduled to start in the next update period.

b. Describe activities along the critical path in addition to activities on the next float path after the critical path.

c. Describe current and anticipated problem areas, delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. Identify the party responsible for delay, if applicable.

d. Identify and explain why activities, based on their calculated late dates, should have either started or finished during the update period but did not.

e. Identify and discuss all schedule changes by activity ID and activity name including what specifically was changed and why the change was needed. Include at a minimum new and deleted activities, logic changes, duration changes, calendar changes, lag changes, resource changes, and actual start and finish date changes.

f. Identify and discuss out-of-sequence work. Include in discussion the reason the work was performed out of sequence.

g. If the longest path changes from a monthly update to the next, provide an explanation of the factors driving the change.

h. Respond to USACE Schedule Review Comments from the previous update(s).

3.5.3 Schedule Reports

The format, filtering, organizing, and sorting for each schedule report will be as directed by the Contracting Officer. Typically, reports contain Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete. Provide the reports electronically in .pdf format. The following lists typical reports that will be requested:

3.5.3.1 Activity Report

List of all activities sorted according to activity number.

3.5.3.2 Logic Report

List of detailed predecessor and successor activities for every activity in ascending order by activity number.

3.5.3.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.

3.5.3.4 Earnings Report by CLIN

A compilation of the Total Earnings on the project from the NTP to the data date, which reflects the earnings of activities based on the agreements made in the schedule update meeting defined herein. Provided a complete schedule update has been furnished, this report serves as the basis of determining progress payments. Group activities by CLIN number and sort by activity number. Provide a total CLIN percent earned value, CLIN percent complete, and project percent complete. The electronic report must contain the following for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Earnings to Date, Earnings this period, Total Quantity, Quantity to Date, and Percent Complete (based on cost).

3.5.3.5 Scheduling and Leveling Report

Provide a Scheduling/Leveling Report generated from the current project schedule being submitted.

3.5.4 Network Diagram

The Network Diagram is required for the Preliminary, Initial and Periodic Updates. Depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.4.1 Continuous Flow

Show a continuous flow from left to right with no arrows from right to left. Show the activity number, description, duration, and estimated earned value on the diagram.

3.5.4.2 Project Milestone Dates

Show dates on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.4.3 Critical Path

Show all activities on the critical path. The critical path is defined as the longest path.

3.5.4.4 Grouping and Sorting

Group and sort activities as directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by major elements of work, category of work, work area and/or responsibility.

3.5.4.5 Cash Flow / Schedule Variance Control (SVC) Diagram

With each schedule submission, provide a SVC diagram showing 1) Cash Flow S-Curves indicating planned project cost based on projected early and late activity finish dates, and 2) Earned Value to-date.

3.6 PERIODIC SCHEDULE UPDATE

3.6.1 Periodic Schedule Update Meetings

Conduct periodic schedule update meetings for the purpose of reviewing the proposed Periodic Schedule Update, Narrative Report, Schedule Reports, and progress payment. Conduct meetings at least monthly within five days of the proposed schedule data date. Provide a computer with the scheduling software loaded and a projector which allows all meeting participants to view the proposed schedule during the meeting. The Contractor's authorized scheduler must organize, group, sort, filter, perform schedule revisions as needed and review functions as requested by the Contractor and/or Government. The Contractor scheduler must attend in person unless virtual attendance is approved by Contracting Officer. The meeting is a working interactive exchange which allows the Government and Contractor the opportunity to review the updated schedule on a real time and interactive basis. The meeting will last no longer than 8 hours. Submit schedule file and narrative to the Government a minimum of two workdays in advance of the meeting. The Contractor's Project Manager must attend the meeting with the authorized representative of the Contracting Officer. Superintendents, foremen and major subcontractors must attend the meeting as required to discuss the project schedule and work. Following the

schedule update meeting, make corrections to the schedule and resubmit, following the required schedule naming convention. Include only those changes approved by the Government in the schedule review meeting. Only approved schedules may be used to generate invoices for payment.

3.6.2 Update Submission Following Progress Meeting

Submit the complete Periodic Schedule Update of the Project Schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 workdays after the periodic schedule update meeting.

3.7 WEEKLY PROGRESS MEETINGS

Conduct a weekly meeting with the Government (or as otherwise mutually agreed to) between the meetings described in paragraph entitled PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming three weeks. Use the current approved schedule update for the purposes of this meeting and for the production and review of reports. At the weekly progress meeting, address the status of RFIs, RFPs and Submittals. Contractor to provide meeting agenda and other related documents at least 24 hours in advance of meeting.

3.8 REQUESTS FOR TIME EXTENSIONS

ASCE 67-17 provides delay analysis guidelines. If there is a conflict between the contract and guidance provided in ASCE 67-17, the contract will govern. Provide justification of delay to the Contracting Officer in accordance with the contract provisions and clauses for approval, within 10 days of a delay occurring. Also prepare a time impact analysis for each Government request for proposal (RFP).

3.8.1 Justification of Delay

Provide a description of the event(s) that caused the delay and/or impact to the work. As part of the description, identify all schedule activities impacted. Show that the event that caused the delay/impact was the responsibility of the Government. Provide a time impact analysis that demonstrates the effects of the delay or impact on the project completion date, or interim completion date(s). Evaluate multiple impacts chronologically; each with its own justification of delay. With multiple impacts consider any concurrency of delay. A time extension and the schedule fragnet becomes part of the project schedule and all future schedule updates upon approval by the Contracting Officer.

3.8.2 Changes That Do Not Cause Delay

If it is determined that a change does not constitute a schedule time extension, a fragnet as described in paragraph FRAGMENTARY NETWORK, is to be created and inserted into the Project schedule.

3.8.3 Time Impact Analysis (Prospective Analysis)

Submit requests for time extensions based on a prospective analysis if the work involved or the impact identified has not already occurred. Where the impact is ongoing a prospective analysis may be considered. However, the Government reserves the right to require a retrospective analysis be prepared after the impact has ended.

Prepare a time impact analysis for approval by the Contracting Officer based on industry recommended practice AACE 52R-06. Utilize a copy of the last approved schedule prior to the first day of the impact or delay for the time impact analysis. If Contracting Officer determines the time frame between the last approved schedule and the first day of impact is too great, prepare an interim updated schedule to perform the time impact analysis. Unless approved by the Contracting Officer, no other changes may be incorporated into the schedule being used to justify the time impact.

3.8.4 Forensic Schedule Analysis (Retrospective Analysis)

Submit requests for time extensions based on a retrospective analysis if the work involved or the impact identified has already occurred. The analysis must account for the actual performance of both the impacted work and all other contract work in the schedule.

If a methodology is chosen from AACE 29R-03, the method must adhere to the principles identified in ASCE 67-17. If there is a conflict with the methodology chosen from AACE 29R-03 and ASCE 67-17, ASCE 67-17 will govern. Choice of methodology should be discussed prior to submission to Government.

3.8.5 Fragmentary Network (Fragnet)

Prepare a proposed fragnet for time impact analysis consisting of a sequence of new activities that are proposed to be added to the project schedule to demonstrate the influence of the delay or impact to the project's contractual dates. Clearly show how the proposed fragnet is to be tied into the project schedule including all predecessors and successors to the fragnet activities. The proposed fragnet must be approved by the Contracting Officer prior to incorporation into the project schedule.

3.8.6 Time Extension

The Contracting Officer must approve the Justification of Delay including the time impact analysis before a time extension will be granted. No time extension will be granted unless the delay consumes all available Project Float and extends the projected finish date ("End Project" milestone) beyond the Contract Completion Date. The time extension will be in calendar days.

Actual delays that are found to be caused by the Contractor's own actions, which result in a calculated schedule delay, are not a cause for an extension to the performance period, completion date, or any interim milestone date.

3.8.7 Impact to Early Completion Schedule

No extended overhead will be paid for delay prior to the original Contract Completion Date for an Early Completion IPS unless the Contractor actually performed work in accordance with that Early Completion Schedule. The Contractor must show that an early completion was achievable had it not been for the impact.

3.9 FAILURE TO ACHIEVE PROGRESS

Should the progress fall behind the approved project schedule for reasons other than those that are excusable within the terms of the contract, the Contracting Officer may require provision of a written recovery plan for approval. The plan must detail how progress will be made-up to include which activities will be accelerated by adding additional crews, longer work hours, extra workdays, etc.

3.9.1 Artificially Improving Progress

Artificially improving progress by means such as, but not limited to, revising the schedule logic, modifying, or adding constraints, shortening activity durations, or changing calendars in the project schedule is prohibited. Indicate assumptions made and the basis for any logic, constraint, duration, and calendar changes used in the creation of the recovery plan. Any additional resources, manpower, or daily and weekly work hour changes proposed in the recovery plan must be evident at the work site and documented in the daily report along with the Schedule Narrative Report.

3.9.2 Failure to Perform

Failure to perform work and maintain progress in accordance with the supplemental recovery plan may result in an interim and final unsatisfactory performance rating and may result in corrective action directed by the Contracting Officer pas authorized by the contract. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

3.9.3 Recovery Schedule

When directed by the Contracting Officer, submit a Recovery Schedule demonstrating the actions necessary to regain compliance with contract milestones and achieve timely completion of the work. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

3.10 OWNERSHIP OF FLOAT

Except for the provision given in the paragraph IMPACT TO EARLY COMPLETION SCHEDULE, float available in the schedule, at any time, belongs to the Project and is available for Contractor and Government use. This includes activity and project float. Activity float is the number of workdays that an activity can be delayed without causing a delay to the "End Project" finish milestone. Project float (if applicable) is the number of work days between the projected early finish and the "End Project" finish.

3.11 TRANSFER OF SCHEDULE DATA INTO RESIDENT MANAGEMENT SYSTEM

Ensure schedule data is uploaded to RMS. Ensure schedule data is uploaded to RMS. This data is supplemental information required by the Government to support contract administration, progress evaluation, and payment request review.

Government review of payment requests is contingent upon receipt of acceptable and approvable electronic progress payment documentation. Hard-copy payment requests are not required unless specifically requested by the Contracting Officer.

Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

3.12 PRIMAVERA P6 MANDATORY REQUIREMENTS

Ensure Primavera P6 settings provide a schedule capable of fulfilling the requirements of the contract. The following settings are mandatory and required in all schedule submissions to the Government:

a. Activity Codes must be Project Level, not Global or EPS level.

b. Calendars must be Project Level, not Global or Resource level.

c. Activity Duration Types must be set to "Fixed Duration & Units".

d. Percent Complete Types must be set to "Physical".

e. Time Period Admin Preferences must remain the default "8.0 hr/day, 40 hr/week, 172 hr/month, 2000 hr/year". Set Calendar Work Hours/Day to 8.0 Hour days.

f. Set Schedule Option for defining Critical Activities to "Longest Path".

g. Set Schedule Option for defining progressed activities to "Retained Logic".

h. Set up cost loading using a single lump sum non-labor resource. The Price/Unit must be $1/hr, Default Units/Time must be "8h/d", and settings "Auto Compute Actuals" and "Calculate costs from units" un-selected.

i. Activity ID's must not exceed 10 characters.

j. Activity Names must have a verb-noun structure and contain the most defining and detailed description within the first 30 characters.

k. The daily ending hour for all work calendars must be the same.

3.13 **USACE P6 SCHEDULE NAMING CONVENTION (FORT WORTH DISTRICT)**

Summary
Please ensure that all schedule submittals comply with the following:

1) Sample Schedule NAME, (P6 Project ID): "M2004727-2INIT-V03". Use the RMS 8-digit "CONTRACT ID", a "-", a 5-digit schedule type identifier, another "-", and a 3-digit version identifier.
2) Sample Schedule DESCRIPTION, (P6 Project Name): "W9126G-14-D-0050-0002, SAMMC-N Fire Station". Use the RMS 16-digit "Contract Number", (matching the format as awarded), (Omit the "-" and the Task Order number if none is used.)
3) Sample P6 Export File Name: "M2004727-2INIT-V03.xer". Use the Schedule Name, (P6 Project ID), for the name of the export file.

Details
To ensure compatibility with the USACE Primavera database, the contractor's schedule submissions must follow the guidance for schedule IDs, Schedule Names and Schedule File Submittals, as shown below:

A. Schedule Name (P6 Project ID)

To ensure that all construction schedules can be distinguished in the USACE database, contactors must use the following P6 naming convention:

1) Software Settings: The "Project ID" must be set to the maximum of 20 characters. (The normal default.)

2) Schedule Name

a. The first eight characters of the Schedule Name, (P6 Project ID), must use the RMS "Contract ID". For the Fort Worth District, the Contract ID starts with "M200".

b. For legibility, use a "-" for the 9th character

c. Define the type of schedule with the next 5 characters (the leading number of this section lists the type of schedule in approximate chronological order of use)

i. "1PREL" for Preliminary

ii. "2INIT" for Initial

iii. "3MPCT" for Impact Schedules

iv. "4RBAS" for Re-Baselined schedules

v. "5UP##" for monthly update, i.e. "UP01" for the first monthly update

d. For legibility, use a "-" for the next character

e. Define the version with the next 3 characters. Use "V01" for the 1st version of the schedule, "V02" for the 2nd version of the schedule, etc. Note that the "0" is the number zero, not the letter "O")

f. Do not add additional characters or numbers to the name

3) Examples:

a. M2003368-1PREL-V01 - The 1st version of the Preliminary schedule for project M2003368

b. M2002479-2INIT-V03 - The 3rd version of the Initial schedule for project M2002479

c. M2003451-3MPCT-V02 - The 2nd Impact for project M2003451

d. M2001123-4RBAS-V01 - The 1st Re-Baselined/Recovery schedule for project M2001123

e. M2001835-5UP11-V01 - The 1st version of the 11th update for project M2001835

B. Schedule Description (P6 Project Name)

To ensure that schedule descriptions are meaningful and consistent, contractors should use the following conventions for the P6 Project Name:

1) Use the RMS 16-digit "Contract Number", (matching the format as awarded). (Omit the "-" and Task Order number if none is used.)

2) Examples:

a. For contract M2004358: W9126G14C0006, THAAD Battery - COF

b. For contract M2002231: W9126G08C0036, Construct SAMMC North

c. For contract M2002487: W9123806D0032-0003, HQ Bldg BCT-3

C. Schedule File

To ensure that there is a direct correlation between contractor's submitted schedule file and their respective schedules in our database, the contractor must:

1) Use the P6 schedule name (Project ID) for the exported file name for each schedule file submitted to the Corps. This will ensure that the schedule backup name matches the imported schedule name in our database.

2) Examples:

a. The file export for a schedule named M2001244-5UP01-V01 should be named "M2001244-5UP01-V01.xer".

b. The file export for a schedule named M2003451-3MPCT-V02 should

be named "M2003451-3MPCT-V02.xer"

D. Creating the Schedule Exports:
Each schedule submittal will be saved in our database as a separate schedule for future reference. This means that a single project will have many schedules, one matching each of the contractor's submittals. These schedules will include all of the "Preliminary", "Initial", "Update", "Impact" and "Re-Baselined" schedules. To be able to keep track of these, the schedules must be uniquely-named using the following strategy:

1) Starting with the Preliminary or Initial schedule, create a schedule that represents the contractor's execution plan before any work is performed. For example, the first version of the Initial schedule will be named "M200####-2INIT-V01 (substituting the RMS Contract ID for the #'s).

2) Ensure that the "Project Name" is set correctly

3) When ready to submit the schedule, create a backup named exactly the same as the schedule. The easiest way to accomplish this is to:

a. go to the P6 Project screen

b. highlight the appropriate schedule in the Project Details window (Project ID)

c. simultaneously press the CTRL key and "C" to copy the name into the copy buffer

d. go to the P6 Activity screen

e. execute a schedule backup (File, Export, etc.)

f. when prompted for a file name, simultaneously press the CTRL and "V" key, pasting the P^ Project ID as the backup name

g. execute the backup

4) When the Initial schedule is accepted by the Government, base your first update off of it by making a copy, renaming the schedule to the appropriate M200###-5UP01-V01, adding status, backing up to same name, submission.

5) Create a Government Approved "G" Submittal and Transmittal for each and every schedule submission:

a. Indicate that the submittal is a schedule by starting the "Item Description" with word "Schedule"

b. Indicate the specific schedule, by name, in the "Item Description"

c. For MPCT, RBAS and schedule updates, add the time period using "- yyyy-MM"

d. **Example, Submittal Item Description:** "Schedule "M2003666-5UP06-V01, 2013-06".

-- End of Section --

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

1.1.1 Submittal Information

The Contracting Officer 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.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

1.1.2 Project Type

The Contractor's Quality Control (CQC) System Manager 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.

1.1.3 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)

Submittal requirements are specified in the technical sections. Examples and descriptions of submittals identified by the Submittal Description (SD) numbers and titles follow:

SD-01 Preconstruction Submittals

Submittals that are required prior to or at the start of construction (work) or the next major phase of the construction on a multiphase contract.

Preconstruction Submittals include schedules and a tabular list of locations, features, and other pertinent information regarding products, materials, equipment, or components to be used in the work.

Certificates Of Insurance

Surety Bonds

List Of Proposed Subcontractors

List Of Proposed Products

Baseline Network Analysis Schedule (NAS)

Submittal Register

Schedule Of Prices Or Earned Value Report

Accident Prevention Plan

Work Plan

Quality Control (QC) plan

Environmental Protection Plan

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

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 ensuring work can be judged. Includes assemblies or portions of assemblies that are to be incorporated into the project and those that will be removed at conclusion of the work.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. Unless specified in another section, testing must have been within three years of date of contract award for the project.

Report that includes findings of a test required to be performed on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report that includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports

Daily logs and checklists

Final acceptance test and operational test procedure

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that the product, system, or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor. The document purpose is to further promote the orderly progression of a portion of the work by documenting procedures, acceptability of methods, or personnel qualifications.

Confined space entry permits

Text of posted operating instructions

SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and Safety Data Sheets(SDS)concerning impedances, hazards and safety precautions.

SD-10 Operation and Maintenance Data

Data provided by the manufacturer, or the system provider, including manufacturer's help and product line documentation, necessary to maintain and install equipment, for operating and maintenance use by facility personnel.

Data required by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.

Data incorporated in an operations and maintenance manual or control system.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Submittals required for Guiding Principle Validation (GPV) or Third Party Certification (TPC).

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.

1.2.2 Approving Authority

Office or designated person authorized to approve the 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

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submittal Register; G

1.4 SUBMITTAL CLASSIFICATION

1.4.1 Government Approved (G)

Government approval is required for extensions of design, critical materials, variations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Government.

Submittals are considered to be "shop drawings." Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.4.2 For Information Only

Submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings." Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.5 PREPARATION

1.5.1 Transmittal Form

Use the ENG Form 4025-R transmittal form for submitting both Government-approved and information-only submittals. Submit in accordance with the instructions on the reverse side of the form. These forms or similar forms are included in the RMS CM software that the Contractor is required to use for this contract. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

1.5.2 Submittal Format

1.5.2.1 Format of SD-01 Preconstruction Submittals

When the submittal includes a document that is to be used in the project, or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

1.5.2.2 Format for SD-02 Shop Drawings

Provide shop drawings not less than 8 1/2 by 11 inches nor more than 30 by 42 inches, except for full-size patterns or templates. Prepare drawings to accurate size, with scale indicated, unless another form is required. Ensure drawings are suitable for reproduction and of a quality to produce clear, distinct lines and letters, with dark lines on a white background.

a. Include the nameplate data, size, and capacity on drawings. Also include applicable federal, military, industry, and technical society publication references.

b. Dimension drawings, except diagrams and schematic drawings. Prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawings as indicated on the contract drawings. Identify materials and products for work shown.

Submit an electronic copy of drawings in PDF format and native electronic format.

1.5.2.2.1 Drawing Identification

Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph IDENTIFYING SUBMITTALS.

Number drawings in a logical sequence. Each drawing is to bear the number of the submittal in a uniform location next to the title block. Place the Government contract number in the margin, immediately below the title block, for each drawing.

Reserve a blank space, no smaller than 2 inches on the right-hand side of each sheet for the Government disposition stamp.

1.5.2.3 Format of SD-03 Product Data

Present product data submittals for each section. Include a table of contents, listing the page and catalog item numbers for product data.

Indicate, by prominent notation, each product that is being submitted; indicate the specification section number and paragraph number to which it pertains.

1.5.2.3.1 Product Information

Supplement product data with material prepared for the project to satisfy the submittal requirements where product data does not exist. Identify this material as developed specifically for the project, with information and format as required for submission of SD-07 Certificates.

Provide product data in units used in the Contract documents. Where product data are included in preprinted catalogs with another unit, submit the dimensions in contract document units, on a separate sheet.

1.5.2.3.2 Standards

Where equipment or materials are specified to conform to industry or technical-society reference standards of such organizations as the American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), or Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

1.5.2.3.3 Data Submission

Collect required data submittals for each specific material, product, unit of work, or system into a single submittal that is marked for choices, options, and portions applicable to the submittal. Mark each copy of the product data identically. Partial submittals will not be accepted for expedition of the construction effort.

Submit the manufacturer's instructions before installation.

1.5.2.4 Format of SD-04 Samples

1.5.2.4.1 Sample Characteristics

Furnish samples in the following sizes, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately the same size as specified:

a. Sample of Equipment or Device: Full size.

b. Sample of Materials Less Than 2 by 3 inches: Built up to 8 1/2 by 11 inches.

c. Sample of Materials Exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.

d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.

e. Sample Volume of Nonsolid Materials: Pint. Examples of nonsolid materials are sand and paint.

f. Color Selection Samples: 2 by 4 inches. Where samples are specified for selection of color, finish, pattern, or texture, submit the full set of available choices for the material or product specified. Sizes and quantities of samples are to represent their respective standard unit.

g. Sample Panel: 4 by 4 feet.

h. Sample Installation: 100 square feet.

1.5.2.4.2 Sample Incorporation

Reusable Samples: Incorporate returned samples into work only if so specified or indicated. Incorporated samples are to be in undamaged condition at the time of use.

Recording of Sample Installation: Note and preserve the notation of any area constituting a sample installation, but remove the notation at the final clean-up of the project.

1.5.2.4.3 Comparison Sample

Samples Showing Range of Variation: Where variations in color, finish, pattern, or texture are unavoidable due to nature of the materials, submit sets of samples of not less than three units showing extremes and middle of range. Mark each unit to describe its relation to the range of the variation.

When color, texture, or pattern is specified by naming a particular manufacturer and style, include one sample of that manufacturer and style, for comparison.

1.5.2.5 Format of SD-05 Design Data

Provide design data and certificates on 8 1/2 by 11 inch paper.

1.5.2.6 Format of SD-06 Test Reports

By prominent notation, indicate each report in the submittal. Indicate the specification number and paragraph number to which each report pertains.

1.5.2.7 Format of SD-07 Certificates

Provide design data and certificates on 8 1/2 by 11 inch paper.

1.5.2.8 Format of SD-08 Manufacturer's Instructions

Present manufacturer's instructions submittals for each section. Include the manufacturer's name, trade name, place of manufacture, and catalog model or number on product data. Also include applicable federal, military, industry, and technical-society publication references. If supplemental information is needed to clarify the manufacturer's data, submit it as specified for SD-07 Certificates.

Submit the manufacturer's instructions before installation.

1.5.2.8.1 Standards

Where equipment or materials are specified to conform to industry or technical-society reference standards of such organizations as the American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), or Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

1.5.2.9 Format of SD-09 Manufacturer's Field Reports

By prominent notation, indicate each report in the submittal. Indicate the specification number and paragraph number to which each report pertains.

1.5.2.10 Format of SD-10 Operation and Maintenance Data (O&M)

Comply with the requirements specified in Section 01 78 23 OPERATION AND MAINTENANCE DATA for O&M Data format.

1.5.2.11 Format of SD-11 Closeout Submittals

When the submittal includes a document that is to be used in the project or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

1.5.3 Source Drawings for Shop Drawings

1.5.3.1 Source Drawings

The entire set of source drawing files (DWG) will not be provided to the Contractor. Request the specific Drawing Number for the preparation of shop drawings. Only those drawings requested to prepare shop drawings will be provided. These drawings are provided only after award.

1.5.3.2 Terms and Conditions

Data contained on these electronic files must not be used for any purpose

other than as a convenience in the preparation of construction data for the referenced project. Any other use or reuse is at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim, and waives to the fullest extent permitted by law any claim or cause of action of any nature against the Government, its agents, or its subconsultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities, or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic source drawing files are not construction documents. Differences may exist between the source drawing files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic source drawing files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. The Contractor is responsible for determining if any conflict exists. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished source drawing files, the signed and sealed construction documents govern. Use of these source drawing files does not relieve the Contractor of the duty to fully comply with the contract documents, including and without limitation the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction data related to this contract, remove all previous indication of ownership (seals, logos, signatures, initials and dates).

1.5.4 Electronic File Format

Provide submittals in electronic format, with the exception of material samples required for SD-04 Samples items. Compile the submittal file as a single, complete document, to include the Transmittal Form described within, and also separately attach the native files which were used to create PDF. The attached files should include the original digital files used to create the submittal. Name the electronic submittal file specifically according to its contents, and coordinate the file naming convention with the Contracting Officer. Electronic files must be of sufficient quality that all information is legible. Use PDF as the electronic format, unless otherwise specified or directed by the Contracting Officer. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is searchable and can be copied. If documents are scanned, optical character resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature or a scan of a signature.

E-mail electronic submittal documents smaller than 10MB to an e-mail address as directed by the Contracting Officer. Provide electronic documents over 10 MB on an optical disc or through an electronic file sharing system such as the DOD SAFE Web Application located at the following website: https://safe.apps.mil/.

1.6 QUANTITY OF SUBMITTALS

1.6.1 Number of SD-01 Preconstruction Submittal Copies

Unless otherwise specified, submit two sets of administrative submittals.

1.6.2 Number of SD-04 Samples

a. Submit two samples, or two sets of samples showing the range of variation, of each required item. One approved sample or set of samples will be retained by the approving authority and one will be returned to the Contractor.

b. Submit one sample panel or provide one sample installation where directed. Include components listed in the technical section or as directed.

c. Submit one sample installation, where directed.

d. Submit one sample of nonsolid materials.

1.7 INFORMATION ONLY SUBMITTALS

Submittals without a "G" designation must be certified by the QC manager and submitted to the Contracting Officer for information-only. Provide information-only submittals to the Contracting Officer a minimum of 14 calendar days prior to the Preparatory Meeting for the associated Definable Feature of Work (DFOW). Approval of the Contracting Officer is not required on information only submittals. The Contracting Officer will mark "receipt acknowledged" on submittals for information and will return only the transmittal cover sheet to the Contractor. Normally, submittals for information only will not be returned. However, the Government reserves the right to return unsatisfactory submittals and require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.8 PROJECT SUBMITTAL REGISTER

A sample Project Submittal Register showing items of equipment and materials for when submittals are required by the specifications is provided as "Attachment A - Submittal Register."

1.8.1 Submittal Management

Prepare and maintain a submittal register, as the work progresses. Do not change data that is output in columns (c), (d), (e), and (f) as delivered by Government; retain data that is output in columns (a), (g), (h), and (i) as approved. As an attachment, provide a submittal register showing items of equipment and materials for which submittals are required by the specifications. This list may not be all-inclusive and additional submittals may be required. Maintain a submittal register for the project in accordance with Section 01 45 00.15 10 RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE(RMS CM). The Government will provide the initial

submittal register in electronic format with the following fields completed, to the extent that will be required by the Government during subsequent usage.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD Number. and type, e.g., SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in each specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting the project requirements.

Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns and all dates on which submittals are received by and returned by the Government.

1.8.2 Preconstruction Use of Submittal Register

Submit the submittal register. Include the QC plan and the project schedule. Verify that all submittals required for the project are listed and add missing submittals. Coordinate and complete the following fields on the register submitted with the QC plan and the project schedule:

Column (a) Activity Number: Activity number from the project schedule.

Column (g) Contractor Submit Date: Scheduled date for the approving authority to receive submittals.

Column (h) Contractor Approval Date: Date that Contractor needs approval of submittal.

Column (i) Contractor Material: Date that Contractor needs material delivered to Contractor control.

1.8.3 Contractor Use of Submittal Register

Update the following fields in the Government-furnished submittal register program or equivalent fields in the program used by the Contractor with each submittal throughout the contract.

Column (b) Transmittal Number: List of consecutive, Contractor-assigned numbers.

Column (j) Action Code (k): Date of action used to record Contractor's review when forwarding submittals to QC.

Column (l) Date submittal transmitted.

Column (q) Date approval was received.

1.8.4 Approving Authority Use of Submittal Register

Update the following fields:

Column (b) Transmittal Number: List of consecutive, Contractor-assigned numbers.

Column (l) Date submittal was received.

Column (m) through (p) Dates of review actions.

Column (q) Date of return to Contractor.

1.8.5 Action Codes

1.8.5.1 Contractor Action Codes

DESIGN BID BUILD SUBMITTALS			
Submittal Classifications shown in UFGS Sections	Submittal Classification	Corresponding SpecsIntact Submittal Register Code which is populated in the SI Submittal Register. Software Limitations: (The software shows one character delineation in the SpecsIntact Submittal Register)	RMS – The following Submittal Classifications are populated in RMS when the SpecsIntact Submittal Data File is pulled into RMS)
G	Submittal requires Government Approval	G	GA
BLANK	Submittal is For Information Only (FIO)	BLANK	FIO
S	Submittal is for documentation of Sustainable requirements	S	S/FIO

1.8.6 Delivery of Copies

Submit an updated electronic copy of the submittal register to the Contracting Officer with each invoice request. Provide an updated Submittal Register monthly regardless of whether an invoice is submitted.

1.9 VARIATIONS

Variations from the contract requirements require prior written approval by the Contracting Officer. Proposed variations may be considered when determined to be advantageous to the Government and consistent with the contract requirements. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.9.1 Considering Variations

Discussion of variations with the Contracting Officer before submission will help ensure that functional and quality requirements are met and minimize rejections and resubmittals. For variations that include design changes or some material or product substitutions, the Government may require an evaluation and analysis by a licensed professional engineer hired by the contractor.

Specifically point out variations from contract requirements in a transmittal letter. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

1.9.2 Proposing Variations

Specifically point out variations from contract requirements in a transmittal letter. Failure to point out variations may cause the Government to require rejection and removal of such work at no additional cost to the Government.

Check the column "variation" of ENG Form 4025 for submittals that include variations proposed by the Contractor. Set forth in writing the reason for any variations and note such variations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted variations.

1.9.3 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.

1.9.4 Review Schedule Extension

In addition to the normal submittal review period, a period of 7 calendar days will be allowed for the Government to consider submittals with variations.

1.10 SCHEDULING

Schedule and submit concurrently product data and shop drawings covering component items forming a system or items that are interrelated. Submit pertinent certifications at the same time. No delay damages or time extensions will be allowed for time lost in late submittals. .

a. Coordinate scheduling, sequencing, preparing, and processing of submittals with performance of work so that work will not be delayed by submittal processing. The Contractor is responsible for additional time required for Government reviews resulting from required resubmittals. The review period for each resubmittal is the same as for the initial submittal.

b. Submittals required by the contract documents are listed on the submittal register. If a submittal is listed in the submittal register but does not pertain to the contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the

contract documents but that have been omitted from the register or marked "N/A."

c. Resubmit the submittal register and annotate it monthly with actual submission and approval dates. When all items on the register have been fully approved, no further resubmittal is required.

Contracting Officer review will be completed within 7 calendar days after the date of submission.

1.11 GOVERNMENT APPROVING AUTHORITY

When the approving authority is the Contracting Officer, the Government will:

a. Note the date on which the submittal was received.

b. Review submittals for approval within the scheduling period specified and only for conformance with project design concepts and compliance with contract documents.

c. Identify returned submittals with one of the actions defined in paragraph REVIEW NOTATIONS and with comments and markings appropriate for the action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date submittals. 2 copies of the submittal will be retained by the Contracting Officer and 2 copies of the submittal will be returned to the Contractor.

1.11.1 Review Notations

Submittals will be returned to the Contractor with the following notations:

a. Submittals marked "approved" or "accepted" authorize proceeding with the work covered.

b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize proceeding with the work covered provided that the Contractor takes no exception to the corrections.

c. Submittals marked "not approved," "disapproved," or "revise and resubmit" indicate incomplete submittal or noncompliance with the contract requirements or design concept. Resubmit with appropriate changes. Do not proceed with work for this item until the resubmittal is approved.

d. Submittals marked "not reviewed" indicate that the submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.

e. Submittals marked "receipt acknowledged" indicate that submittals have been received by the Government. This applies only to "information-only submittals" as previously defined.

1.12 DISAPPROVED SUBMITTALS

Make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications, give notice to the Contracting Officer. The Contractor is responsible for the dimensions and design of connection details and the construction of work. Failure to point out variations may cause the Government to require rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, make such revisions and resubmit in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.13 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals is not to be construed as a complete check, and indicates only that

Approval or acceptance by the Government for a submittal does not relieve the Contractor of the responsibility for meeting the contract requirements or for any error that may exist, because under the Quality Control (QC) requirements of this contract, the Contractor is responsible for ensuring information contained with in each submittal accurately conforms with the requirements of the contract documents.

After submittals have been approved or accepted by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.14 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, provide assurance that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those that may be damaged in testing, will be returned to the Contractor, at its expense, upon completion of the contract. Unapproved samples will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make as that material. The Government reserves the right to disapprove any material or equipment that has previously proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Replace such materials or equipment to meet contract requirements.

1.15 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.16 CERTIFICATION OF SUBMITTAL DATA

Certify the submittal data as follows on Form ENG 4025: "I certify that the above submitted items had been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

_____NAME OF CONTRACTOR _____ SIGNATURE OF CONTRACTOR

CONTRACTOR

(Firm Name)

_____ Approved

_____ Approved with corrections as noted on submittal data and/or attached sheet (s)

SIGNATURE: _____

TITLE: _____

DATE: _____

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

U.S. Army Corps of Engineers (USACE)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

For use of this form, see ER 415-1-10; the proponent agency is CECW-CE.

DATE	TRANSMITTAL NO.

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (*This section will be initiated by the contractor*)

TO:	FROM:	CONTRACT NO.	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (*Cover only one section with each transmittal*)	PROJECT TITLE AND LOCATION	THIS TRANSMITTAL IS FOR: (*Check one*) ☐ FIO ☐ GA ☐ DA ☐ CR ☐ DA/CR ☐ DA/GA

ITEM NO. (*See Note 3*) a.	DESCRIPTION OF SUBMITTAL ITEM (*Type size, model number/etc.*) b.	SUBMITTAL TYPE CODE (*See Note 8*) c.	NO. OF COPIES d.	CONTRACT DOCUMENT REFERENCE		CONTRACTOR REVIEW CODE g.	VARIATION Enter "Y" if requesting a variation (*See Note 6*) h.	USACE ACTION CODE (*Note 9*) i.
				SPEC. PARA. NO. e.	DRAWING SHEET NO. f.			

REMARKS	I certify that the above submitted items had been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.	
	NAME OF CONTRACTOR	SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (*List by item No.*)	NAME AND TITLE OF APPROVING AUTHORITY	SIGNATURE OF APPROVING AUTHORITY	DATE

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each Transmittal shall be numbered consecutively. The Transmittal Number typically includes two parts separated by a dash (-). The first part is the specification section number. The second part is a sequential number for the submittals under that spec section. If the Transmittal is a resubmittal, then add a decimal point to the end of the original Transmittal Number and begin numbering the resubmittal packages sequentially after the decimal.

3. The "Item No." for each entry on this form will be the same "Item No." as indicated on ENG FORM 4288-R.

4. Submittals requiring expeditious handling will be submitted on a separate ENG Form 4025-R.

5. Items transmitted on each transmittal form will be from the same specification section. Do not combine submittal information from different specification sections in a single transmittal.

6. If the data submitted are intentionally in variance with the contract requirements, indicate a variation in column h, and enter a statement in the Remarks block describing he detailed reason for the variation.

7. ENG Form 4025-R is self-transmitting - a letter of transmittal is not required.

8. When submittal items are transmitted, indicate the "Submittal Type" (*SD-01 through SD-11*) in column c of Section I.
   Submittal types are the following:
   SD-01 - Preconstruction SD-02 - Shop Drawings SD-03 - Product Data SD-04 - Samples SD-05 - Design Data SD-06 - Test Reports
   SD-07 - Certificates SD-08 - Manufacturer's Instructions SD-09 - Manufacturer's Field Reports SD-10 - O&M Data SD-11 - Closeout

9. For each submittal item, the Contractor will assign Submittal Action Codes in column g of Section I. The U.S. Army Corps of Engineers approving authority will assign Submittal Action Codes in column i of Section I. The Submittal Action Codes are:
   A – Approved as submitted.
   B – Approved, except as noted on drawings. Resubmission not required.
   C – Approved, except as noted on drawings. Refer to attached comments. Resubmission required.
   D – Will be returned by separate correspondence.
   E – Disapproved. Refer to attached comments.
   F – Receipt acknowledged.
   X – Receipt acknowledged, does not comply with contract requirements, as noted.
   G – Other action required *(Specify)*
   K – Government concurs with intermediate design. (*For D-B contracts*)
   R – Design submittal is acceptable for release for construction. (*For D-B contracts*)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract.

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
B90176 Hangar Door Expansion (HADES)

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # RAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 30 00	SD-01 Preconstruction Submittals															
			View Location Map	1.3														
			Progress and Completion	1.4														
			Pictures															
			Field Office Overhead	1.7														
			Field Office Overhead	1.7.1														
			Field Office Overhead	1.7.2														
			Accounting Practice	1.7														
			Delegation Of Authority	1.8														
			SD-11 Closeout Submittals															
			High-Resolution Exterior	1.4.1														
			Panoramic Photographs															
		01 32 01.00 10	SD-01 Preconstruction Submittals															
			Project Scheduler Qualifications	1.3	G													
			Preliminary Project Schedule	3.4.1	G													
			Initial Project Schedule	3.4.2	G													
			Periodic Schedule Update	3.6.2	G													
		01 33 00	SD-01 Preconstruction Submittals															
			Submittal Register	1.8	G													
		01 35 10.00 44	SD-02 Shop Drawings															
			Hardware schedule		G													
			Keying system															
			Electro-Mechanical Devices		G													
			SD-03 Product Data															
			Casing Pipe	1.9.3														

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		01 35 10.00 44	Paint Usage and Safety Data															
			Sheet (SDS)															
			Air Emission Inventory															
			Certificate of Conformity for New															
			Generators															
			Backflow Prevention Assembly															
			Vacuum Breakers															
			SD-04 Samples															
			Plastic Marking Tape and Tracer	1.9.2	G													
			Wire															
			Locks and Latches		G													
			SD-07 Certificates															
			Customer Service Inspections	1.23														
			Customer Service Inspection	3.1.2														
			Certificate															
			Digging And Water Use Permits	1.7.1														
			Army Radiation Permits (ARP)	1.7.3														
			Landfill Permit	1.19.1														
			Landfill Permit	3.1.1														
		01 35 26	SD-01 Preconstruction Submittals															
			Accident Prevention Plan (APP)	1.8	G													
			SD-06 Test Reports															
			Accident Reports	1.12.2	G													
			LHE Inspection Reports	1.12.3														
			Monthly Exposure Reports	1.5	G													
			SD-07 Certificates															

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		01 35 26	Activity Hazard Analysis (AHA)	1.9	G													
			Certificate of Compliance	1.12.4														
			Hot Work Permit	1.13														
			License Certificates	1.14														
			Portable Gauge Operations	1.14.1	G													
			Planning Worksheet															
			Radiography Operation Planning	1.14.1	G													
			Work Sheet															
			Standard Lift Plan	1.12.4	G													
		01 45 00	SD-01 Preconstruction Submittals															
			Contractor Quality Control (CQC)	1.5.2	G													
			Plan															
			SD-06 Test Reports															
			Verification Statement	1.12.3														
		01 45 35	SD-06 Test Reports															
			Special Inspection Daily Reports	3.1.1														
			Special Inspection Daily Reports	3.1.2														
			Special Inspection Biweekly	3.1.1														
			Reports															
			SD-07 Certificates															
			AISC Certified Steel Fabricator	2.1														
			Certificate of Compliance	2.1														
			SD-11 Closeout Submittals															
			Comprehensive Final Report	3.1.2	G													
		01 50 00	SD-01 Preconstruction Submittals															
			Construction Site Plan	1.3	G													

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		01 50 00	Traffic Control Plan	3.3.1	G													
			Haul Road Plan	2.2.1	G													
			Contractor Computer	1.5.1.4	G													
			Cybersecurity Compliance															
			Statements															
			Contractor Temporary Network		G													
			Cybersecurity Compliance															
			Statements															
		01 57 19	SD-01 Preconstruction Submittals															
			Contractor Hazardous Material		G	RO												
			Inventory Log															
			Storage Material Inventory															
			Preconstruction Survey	1.5.1														
			Regulatory Notifications	1.5.2														
			Environmental Manager															
			Qualifications															
			Employee Training Records	1.5.4														
			Environmental Protection Plan	1.6	G	RO												
			Dirt and Dust Control Plan	1.6.8.1														
			Solid Waste Management Permit	1.10														
			Spill Prevention Control And	3.8.2	G	RO												
			Countermeasure (SPCC) Plan															
			SD-06 Test Reports															
			Monthly Solid Waste Disposal	1.10.1	G													
			Report															
			SD-07 Certificates															

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		01 57 19	Employee Training Records	1.5.4	G													
			Certificate of Competency	1.5.4.1														
			SD-11 Closeout Submittals															
			Contractor Hazardous Material		G	RO												
			Inventory Log															
			Regulatory Notifications	1.5.2	G	RO												
			Assembled Employee Training	1.5.4	G	RO												
			Records															
			Solid Waste Management Permit	1.10	G													
			Waste Determination	3.5.1	G	RO												
			Documentation															
			Project Solid Waste Disposal	3.5.2.1	G	RO												
			Documentation Report															
			Sales Documentation	3.5.2.1	G													
			Hazardous Waste/Debris		G	RO												
			Management															
			Disposal Documentation for		G	RO												
			Hazardous and Regulated Waste															
		01 58 00	SD-02 Shop Drawings															
			Sign Legend Orders	1.3.1	G													
		01 71 23.00 44	SD-01 Preconstruction Submittals															
			Survey Data	3.1														
		01 74 19	SD-01 Preconstruction Submittals															
			Construction Waste Management	1.6	G													
			Plan															
			SD-06 Test Reports															

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		01 74 19	Monthly Reporting	1.8.2														
			SD-11 Closeout Submittals															
			Final Construction Waste	1.9	S													
			Diversion Report															
		01 78 00	SD-02 Shop Drawings															
			Preliminary Record Drawings	1.5.1														
			Final Record Drawings	1.5.1.1														
			Final Record Drawings	1.5.1.2														
			SD-03 Product Data															
			Warranty Management Plan	1.9.1														
			Warranty Tags	1.9.5														
			Spare Parts Data	1.7														
			warranty report	1.9.4														
			Inventory of Contractor Furnished															
			and Insttalled Equipment															
			video	3.6.1.1														
			Red Zone Meeting	3.6.5														
			SD-08 Manufacturer's Instructions															
			Instructions	1.9.1														
			SD-10 Operation and Maintenance															
			Data															
			Operation and Maintenance	3.6	G													
			Manuals															
			SD-11 Closeout Submittals															
			As-Built Drawings	3.1	G													
			Record Drawings	3.3	G													

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		01 78 00	As-Built Record of Equipment	3.5														
			and Materials															
			Warranted Equipment and	1.9.1														
			Materials															
			Final Approved Shop Drawings	3.4	G													
			Certification of EPA Designated		G													
			Items															
			Certification Of USDA Designated	2.2	G													
			Items															
			List Of Installed Building															
			Equipment Items For DD Form															
			1354															
		01 78 23	SD-10 Operation and Maintenance															
			Data															
			Training Plan	3.1.1	G													
			Training Outline	3.1.3	G													
			Training Content	3.1.2	G													
			Operation And Maintenance	3.2.1	G													
			Manual, Progress Submittal															
			Operation And Maintenance	3.2.2	G													
			Manual, Prefinal Submittal															
			Operation And Maintenance	3.2.3	G													
			Manual, Final Submittal															
			SD-11 Closeout Submittals															
			Training Video Recording	3.1.4	G													
			Validation of Training Completion	3.1.6	G													

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		01 78 23	Training Plan	3.1.1	G													
			Record Drawings And Utility	1.5.6.7	G													
			Systems															
		02 41 00	SD-01 Preconstruction Submittals															
			Demolition Plan	1.2.2	G CO													
			Existing Conditions	1.11														
			SD-07 Certificates															
			Notification	1.7	G CO													
		03 30 53	SD-02 Shop Drawings															
			Installation Drawings	1.4	G													
			SD-03 Product Data															
			Accelerating Admixture	2.2.3.2														
			Water-Reducing or Retarding	2.2.3.3														
			Admixture															
			Curing Materials	2.2.11														
			Expansion Joint Filler Strips,	2.2.6														
			Premolded															
			Joint Sealants - Field Molded	2.2.7														
			Sealants															
			Batching and Mixing Equipment	3.1.4.3														
			Conveying and Placing Concrete	3.2														
			Formwork	2.2.8														
			Mix Design Data	2.3	G													
			Ready-Mix Concrete	2.3														
			Curing Compound	2.4.1														
			SD-06 Test Reports															

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		03 30 53	Aggregates	2.2.2														
			Concrete Mixture Proportions	2.1.3	G													
			Compressive Strength Testing	3.8.3	G													
			Slump	3.8.3	G													
			Air Content	3.8.3														
			Water	2.2.4														
			SD-07 Certificates															
			Cementitious Materials	2.2.1														
			Pozzolan	2.2.1.2														
			Aggregates	2.2.2														
			Delivery Tickets	2.3														
			SD-08 Manufacturer’s Instructions															
			Curing Compound	2.4.1														
		05 05 23.16	SD-01 Preconstruction Submittals															
			Welding Quality Assurance Plan	3.2	G													
			SD-03 Product Data															
			Welding Procedure Qualifications	1.3	G													
			Welder, Welding Operator, and	1.3.4														
			Tacker Qualification															
			Previous Qualifications	1.3.2														
			Pre-Qualified Procedures	1.3.3	G													
			Welding Electrodes and Rods	2.2														
			SD-06 Test Reports															
			Nondestructive Testing	3.3														
			Weld Inspection Log	3.2														
			SD-07 Certificates															

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		05 05 23.16	Certified Welding Procedure	1.3.1														
			Specifications (WPS)															
			Certified Procedure Qualification	1.3.1														
			Records (PQR)															
			Certified Welder Performance	1.3.1														
			Qualifications (WPQ)															
			Certified Welding Inspector	1.3.5														
			Nondestructive Testing Personnel	1.3.5														
		05 12 00	SD-01 Preconstruction Submittals															
			Erection and Erection Bracing	1.4.1.1	G													
			Drawings															
			SD-02 Shop Drawings															
			Fabrication Drawings	1.4.2	G													
			SD-03 Product Data															
			Shop Primer	2.6.2														
			Welding Electrodes and Rods	2.4.1														
			Direct Tension Indicator Washers	2.3.2.3														
			Non-Shrink Grout	2.4.2														
			Tension Control Bolts	2.3.3														
			Recycled Content for Structural	2.2.1	S													
			Steel															
			Recycled Content for Structural	2.2.2	S													
			Steel Tubing															
			Recycled Content for Steel Pipe	2.2.3	S													
			SD-05 Design Data															
			Shoring and Temporary Bracing	1.4.2	G													

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		05 12 00	SD-06 Test Reports															
			Bolts, Nuts, and Washers	2.3														
			Weld Inspection Reports	3.7.1.2														
			Direct Tension Indicator Washer	3.7.2.1														
			Inspection Reports															
			Bolt Testing Reports	3.7.3.1														
			SD-07 Certificates															
			Steel	2.2														
			Bolts, Nuts, and Washers	2.3														
			Galvanizing	2.5														
			AISC Structural Steel Fabricator	1.3														
			Quality Certification															
			AISC Structural Steel Erector	1.3														
			Quality Certification															
			Welding Procedures and	1.4.3.1														
			Qualifications															
			Welding Electrodes and Rods	2.4.1														
			Certified Welding Inspector	3.7.1.1														
			NDT Technician	3.7.1.2														
			Welding Procedure Specifications	3.4														
			(WPS)															
		05 50 13	SD-02 Shop Drawings															
			Floor Gratings	2.3	G													
			Bollards/Pipe Guards	2.4	G													
			Angles and Plates	2.5	G													
			SD-03 Product Data															

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		05 50 13	Floor Gratings	2.3	G													
			Recycled Content		S													
			SD-07 Certificates															
			Certificates of Compliance		G													
			Certified Mill	2.1	G													
		05 51 33	SD-02 Shop Drawings															
			Ladders	2.4														
			SD-03 Product Data															
			Ladders	2.4														
			Ladder Safety Devices	2.4.2														
			SD-07 Certificates															
			Fabricator Certification for Ladder	1.3														
			Assembly															
		05 52 00	SD-02 Shop Drawings															
			Fabrication Drawings	1.2.1	G													
			Fabrication Drawings	1.5.1	G													
			Iron and Steel Hardware	3.2	G													
			Steel Shapes, Plates, Bars and	3.2	G													
			Strips															
			SD-03 Product Data															
			Protective Coating	2.1.2	G													
			Steel Railings and Handrails	2.2.8	G													
			Anchorage and Fastening	1.2.1	G													
			Systems															
			SD-06 Test Reports															
			Welding Inspections	1.4.1	G													

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		05 52 00	Mill Test Reports	2.3	G													
			SD-07 Certificates															
			Welder Qualification	1.4.2	G													
			SD-08 Manufacturer's Instructions															
			Installation Instructions	3.2														
		07 21 16	SD-03 Product Data															
			Blanket Insulation	2.1	G	AE												
			Recycled Content for Insulation	2.1.1	S													
			Materials															
			Energy Star Label for Insulation	2.1.2	S													
			Materials															
			Accessories	2.3														
			SD-07 Certificates															
			Indoor Air Quality for Insulation	2.1.4	S													
			Materials															
			Indoor Air Quality for Adhesives	2.3.1	S													
			SD-08 Manufacturer's Instructions															
			Insulation	3.2.1														
		07 27 10	SD-02 Shop Drawings															
			Air Barrier System Shop	2.1	G	RO												
			Drawings															
			SD-03 Product Data															
			Air Barrier System Product Data	2.1	G	AE												
			SD-04 Samples															
			Material Samples For Air Barrier	2.1	G	AE												
			System															

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ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # RAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
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		07 27 10	SD-06 Test Reports															
			Inspection	3.1.2	G	RO												
		07 27 19.01	SD-01 Preconstruction Submittals															
			Qualifications of Manufacturer	1.6.1	G	AE												
			Qualifications of Installer	1.6.2	G	AE												
			SD-02 Shop Drawings															
			Self-adhering Air Barrier Shop	1.4.1	G	AE												
			Drawings															
			SD-03 Product Data															
			Self-adhering Air Barrier	2.1	G	AE												
			Primers, Adhesives, and Mastics	2.2	G	AE												
			Safety Data Sheets	1.4.2	G	AE												
			SD-04 Samples															
			Self-adhering Air Barrier System	1.4.3	G	AE												
			Mockup															
			SD-06 Test Reports															
			Field Peel Adhesion Test	1.6.3	G	AE												
			Flame Propagation of Wall	1.4.4	G	AE												
			Assemblies															
			Site Inspections and Testing	3.4.1	G	AE												
			SD-08 Manufacturer’s Instructions															
			Self-adhering Air Barrier	1.4.2	G	AE												
			Manufacturer's Printed Instructions															
			Primers, Adhesives, and Mastics	2.2	G	AE												
		07 42 13	SD-01 Preconstruction Submittals															
			Qualification of Manufacturer	1.4.3	G	RO												

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		07 42 13	Qualification of Installation	1.4.4	G	RO												
			Contractor															
			Warranty	1.7	G	RO												
			SD-02 Shop Drawings															
			Installation Drawings	1.4.1.1	G	RO												
			SD-03 Product Data															
			Recycled Content;	2.2	S													
			Steel Sheet Panels	2.3.2	G	AE												
			Factory Color Finish	2.3.3														
			Closure Materials	1.4.5														
			Pressure Sensitive Tape	2.3.6.6														
			Sealants and Caulking	2.3.6.3														
			Galvanizing Repair Paint	1.4.3.1														
			Enamel Repair Paint	1.4.3.1														
			Accessories	2.3.6														
			SD-04 Samples															
			Steel Sheet Panels	2.3.2	G	AE												
			Fasteners	1.4.3.1	G	AE												
			Metal Closure Strips	2.3.6.2	G	AE												
			SD-05 Design Data															
			Wind Load Design Analysis	1.4.1.2	G	AE												
			SD-06 Test Reports															
			Leakage Tests	3.5.1	G	RO												
			Wind Load Tests	2.1.2	G	RO												
			Coating	2.3.3.6	G	RO												
			Chalking	2.3.3.6	G	RO												

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		07 42 13	Seismic Tests	2.1.2	G	RO												
			SD-07 Certificates															
			Coil Stock	1.4.3.1	G	RO												
			Fasteners	1.4.3.1	G	AE												
			Galvanizing Repair Paint	1.4.3.1	G	AE												
			Enamel Repair Paint	1.4.3.1	G	AE												
			SD-08 Manufacturer’s Instructions															
			Installation	3.3.1	G	RO												
			SD-09 Manufacturer’s Field															
			Reports															
			Manufacturer's Field Inspection	3.5.4.1.2	G	PO												
			Reports															
			SD-11 Closeout Submittals															
			Warranty	1.7	G	RO												
			Maintenance Instructions	1.4.6	G	RO												
			20 Year 'No Dollar Limit'	1.7.1														
			Warranty for Labor and Material															
		07 60 00	SD-02 Shop Drawings															
			Exposed Sheet Metal	2.2.1	G	PO												
			Expansion Joints	3.1.17	G	AE												
			Gravel Stops and fascia	2.2.1	G	AE												
			Counterflashing	3.1.10	G	AE												
			Reglets	2.2.15	G	AE												
			Copings	3.1.19	G	AE												
			Drip Edges	3.1.14	G	AE												
			Recycled Content	2.1	S													

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		07 60 00	SD-04 Samples															
			Finish Samples	1.4.2	G	AE												
			SD-07 Certificates															
			Warranty on Finishes	2.2.12.1	G	AE												
			SD-08 Manufacturer’s Instructions															
			Instructions for Installation	1.4.3	G													
			SD-10 Operation and Maintenance															
			Data															
			Cleaning and Maintenance	1.4.3	G	PO												
		07 92 00	SD-03 Product Data															
			Sealants	2.1	G	AE												
			Primers	2.2	G	AE												
			Bond Breakers	2.3	G	AE												
			Backstops	2.4	G	AE												
			Cleaning Solvents	2.5	G	AE												
			SD-06 Test Reports															
			Field Adhesion	3.1	G	PO												
			SD-07 Certificates															
			Indoor Air Quality For Interior	2.1.1	S													
			Sealants															
			Indoor Air Quality For Interior	2.1.3	S													
			Floor Joint Sealants															
		08 11 13	SD-02 Shop Drawings															
			Doors	2.1	G	AE												
			Frames	2.4	G	AE												
			Accessories	2.2														

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		08 11 13	SD-03 Product Data															
			Doors	2.1	G	AE												
			Recycled Content for Steel Door Product	2.1	S													
			Frames	2.4	G	AE												
			Recycled Content for Steel Frame Product	2.4	S													
			Accessories	2.2														
		08 34 16.20	SD-01 Preconstruction Submittals															
			Manufacturer's Qualifications	1.4.1	G	AE												
			Installer's Qualifications	1.4.2	G	AE												
			SD-02 Shop Drawings															
			Door Design	1.3.1	G	AE												
			SD-03 Product Data															
			Electric Operator	2.3	G	AE												
			Motors	2.3.5	G	AE												
			Doors	2.2	G	AE												
			Controls	2.3.6	G	AE												
			Door Fabric	2.1.7	G	AE												
			Surge Protection Device (SPD)	2.3.6.1	G	AE												
			SD-05 Design Data															
			Calculations	1.3.2.1	G	AE												
			Door Load Diagrams	1.3.4	G	AE												
			Door Compliance Matrix	1.3.1	G	AE												
			SD-06 Test Reports															
			Safety Arrester Operation Test	2.3.3.1	G	AE												

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		08 34 16.20	Door Fabric	2.1.7	G	AE												
			Door Fabric	2.1.7	G	AE												
			Door Fabric Connection	2.2.1	G	AE												
			Weld Inspection Report	3.2.2	G	AE												
			SD-07 Certificates															
			Manufacturer's Qualifications	1.4.1	G	AE												
			Installers Qualifications	1.4.2	G	AE												
			Welding Procedures and	1.5	G	AE												
			Qualifications															
			SD-09 Manufacturer’s Field															
			Reports															
			Acceptance Testing Procedure	3.5	G	AE												
			SD-10 Operation and Maintenance															
			Data															
			Door Operation	2.9.1	G	AE												
			Emergency and Routine	1.4.3.1	G	AE												
			Preventative Maintenance Plan															
			SD-11 Closeout Submittals															
			Acceptance Testing Procedure	3.5	G	AE												
			Warranty	1.4.3	G	AE												
		08 71 00	SD-02 Shop Drawings															
			Manufacturer's Detail Drawings	1.3	G	AE												
			Verification of Existing Conditions	1.3	G	AE												
			Hardware Schedule	1.5	G	AE												
			Keying System	2.3.6	G	AE												
			SD-03 Product Data															

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		08 71 00	Hardware Items	2.3	G AE													
			SD-08 Manufacturer's Instructions															
			Installation	3.1														
			SD-10 Operation and Maintenance															
			Data															
			Hardware Schedule	1.5	G AE													
		09 67 23.14	SD-02 Shop Drawings															
			Flooring Systems	2.2	G													
			SD-03 Product Data															
			Sealer and Resin	2.4	G													
			Floor Surfacing	3.3.2	G													
			Conductive Sparkproof Flooring	2.3	G													
			Indoor Air Quality for Primer	2.1.1	S													
			Indoor Air Quality for Top Coating	2.1.5	S													
			Indoor Air Quality for Sealer And	2.4	S													
			Resin															
			Mixing	3.2	G													
			SD-04 Samples															
			Flooring Systems	2.2	G													
			SD-06 Test Reports															
			Testing	3.4	G													
			SD-07 Certificates															
			Qualifications of Installer	1.3.1	G													
			Certification Letter from the	1.3.1														
			Manufacturer															
			SD-08 Manufacturer's Instructions															

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		09 67 23.14	Application	3.3	G													
			SD-10 Operation and Maintenance															
			Data															
			Flooring Systems	2.2	G													
		09 90 00	SD-03 Product Data															
			Coating	2.1	G													
			Product Data Sheets	2.1														
			SD-04 Samples															
			Color	2.2	G	AE												
			SD-07 Certificates															
			Indoor Air Quality for Paints and	1.5.4														
			Primers															
			Indoor Air Quality for	1.5.4														
			Consolidated Latex Paints															
			SD-08 Manufacturer’s Instructions															
			Mixing	2.1														
			Manufacturer's Safety Data	1.7.1														
			Sheets															
			SD-10 Operation and Maintenance															
			Data															
			Coatings	2.1	G													
		10 14 00.10	SD-02 Shop Drawings															
			Approved Detail Drawings	3.1	G													
			SD-03 Product Data															
			Installation	3.1														
			Exterior Signage	1.2	G													

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		10 14 00.10	Wind Load Requirements	1.2.1														
			SD-04 Samples															
			Exterior Signage	1.2	G													
			SD-10 Operation and Maintenance															
			Data															
			Protection and Cleaning	3.1.2	G													
		10 14 00.20	SD-02 Shop Drawings															
			Detail Drawings	1.3.2	G													
			SD-03 Product Data															
			Room Identification And	2.1	G													
			Directional Signage System															
			Exit Door Tactile Sign	2.2	G													
			SD-04 Samples															
			Interior Signage	1.3.1	G													
			Exit Door Tactile Sign	2.2	G													
			SD-10 Operation and Maintenance															
			Data															
			Approved Manufacturer's	3.1	G													
			Instructions															
			Protection and Cleaning	3.1.2	G													
		21 13 24.00 10	SD-02 Shop Drawings															
			Scope of Work Letter	1.3.3	G													
			SD-03 Product Data															
			Installer's Qualifications	1.3.2	G													
			SD-11 Closeout Submittals															
			As-Built Drawings	1.3.1	G													

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		22 00 00	SD-02 Shop Drawings															
			Plumbing System	3.5.1	G													
			SD-03 Product Data															
			Plumbing System	3.5.1														
			SD-06 Test Reports															
			Tests, Flushing and Disinfection	3.5														
			SD-07 Certificates															
			Materials and Equipment	1.4														
			Bolts	2.1.1														
			SD-10 Operation and Maintenance															
			Data															
			Plumbing System	3.5.1	G													
		22 15 26	SD-03 Product Data															
			Fittings	2.1.2														
			Identification Labels For Piping	2.2														
			SD-06 Test Reports															
			Leak Tightness Test	3.4.1.2														
			SD-10 Operation and Maintenance															
			Data															
			Cleaning Procedures	3.2.3	G													
			SD-11 Closeout Submittals															
			Compressed Air Systems	1.3														
		26 20 00	SD-03 Product Data															
			Switches	2.8	G													
			Receptacles	2.10	G													
			Circuit Breakers	2.11.3	G													

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		26 20 00	Fuses	2.9	G													
			Enclosed Circuit Breakers	2.12	G													
			Motor Controllers	2.14	G													
			SD-06 Test Reports															
			600-volt Wiring Test	3.5.2	G													
			Grounding System Test	3.5.5	G													
			SD-07 Certificates															
			Fuses	2.9	G													
			SD-10 Operation and Maintenance															
			Data															
			Electrical Systems	1.6.1	G													
		28 31 76	SD-01 Preconstruction Submittals															
			Qualified Fire Protection Engineer	1.2.2	G													
			(QFPE)															
			Fire alarm system designer	1.8.2.1	G													
			Supervisor	1.8.2.2	G													
			Technician	1.8.2.3	G													
			Installer	1.8.2.4	G													
			Test Technician	1.8.2.5	G													
			Fire Alarm System Site-Specific	1.6	G													
			Software Acknowledgement															
			SD-02 Shop Drawings															
			Nameplates	1.8.1.3	G													
			Wiring Diagrams	1.8.1.4	G													
			System Layout	1.8.1.5	G													
			Notification Appliances	1.8.1.6	G													

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		28 31 76	Initiating devices	1.8.1.7	G													
			Battery Power	1.8.1.8	G													
			Voltage Drop Calculations	1.8.1.9	G													
			SD-03 Product Data															
			Manual Stations	2.3	G													
			Addressable Interface Devices	2.4	G													
			Addressable Control Modules	2.5	G													
			Notification Appliances	1.8.1.6	G													
			Surge Protective Devices	2.7	G													
			Alarm Wiring	2.7	G													
			Back Boxes and Conduit	3.3.3	G													
			Document Storage Cabinet	3.11.3	G													
			SD-06 Test Reports															
			Test Procedures	3.7.1	G													
			SD-07 Certificates															
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			Installation															
			Request for Government Final	3.7.2.2	G													
			Test															
			SD-10 Operation and Maintenance															
			Data															
			Operation and Maintenance	3.9	G													
			(O&M) Instructions															
			Instruction of Government	3.10	G													
			Employees															
			SD-11 Closeout Submittals															

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
B90176 Hangar Door Expansion (HADES)

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		28 31 76	As-Built Drawings	1.8.1.12														
			Spare Parts	1.10.1														
		32 01 19.61	SD-03 Product Data															
			Sealants	2.1														
			Manufacturer's	3.4.2														
			Recommendations															
			SD-04 Samples															
			Sealants	2.1														
			Blocking Media/Backup Materials	2.3.1														
			Backer Rod	3.2.4.1														
			Bond Breaking Tapes	2.3.2														
			SD-06 Test Reports															
			Sealants	2.1														
			SD-07 Certificates															
			Equipment List	3.1														
			SD-08 Manufacturer’s Instructions															
			Sealants	2.1														
		32 11 20	SD-03 Product Data															
			Plant, Equipment, and Tools	2.3	G													
			SD-06 Test Reports															
			Initial Tests	2.2.1	G													
			In-Place Tests	3.11.1	G													
		32 13 14.13	SD-01 Preconstruction Submittals															
			Proposed Techniques	3.1.2	G													
			Preliminary Proposed	2.13.2	G													
			Proportioning															

SUBMITTAL REGISTER

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B90176 Hangar Door Expansion (HADES)

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ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		32 13 14.13	Pavement Quality Control Plan	1.3.2.3	G													
			SD-03 Product Data															
			Diamond Grinding Plan	2.1.7	G													
			Dowels	2.9.1	G													
			Dowel Bar Assemblies	2.9.2	G													
			Equipment	2.11	G													
			Concrete Patching Mixture	2.1.5	G													
			SD-05 Design Data															
			Proportioning Studies	2.13.2	G	DO												
			SD-06 Test Reports															
			Sampling and Testing	2.1.4.1	G													
			Diamond Grinding of PCC	2.1.7	G													
			Surfaces															
			Repair Recommendations Plan	3.9.1	G													
			Paving Lot Report	3.12.5	G													
			SD-07 Certificates															
			Contractor Quality Control (CQC)	1.3.1	G													
			Staff															
			Laboratory Accreditation and	1.3.2	G													
			Validation															
			Commercial Laboratory	1.3.2	G													
		32 13 73.19	SD-03 Product Data															
			Equipment	2.1														
			Manufacturer's Instructions	3.1.1														
			SD-04 Samples															
			Compression Seals	2.2	G													

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
B90176 Hangar Door Expansion (HADES)

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		32 13 73.19	SD-06 Test Reports															
			Test Requirements	2.1.3	G													
		33 40 00	SD-08 Manufacturer's Instructions															
			Placing Pipe	3.3	G													
			SD-11 Closeout Submittals															
			Post-Installation Inspection	3.6.2.1.2	G													
			Report															

SECTION 01 35 10.00 44

SPECIAL PROJECT PROCEDURES FOR FORT HOOD (FORMERLY KNOWN AS FORT CAVAZOS)

PART 1 GENERAL

There are documents that are still referred to under the Fort Cavazos name while the Installation name has been updated to Fort Hood. There are places throughout the document where the name may not be updated as those document names have not been changed or no current version with the name change exist to date.

This Section covers the project requirements unique to Fort Hood, Texas. These unique requirements relate to items such as the digging permit process;tracer wire and marking tape specifications for the location of utility systems; Fort Hood landfill operations and permit requirements; local jacking, boring, and tunneling requirements; backflow prevention assembly documentation; and Customer Service Inspection certifications.

1.1 Installation Entrance Requirements

All personnel accessing Fort Hood must have DOD affiliation or be vetted at the Visitors' Welcome Center and issued a pass before being allowed onto Fort Hood. Contractor employees working at Fort Hood will be issued an extended pass once they have been vetted.

1.1.1 Vetting Requirements

Entry Requirements for person without a Valid DOD ID Card requesting unescorted access:
•A valid purpose for entering the installation; (Attend Meeting, visit Museum, Job interview, etc.)
•Valid driver's license
•Current vehicle registration (If operating a vehicle)
•Proof of current insurance (If operating a vehicle)
•License plate number
•Provide the destination, name of facility, building number, street address, or unit name/designation

Upon satisfying the above criteria and vetting requirements an Installation access pass/badge will be issued to the person.

NOTE: All unescorted visitors and all vehicle passengers (riding in these vehicles) will proceed to the Visitors Welcome Center (VWC) and receive a security screening. All vehicle occupant names will be included on an Installation Visitors Pass. Security personnel will verify all occupants ID with names on visitor passes at Installation Access Control Points (IACP) prior to providing installation access.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN WATER OPERATIONS AND MAINTENANCE

AWO&M

American Water Operations & Maintenance, Inc. (AWO&M) Design Guide http://www.amwater.com/products-and-services/military-services/specifications-and-details/hood/index.html#designguide

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C651 (2014) Standard for Disinfecting Water Mains

ASTM INTERNATIONAL (ASTM)

ASTM A53/A53M (2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

ANSI/BHMA A156.4 (2024) Door Controls - Closers

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Hardware schedule; G

Submit a door hardware schedule, similar to Door Hardware Institute's (DHI)"Vertical Hardware Schedule for Typical Openings"), listing all items to be furnished.

Keying system

Electro-Mechanical Devices and Accessories; G

Detail drawings for hardware devices for computerized keying systems, magnetic cards, keyless push button access control systems, and other electrical hardware devices showing complete wiring and schematic diagrams and other details required to demonstrate proper function of units.

SD-03 Product Data

Casing Pipe

10 days prior to jacking, boring, and tunneling activity, furnish catalog data for casing pipe.

Paint Usage and Safety Data Sheet (SDS)

Submit two copies of all paint systems for this contract and the associated SDS. One copy for the Contracting Officer Representative (COR) and the other copy for the Air Quality Manager (telephone, 254-287-5284), DPW Environmental Division.

Air Emission Inventory

Submit a copy of air emission inventory Clean Air Act Program Office on each type of mechanical equipment and the number of units to be installed for the new facility to facilitate annual revision of Federal Air Permit Title V. The Contractor should use the manufacturer equipment information to prepare submittal of Air Emission Inventory

Certificate of Conformity for New Generators

Submit a copy of Environmental Protection Agency issued Certificate of Conformity for all new generators to the Clean Air Act Team to be installed to facilitate annual revision of Federal Title V Air Permit.

Door hardware manufacturer's descriptive data, technical literature, catalog cuts, installation instructions, manufacturer warranties, and spare parts data. Spare parts data for locksets, exit devices, closers, electric locks, electric strikes, electro-magnetic closer holder release devices, and electric exit devices, after approval of the detail drawings, and not later than 3 months prior to the date of acceptance of the facility by the Contracting Officer. The data shall include a complete list of parts and supplies, with current unit prices and source of supply.

SD-04 Samples

Plastic Marking Tape and Tracer Wire; G

10 days prior to installation of utilities, furnish 12 inch long samples of marking tape for each applicable utility. Furnish 12 inch long sample of the tracer wire.

Locks and Latches; G.

Furnish samples of the locksets, cylinders, cores, and keys to be furnished this project. Notify the Contracting Officer and base personnel for a meeting demonstrating that the locksets to be furnished are fully compatible with the project requirements and, if applicable, the existing keying system. An existing base core and/or cylinder and key will be fitted to the sample lockset.

SD-07 Certificates

Customer Service Inspections

The Contractor shall supply a "Customer Service Inspection" (CSI) certificate for the water supply in accordance with the Texas Commission on Environmental Quality (TCEQ) regulations. Prior to final inspection and acceptance of new construction or after any material improvement or addition to drinking water systems, furnish the completed and signed certificate to American Water

Operations & Maintenance, Inc. (AWO&M) (Bldg. 49002, 254-213-0382), through the Contracting Officer, for review and final approval. The ORIGINAL of the signed and dated form shall be delivered to AWO&M (Bldg. 49002). A blank certificate is located at the end of this section. See paragraph CUSTOMER SERVICE INSPECTIONS for additional information.

Customer Service Inspection Certificate

Digging And Water Use Permits

Digging permits must be obtained prior to any digging, drilling or excavation. See paragraph DIGGING PERMITS for additional information.

Army Radiation Permits (ARP)

Landfill Permit

Contractor shall obtain permission from Fort Hood Directorate of Public Works (DPW) to use the Fort Hood landfill. Submit documentation granting permission and a completed landfill permit to the Contracting Officer prior to start of construction. A blank permit form is located at the end of this section. See paragraph CONDITIONS FOR USE OF FORT HOOD LANDFILL for additional information.

1.4 FORT HOOD CADD AND GIS DELIVERABLES

1.4.1 Data Standards

Spatial Data Standard for Facilities, Infrastructure and Environment (SDSFIE) current release shall be followed for Geospatial database structure and attributes to allow for data integration. CADD data shall be documented according to the current release of the Architecture, Engineering and Construction (AEC)/CADD standards. All GIS and CADD data will be documented in accordance with the Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata. Deviations from the standard described above will be rejected.

1.4.2 Coordinate System Projection And Datum

All GIS data shall use the Universal Transverse Mercator Zone 14 North projection, World Geodetic System of 1984 (WGS84) datum, and the North American Vertical Datum of 1988 (NAVD88) using Metric as the working units to ensure data alignment and accuracy.

CADD data shall be geo-referenced in the State Plane Coordinate System 1983, using the North American 1983 Geodetic Datum with Survey Feet as the working units.

The projection, datum and coordinate system must be defined and then documented in the metadata for both CADD and GIS and provided whenever the data is distributed.

1.4.3 CADD And GIS Deliverables

All CADD deliverables of As-built drawings shall be delivered in a MicroStation V8.DGN compatible format.

All CADD references shall be removed from the submitted DGN file.

Files with raster's attached as the sole contents of the file are not acceptable. DGN files with vector edits made over an attached raster will be accepted.

Individual as-built sheets have one to one correspondences to individual dgn files.

Each dgn file will be named in such a way to easily reflect the order and As-Built sheet it represents.

A seed file can be obtained from the Fort Hood DPW CADD/GIS Center. If a seed file other than the Fort Hood seed file is used, the contractor must provide a copy of the file with the submittal.

GIS deliverables shall be delivered in current Bentley file format or an ArcGIS shape file format.

1.5 ENVIRONMENTAL PROTECTION PLAN

The environmental protection plan shall include all elements addressed in Section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS ENVIRONMENTAL PROTECTION, paragraph "Content." Include the following:

(a) List of all on-site regulated materials, Safety Data Sheet (SDS), List of Construction Materials and Products (mastic, sealants, etc.), and SDS shall be submitted through the Contracting Officer to the installation DPW-Environmental Office. .

(b) All required pre-construction permits, registration, notifications, certifications applicable to the Contract.

1.6 SURFACE WATER MANAGEMENT

1.6.1 Temporary Water Use Permit

All construction that requires the storage, obtaining, and diversion surface water flow, except potable water, requires a Temporary Water Use Permit per Texas Water Code (TWC) Chapter 11. The Contractor shall obtain the permit, provide a copy of the permit and monthly reports of total surface water usage to the installation environmental office until project completion and acceptance.

1.6.2 Riparian Buffer Zones

All construction to include woody vegetation removal shall remain at least 50 meters from streams in order to maintain riparian buffer zones and reduce erosion. A reduced buffer zone may be approved on a case-by-case basis by DPW Environmental Division, Natural and Cultural Resources Management Branch.

1.7 PERMITS

1.7.1 Digging And Water Use Permits

1.7.1.1 Digging Permits

The Contractor shall obtain digging permits directly from the Fort Hood Post DPW before any drilling, digging, or excavation is undertaken (254-287-6499). Provide a completed form FC 200-10 via usarmy.Cavazos.id-readiness.mbx.dpw-env-dig-permits@army.mil, Coordination for Land Excavation & Water Use, to the DPW Building 4622 , Fort Hood, Texas for each permit. A map with aerial imagery of the site must be attached to the excavation permit. Allow 30 days for Government review of digging permit requests. A digging permit for a specified area of excavation expires 15 days after the issue date; Contractor must re-apply for a new permit to perform excavation in the area if the excavation was not started within the 15-day period. Permits will identify all underground utilities within 5 feet of the designated area. Contractor shall be responsible for all repairs, costs, and damages due to excavating without permit or damaging an identified utility. Unidentified utilities shall be repaired by the Contractor at Government expense.

All personnel performing the digging, including all subcontractor personnel must be present at the digging permit inspection. Subcontractors must submit and obtain their own dig permit.

All personnel performing the digging, including all subcontractor personnel must be present at the digging permit inspection.

1.7.1.2 Water Use Permit

Contractor shall obtain a Fort Hood Water Use Permit directly from Fort Hood post DPW prior to any use of surface or ground water on Fort Hood. All usage of surface water or ground water must be coordinated in writing also using FC 200-10 with both the DPW Environmental Management Branch and Natural and Cultural Resources Management Branch, at least 30 days in advance of such a need. The information required includes the proposed use for the water, estimated dates of the operation, estimated amount of water to be used, and desired locations of the water source.

A temporary water use permit from the TCEQ will also be required (). Such permits can be anticipated to take a minimum of 30 days and require a $100 application fee plus other minor application-related expenses.

Any alteration to the stream such as dikes or other modifications involving placing fill in the stream would require a Section 404 Permit application and approval. This process is elaborate, and 180 days should be allowed for the process. Contact DPW Environmental Division, Natural and Cultural Resources Management Branch for assistance with this type of permit.

1.7.2 Clean Water Act Section 404 Permit

A Section 404 permit is required for any alteration to the stream such as dikes or other modifications which involve placing fill, excavation, or otherwise changing the bottom elevation in the stream. Depending on the activity and extent of impacts to the stream, coordination with and approval from USACE Fort Worth District Regulatory Branch may be required. If coordination with the USACE Fort Worth

District Regulatory Branch is necessary, acquiring approval may take 3-12 months depending on the level of permitting and coordination required. Contact DPW Environmental Division, Natural and Cultural Resources Management Branch early in the planning process for assistance with Section 404 permitting.

1.7.3 Army Radiation Permits (ARP)

Non-Army agencies (including other military services, vendors, and civilian contractors) require an ARP to use, store, or possess ionizing radiation sources on an Army installation (see 32 CFR 655). Non-Army applicants will apply by letter with supporting documentation (see para 2-4a, below) to the garrison commander. The letter should be submitted such that the garrison commander receives the application at least 30 days before the requested start date of the permit (see AR 385-10, chap 7).

a. The ARP application will specify start and stop dates for the ARP and describe the intended use of the radioactive material. For sealed sources, an affirmation that leak test requirements are current shall be included in the application. The garrison commander will approve the application only if the applicant provides evidence to show that one of the following is true:

(1) For installations that maintain exclusive Federal jurisdiction, and installations in NRC non-agreement states, the ARP applicant must possess one of the following that allows the applicant to use the source as specified in the ARP application:

(a) A valid NRC license.
(b) A Department of Energy (DOE) radiological work permit (for work performed under DOE regulations).
(c) A State radioactive material license with an NRC reciprocity agreement. The ARP applicant establishes reciprocity by submitting an NRC Form 241 (Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction or Offshore Waters) to the NRC in accordance with 10 CFR 150.20. The NRC limits work performed under a reciprocity agreement to 180 days in a calendar year. Otherwise, an NRC license is required.

1.8 OBSTRUCTION EVALUATION/AIRPORT AIRSPACE ANALYSIS (OE/AAA)

The project is located in proximity to Class D Airspace and therefore shall meet the requirements of 14 CFR Part 77.9. The Contractor shall utilize the obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website and ensure all requirements for notices to the FAA are met.

The contractor shall provide a Notice to Air Missions (NOTAMs) if any crane(s) will be used during construction. The NOTAMs shall be submitted to DAO Air Traffic and Airspace Officer.

1.9 UTILITY INSTALLATION REQUIREMENTS

1.9.1 American Water and Dominion Electric Requirements

The following utilities on Fort Hood are owned and operated by the following Government Contractors, identified as the System Owner; Dominion Privatization Texas, LLC for natural gas, electrical, and site lighting features, and American Water (AW) Enterprises Military Service Group for water and sanitary sewer. The Government will issue separate contracts to

the system owners for utility services for the project site, up to the point of demarcation for each utility, and the work may be performed concurrently with this construction contract. The contractor shall plan for and be prepared to share the construction site with system owners and/or their contractors. The Prime Contractor shall be responsible for finalizing a schedule with the System Owner(s) and include in activities for utility work (by others) in their project schedule. Work completed by the Systems Owner will not be included in project cost. Prime contractor will coordinate with the Privatized Utility COR to ensure proper coordination with the privatized utilities.

COR may be contacted at:

Dominic Miles
DLA Privatized Utilities COR
Ft Hood, TX
254-535-3188
Email: dominic.q.miles.civ@army.mil

Charlene Crawford
DLA Privatized Utilities COR
Ft Hood, TX
254-535-5170
Email:Charlene.r.crawford.civ@army.mil

Nimsi Carey
DLA Privatized Utilities COR
Ft Hood, TX
254-402-9397
E-mail: Nimsi.a.carey.civ@army.mil

DLA Privatized Utilities Inbox
Fort Hood, Texas
usarmy.cavazos.id-readiness.mbx.dpw-utility-privatization@army.mil

The System Owners may be contracted at:

Dominion Privatization Texas, LLC

Olivia Chee-Martin
Designer
Dominion Energy - Privatization Fort Hood, TX
49005 Santa Fe Avenue
Fort Hood, TX 76544
Cell: (254) 217-1242
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Walter Ezell
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49005 Santa Fe Avenue
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Brian Esplin
Supervisor
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Email: bryan.esplin@dominionenergy.com

American Water Enterprises Military Service Group

Nicole Torralva, P.E.
Capital Program Manager
American Water - Military Services Group
49002 Santa Fe Avenue
Fort Hood, TX 76544
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Cell: (254) 213-0382
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Cell: (254) 383-7756
Email: ghazi.dakik@amwater.com

1.9.2 Plastic Marking Tape and Tracer Wire

Marking tape to be manufactured with integral wires or foil backing. Furnish and install the following marking tape and tracer wire:

a. Plastic Marking Tape

Plastic marking tape shall be acid and alkali-resistant polyethylene film, 6 inches wide with minimum thickness of 0.004 inch. Tape shall have a minimum strength of 1750 psi lengthwise and 1500 psi crosswise. The tape shall be of a type specifically manufactured for marking underground utilities. Tape shall be color as specified in Table 1 and bear a continuous printed inscription describing the specific utility.

TABLE 1. Tape Color

Orange:	Telephone, Telegraph, Television, Police, and Fire Communications

b. Tracer Wire

For communications, place No.10 AWG, THWN, CU, Direct burial in trench bottom prior to sand bedding, and brought up in manholes, with 12 inches minimum leads above finished grade. Only direct -burial splices shall be used.

1.9.3 Jacking, Boring, and Tunneling

Conduct boring and jacking in a manner which does not interfere with the operation of the railroad or street or weakens or damages the embankment or structure. Bore or jack from the low or downstream end wherever possible. Unless otherwise shown or specified, the top of the casing pipe shall be a minimum of 3 feet below the finished road surface and 4 feet below the bottom of the railroad track ballast.

a. Utilities

Excavate where possible and verify the location and depth of buried utilities which will be crossed.

b. Casing Pipe

Smooth wall steel pipe, ASTM A53/A53M with welded joints. Minimum wall thickness of 3/16 inch unless otherwise shown or specified.

c. Casing

Unless otherwise indicated or specified, install a casing pipe of a diameter which provides a minimum of 2 inches clearance between the outside diameter of the carrier pipe joint and the inside wall of the casing. Upon installation of the carrier pipe, sand grout the entire annular space between the casing and carrier pipe walls.

1.10 POLLUTION PREVENTION OF POTABLE WATER SUPPLY SYSTEM

Verification of water line disinfection shall be performed per AWWA C651. The samples shall be analyzed by an analytical lab that holds the current state license and certification. Repeating disinfection protocols are required until satisfactory results are obtained -- that being two consecutive sets of acceptable samples taken 24 hours apart. The water sample analytical results shall be provided to American Water for record-keeping. One water sample at each 1000 linear feet of disinfected water line shall be obtained. Water sample shall be placed in proper sterilized containers and a bacterial examination shall be performed in accordance with state approved methods. The water supply system shall not approve for service until each test result is negative for bacteria examination.

NOTE: In the State of Texas, new water supply system Certification and drinking water well certification are required. The potable water supply system and water quality shall be in accordance with 30 TAC Chapter 290, subchapter D. In compliance with 30 TAC 290.39, the Contractor shall submit to Texas Commission on Environmental Quality (TCEQ) a written application (with plans, specifications, and related document) for review. The revision period could be 60-day in duration. In addition, the Contractor shall submit the post construction water system completion notification to TCEQ after completion of the new water supply system.

1.11 SPILL CONTROL

POL storage greater than 55 gallons requires secondary containment and possible modification to the Installation's existing spill prevention control and countermeasures plan, and are subject to review and approval by the Installation's DPW Environmental Division. All activities that store or use POL or hazardous substances and have the potential of spilling those products must take into consideration secondary containment of the storage container and must have compatible spill cleanup materials on hand at all times. The site environmental protection plan should address the POL or hazardous substances, their storage containers, secondary containment, and how you will immediately respond to and cleanup spills of those substances in any amount. It also will include notification to the Fort Hood Fire Department (254-287-3908) and Contracting Officer of any spills of five gallons or greater to the land

and any amount into a water body such as a creek, pond, river or lake. The contractor will not report any spills to state or federal regulatory agencies. DPW Environmental will assess the spill and conduct regulatory reporting if necessary.

1.12 AIR POLLUTION CONTROL

Provide certifications from equipment manufacturers verifying that the small combustion equipment emission (i.e. with rated capacity less than 2.0 MMBtu/hr) is in compliance with the Texas Commission on Environmental Quality (TCEQ), per 30 TAC 117.3205 (Texas Administrative Code (TAC), Title 30, Chapter 117 Control of Pollution From Nitrogen Compounds, Subchapter E Small Combustion Sources, Division 3 Water Heaters, Small Boilers, and Process Heaters, Rule 117.465 Emission Specifications) and Rule 117.3210 Certification Requirements along with Rule 117.3215 Notifications and Labeling Requirements.

Document all equipment emission data from combustion devices to be used in this Contract per 30 TAC 106.183. All equipment air emission data shall be provided to the Installation Clean Air Act Team to ensure compliace with and, assist with any required revisions of the TITLE V Federal Air Permit. An Emission Inventory is included with the Environmental Design Analysis for information only. The Contractor shall use the manufacturer equipment information to prepare an Emission Inventory based on equipment from the manufacturer, the emission inventory form is attached at the end of this Section. Provide generator USEPA issued Certificates of Conformity for all generators. Provide a Refrigerant Report for all air-conditioning equipment to Fort Hood DPW-ENV, Clean Air Act Team.

1.13 WASTE WATER MANAGEMENT

In the waste water management plan, identify the source of wastewater at job site such as sanitary and construction derived waste waters. Address methods and procedures for management and/or discharge of waste waters which are from construction activities such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines (i.e. new main disinfection (or hyper-chlorinated water), concrete wash water, hydrostatic test water, vehicle wash water, etc.).

Wastewater from water main disinfection shall be de-chlorinated to less than 4 ppm residual chlorine prior to discharge to the sediment pond or the sanitary sewer system when approved by the Contracting Officer with prior approval and/or notification to the local Waste Water Treatment Plant. A chlorine residual test is required to submit to COR prior to land disposal of wastewater from disinfection of water supply system. . If there are any questions about potential harmful consequences of a specific discharge due to proximity to a sensitive environmental area (e.g., creek, wetlands, etc.) or the volume of the discharge (i.e. wastewater from disinfecting water storage tank), the Contractor shall contact area office Contracting Officer for further guidance. Disinfection of water lines and water storage tank required in Section 33 11 00 WATER DISTRIBUTION SYSTEM and Section 22 00 00 PLUMBING, GENERAL requires de-chlorination. Submit the method of de-chlorination for approval.

No foreign items, construction debris, chemicals, oils, etc., shall be introduced into the sanitary sewer collection system. Storm water runoff shall be directed away from the sanitary sewer collection system and storm water shall not be disposed into the sanitary collection system.

Wastewater discharge permit is required, except for the following:

- fire fighting activities,
- fire hydrants flushing,
- vehicle wash waters which do not contain detergent or leaked fluids
- minimal dust control runoff to minimize off-site tracking of vehicles,
- potable water from uncontaminated waterline flushing,
- routine external building wash down which does not use detergents and the exterior paint that does not contain mercury, lead, cadmium, and mildewcides,
- pavement wash waters where spills or leaks do not contain hazardous, toxic, radiological material or detergent,
- air conditioning condensate,
- uncontaminated spring or ground water,
- foundation and footing drains which do not contain contaminated process materials such as solvents.
- lawn watering and similar irrigation drainage, provided that all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portion of the facility, but excluding intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains); and other discharges described in Part V of the Multi Sector General Permit (TPDES General Permit TXR050000) that are subject to effluent guidelines and effluent limitations.

1.14 RECYCLING AND SOLID WASTE MINIMIZATION

Army military construction, renovation, and demolition projects shall achieve a minimum of 60 percent diversion of construction and demolition (C&D) waste, by weight, from landfill disposal.

In accordance with Fort Hood Regulation 420-6 (Recycling), all Contractors must participate in the Installation's recycling program.

Source Separation Method. Waste products and materials that are recyclable will be separated from trash and debris and sorted into appropriately marked separate containers and then transported to the respective recycling facility. Deliver materials in accordance with recycling or reuse facility requirements (e.g. free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.

The Fort Hood Recycle Center will support recycling efforts and provide roll off container service for paper, plastic, cardboard, and metal. The Fort Hood Recycle Center is located in Building 4626, at 72nd Street and Railhead Drive. The Recycle Center can be reached at 254.287.2336 and is open from 0730 - 1630, Monday - Friday and on the 2nd Saturday of each month. The Contractor can contact the Recycle Center for these support services. Fort Hood Recycle has a certified scale and can help provide weights, reporting, and other diversion information. These services are provided free of charge to the contractor. Please contact the recycle center for specific questions and scheduling.

The Contractor shall contact the Fort Hood Sanitary Landfill concerning

wood recycling for trees removed from site clearing and grubbing. The trees may be shredded on-site and the shredded material spread over adjacent vegetative areas for "soil amendments". Do not spread the material to exceed 2.5 inches 63.5 mm in depth, unless otherwise approved by the Contracting Officer. Trees may be loaded and hauled to the Fort Hood Sanitary Landfill (telephone 254-532-2256) where they will be weighed and dumped in the recycle yard for processing.

At Fort Hood range training areas, or areas where erosion rates are known to exceed tolerable limits, the trees identified to be removed shall be cut and shredded on-site and the residue spread over construction areas for temporary soil stabilization. The shredded material shall be spread to not exceeding 6 inches in depth.

Conserve natural resources during site clearing and grubbing operations. Trees identified to remain shall be preserved in accordance with applicable notes and specifications.

Avoid using organic material for temporary stabilization in areas that are to be paved.

Shredded material used for soil stabilization and erosion control shall be no more than ½-inch diameter and no more than 3-inch in length. Trees to be used for soil amendments and/or as mulch may be shredded and the material stockpiled in an area pre-determined and pre-approved by the Contracting Officer.

A copy of each pre-construction and post construction notification, registrations, certifications, and recycling/reuse waste diversion report with disposal receipts, shall be provided to both the Contracting Officer and the Installation's environmental authorized personnel at project completion with other close-out documents.

1.15 CERTIFICATION OF NON-ASBESTOS CONTAINING MATERIALS AND PRODUCTS

The construction Contractor shall provide a Certification of Non-Asbestos Containing Materials and Products in construction. A signed statement by a corproate officer, an architect, engineer or State Department of Health Inspector identifying presence or absence of asbestos containing material in all construction building materials. The Contractor shall submit a Certification and Safety Data Sheet (SDS) on each construction material and products (i.e. interior & exterior material of construction including mastic, sealant, roofing felt, roofing coating, non-roofing coating, floor tile and mastic, pipeline wrap, any type of friction material, etc.) and equipment. If SDS of product or material does not have asbestos containing material data, a state licensed analytical lab shall obtain three bulk samples of from the same material or product for analytical analyses. The SDS can be kept as a separate binder at the job site. A copy of the SDS binder shall submit with the Certification at project closeout.

1.16 CERTIFICATION OF NATURAL GAS HEATING EQUIPMENT

a. The construction Contractor shall provide a Certification of Natural Gas Heating Equipment. (Note: The Contractor shall comply with the Texas Commission on Environmental Quality (TCEQ) air emission requirement for water heaters, small boilers and process heaters. Submit a document or certificate to verify that the natural gas-fired heating equipment having a maximum rated rating capacity of 2.0 million British Thermal Units per hour (MBtu/hr) or less is in compliance with the Nitrogen Oxide

limits as specified in 30 Texas Administrative Code (TAC), Part 1, Chapter 117, Subchapter E, Division 3, Rule 117.3205.)

b. The construction Contractor shall provide data of HVAC Units and initial HVAC Service and Maintenance Record. It shall include all new HVAC units and related data of each unit (i.e. name of manufacturer, model number, type of refrigerants and total charge amount (in pounds). At least a copy of the log shall be provided to the Clean Air Act Team for the new/renovated facility to capture refrigerants which contribute to greenhouse gas emissions.

1.17 ENVIRONMENTAL SUSTAINABLE PAINT SYSTEM

The Contractor shall provide statement of proof on environmental sustainable paint system to verify interior and exterior paint systems have met the low volatile organic compounds (VOC) criteria per CAA permit #24538 and lead concentration on proposed facilities shall not exceed Consumer Safety Act criteria https://www.cpsc.gov/Regulations-Laws--Standards.

1.18 CONDITIONS FOR USE OF FORT HOOD LANDFILL

Use of the Fort Hood Municipal Solid Waste Landfill, located at the intersection of Turkey Run Road and Clark Road, by the Contractor is subject to the operating requirements imposed on the landfill by the Landfill Operating Permit (TCEQ MSW Permit #1866). All waste delivered to the landfill will be secured and covered and will be inspected by the landfill operating Contractor for materials that are not authorized for disposal in the landfill before entry into the landfill is allowed. Containers that contain unauthorized waste will be diverted for removal of unauthorized material before entry into the landfill. Landfill operating hours are 0730-1700 Monday through Friday and 0730-1400 on Saturday. Questions concerning landfill policy and procedures shall be directed to the landfill at 254-532-2256.

The following classes of materials are NOT authorized in the Fort Hood Municipal Solid Waste Landfill and shall be diverted as described below:

Recyclable Materials: Cardboard and paperboard, various metals, aluminum and steel, paper, 1-7 plastics, and serviceable pallets shall be delivered to the Fort Hood Recycle center. Contact the Recycle Center for roll off support and other questions regarding disposal of these items. In general, roll off support is provided free of charge to the contractor.

Compost Materials: Untreated wood, branches, shrubs, grass, wood chips, unserviceable or odd sized pallets shall be separated from the refuse load and delivered to the Fort Hood Compost Center. The Compost Center is located in the vicinity of the Landfill (corner of Clarke Road and Turkey Run Road). All materials must go through the landfill scales for inspection and weight measurements. Solid Waste Contractor personnel will direct disposition of compost materials. Cedar trees may not be composted and must be delivered to an area designated by the Government for deposition.

Inert Constructions and Demolition Debris: Inert C&D debris includes: clean fill; sand; sod; rock; clean masonry; brick; concrete; and asphalt. The Contractor shall transport these materials off Government property and dispose of them in compliance with Federal, State, and local requirements. The Contractor shall submit non-hazardous waste disposal reports to the

Contracting Officer IAW 01 57 20.00 10-1.7.2(h). The Installation prefers these materials are recycled and a weight ticket provided for the diversion. Diversion reports are to be submitted on a monthly basis to the DPW-ENV Net Zero Manager, 254-287-8712. Some clean fill, sand, or sod may be needed on the Installation; however it is not a guaranteed disposal method. Contact the DPW Natural and Cultural Resources Management Branch to coordinate (254-287-2885).

Salvageable Items: Engine and machine parts shall be delivered to the Defense Logistics Agency Disposition Services office (DLADS). The DLADS is located in building 25030 Ivy Division Rd. The phone number is 254-287-8822. Call for hours of operation and turn-in procedures.

Serviceable Pallets: Serviceable pallets are to be delivered to the Fort Hood Recycling Center Bldg. 4621, located at 72th St. and Railhead Dr. Phone 287-2336, Monday-Friday, 0730-1600 and on the 2nd Saturday of each month.

Refrigerant: As per the HFC Phase Down Policy dated 15 December 2022, Army activities will ensure installed HFCs be recovered and made available for reclamation and reuse for mission critical military end uses. Refrigerants shall be collected in designated recovery cylinders/drums (R-123) and separately labeled. Recovered refrigerants shall be turned in to DPW- Classification Unit (CU) Building 1342 for processing. Each container shall be labeled (i.e.R-12, R-22, etc.) and shall not be mixed. The Contractor shall be responsible for all associated fees and disposal cost. For more information on Refrigerant turn-in call the DPW-CU at 254-288-7627 .

Regulated Waste: Liquid waste, fluorescent light bulbs, oil filters, ordinance, explosives, pressurized gases, PCB (TCB, DEPH or fluid-typed) ballasts, paints, solvents, antifreeze, pesticides, herbicides, radioactive materials, and biohazardous materials are prohibited from disposal at the Fort Hood landfill. All turn-ins to the DPW Classification Unit are by appointment only. For more information on the management of regulated wastes on Fort Hood, call the DPW-CU at 254.288.7627 (SNAP). The DPW Classification Unit can assist Contractors with packing procedures, waste classifications, and the proper disposal method. The Contractor shall be responsible for all associated fees and disposal cost.

Asbestos Containing Materials (ACM): The management of asbestos on Fort Hood requires special procedures mandated by the Texas Department of State Health Services. Contact the Fort Hood Asbestos Program Champion prior to the start of work activities for guidance on asbestos waste management IAW the installation's Asbestos Management Program. The Contractor shall be responsible for all associated fees and disposal cost. A complete survey, abatement, and any documentation that is sent to the State of Texas on abetment must also be forwarded to the DPW Environmental Division, Clean Air Act Team. If ACM is to be disposed at the Fort Hood Landfill the manifest must be signed by a the Asbestos Abatement Contractor's authorized representative. If ACM is disposed off post a copy of the manifest must be provided to the DPW-ENV Solid waste representative and Clean Air Act Team located at Building 4622.

Special Wastes: POL contaminated soil and demolition debris contaminated with lead paint are considered special wastes in the State of Texas. These special wastes require special handling procedures mandated by the State of Texas. Contact the Fort Hood Environmental Division prior to the start of work activities for guidance on special waste management. The

Contractor shall be responsible for all associated fees and disposal cost.

Wastewater from Water Line Disinfection: Initial and subsequent wastewater discharge from water main or storage tank disinfection (or flushing) shall be de-chlorinated to less than 4 ppm residual chlorine prior to discharge to the sediment pond or the sanitary sewer system when approved by Contracting Officer Representative (COR). There is a large volume of the discharge from disinfecting water storage tank, the Contractor shall contact COR and DPW for further guidance. De-chlorinate super-chlorinated wastewater from water line and water storage tank disinfection in accordance with AWWA C651 for Section 33 11 00 WATER DISTRIBUTION SYSTEM and AWWA C651 and C652 in Section 22 00 00 PLUMBING, GENERAL. The Contractor is responsible for labor, equipment, all associated fees of for testing, and cost of treatment to meet this requirement.

Verification of water line disinfection shall be performed per AWWA C651-05. The samples shall be analyzed by an analytical lab that holds the current state license and certification. Repeating disinfection protocols per AWWA C651 are required until satisfactory results are obtained -- that being two consecutive sets of acceptable samples taken 24 hours apart. The water sample analytical results shall be provided to AWO&M, Inc. (Bldg. 49002, 254-213-0382) for record-keeping. One water sample at each 1000 linear feet of disinfected water line shall be obtained. Water sample shall be placed in proper sterilized containers and a bacterial examination shall be performed in accordance with state approved methods. The water supply system shall not approve for service until each test result is negative for bacteria examination.

Water Main or Storage Tank Disinfection: The disinfection of new or repaired water mains must be done in accordance with state requirements, currently presented in 30 TAC 290.46(g). Wastewater discharges from water main or storage tank disinfection (or flushing) shall be de-chlorinated to less than 4 ppm total chlorine residual prior to discharge to the environment or the sanitary sewer system, and when approved by Contracting Officer Representative (COR). Care must be taken to not cause erosion during the discharge of this wastewater. In addition, water with any detectable total chlorine residual may not be discharged in such a manner that it enters any surface water body. The de-chlorination of super-chlorinated water shall be done in accordance with current AWWA guidance. The Contractor is responsible for all labor, equipment, and costs or fees associated with the testing, treatment or disposal of wastewater to meet this requirement.

The sample results must indicate that the water main or storage tank is free of microbiological contamination before it is placed into service. A copy of the bacteriological sample results shall be provided to the water distribution system operator, AWO&M, Inc. The American Water POC may be contacted at 254-213-0382.

1.18.1 Landfill Permit

Contractor shall complete the attached Landfill Permit and give copies, laminated or inserted in page protectors, to drivers so that the drivers could leave them in their trucks. Drivers can just hand the permit to the scale operator at the landfill rather than having to remember all information.

1.19 HVAC REFRIGERANTS

For new HVAC equipment installation or replacement, provide the make, model, serial number, refrigerant type, total refrigerant charge and date of installation of the equipment to the Contracting Officer Representative (COR) and the Clean Air Act Team (use the Emission Inventory Form from Submittals).

For air conditioning equipment replacement, remove refrigerant prior to the removal of the air conditioning unit (removal shall be accomplished by an
EPA-certified technician). Refrigerant recovery units shall be registered by completing the EPA Refrigerant Recovery Form and returning these to the Clean Air Act Team instead of EPA. Recovered R-12, R-22, R-134a and R-123 and R-410Arefrigerant shall be turned in to the DPW Classification Unit, Building 1342 at Ivy Division Rd and 37th St, (254) 288-7627. Technicians performing A/C work must be certified by an approved EPA program and carry their certification card with them at all times while performing work on Fort Hood. The COR shall also obtain a copy of the technician certification card and provide that, as well as the contract company information to the Clean Air Act Team along with other submittals.

All HVAC equipment installation, replacement, or service work conducted on units that contain 15 pounds or greater of refrigerant shall be documented on the Refrigerant Service Log and submitted to the COR within 7 days of completing the work. The form shall be filled out completely and thoroughly and must include total refrigerant charge to the system per circuit. This includes amount of refrigerant in the appliance itself and refrigerant downstream in any accumulators, driers, coils etc. to bring the system to a full operating charge.

Because the phaseout of Class II (HCFC) refrigerants such as R-22 began in January 2010 and phasedown of HFCs, any new cooling system installed shall operate EPA SNAP Program approved alternative, etc.

1.20 SOLID WASTE AND CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

The Contractor shall transport solid waste which is not permitted in the Fort Hood Municipal Landfill off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Waste materials shall be hauled to the Government landfill site designated by the Contracting Officer. Authorized waste materials may be hauled to the Fort Hood Sanitary landfill site shown on the drawings or designated by the Contracting Officer; see paragraph CONDITIONS FOR USE OF FORT HOOD LANDFILL, this Section.

1.20.1 Fuel and Lubricants

All above ground POL storage tanks installed shall be designed for aboveground storage of flammable and combustible liquids at atmospheric pressure and must comply with the latest edition of National Fire Protection Association NFPA 30 Flammable and Combustible Liquids Code. Tanks shall be of double wall construction and provide complete secondary containment of the primary storage tank's contents by an impervious outer wall. The double wall meets the EPA's secondary containment requirements

and does not require an external berm. Thermal insulation that provides a minimum two-hour fire rating shall be installed at the factory within the interstitial space between the inner and outer wall. The tank's primary and secondary containment must be tested for tightness in the factory and in the field before commissioning. Inner and Outer Tank shall be manufactured in accordance with UL-142 Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids. Entire tank shall be labeled for Underwriters Laboratories UL 2085 Standard for Insulated Secondary Containment Aboveground Tank for Flammable Liquids. The tank design shall comply with UL 2085 "Protected" Tank standard and shall be tested for Ballistics, Impact, Hose Stream, and Pool Fire UL-2085 performance standards. Each tank shall be delivered as a complete UL-listed assembly with two factory supplied, welded-on saddles to keep tanks off the ground and to permit viewing underneath the tank. Tanks to be set level on a solid foundation. Tank exterior must be chalk white or white in color and protected with a non corrosive coating. Each tank shall be grounded and bonded as specified in NFPA 30. The exterior of all POL storage tanks must be clearly labeled with the contents of the tank and the NFPA 704 hazard identification label. For used product tanks the labels must use the term "Used" rather than "Waste". Lifting lugs shall be provided at balancing points to facilitate handling and installation where applicable. Tanks shall be installed according to manufacturer's recommendations. Tanks shall be supplied with all components necessary to operate and required by NFPA and EPA as listed below:

. One 2" - Interstitial Monitoring Port
. One 2" - Normal Working Vent, Primary Tank; top must be at least 12 feet above ground
. One 4", 6", or 8" - Emergency Vent, Primary Tank
. One 4", 6", or 8" - Emergency Vent, Secondary Tank
. One 2", 4" or 6" - Product Fill with 7 gal. Spill/Overfill Container designed so liquids will automatically flow into fill port. Top of fill tube should be flush with bottom of spill container
. One 2" or 4" - Product Pump or Supply
. One 2" or 4" - Direct Read Liquid Level Gauge

A single walled tank will only be allowed temporarily for construction sites and must be equipped with secondary containment in accordance with provisions of 40 CFR 112, 302 and 30 TAC 334. Storage tanks must have a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation, usually 110% of the largest container. Basin materials must be compatible with the products stored in the tanks. Single walled tanks will not be allowed for permanent installation on Fort Hood.

1.21 INTEGRATED PEST MANAGEMENT AND PESTICIDE USE

The contractor shall submit a proposed treatment plan and update the treatment plan, as information becomes available. Include in the plan: names and qualifications of the applicators, proposed control methods and procedures to include: control equipment, pesticides, application rates, and the sequence of treatment dates, times, and locations.

A Copy of the applicator license must be provided to DPW Installation Pest Management Coordinator (IPMB) through the COR before pesticide or herbicide application begins. Applicators must a have valid commercial certification in the category of work being performed as required by Texas Department of Agriculture (TDA). Individuals must have a license in their name and may not work under another individual's license. Pesticide quantities must be

reported to the IPMC when project is completed.

Use only pesticides that that have been installation approved for the contract use (Pesticide List available from IPMB upon request).

1.22 CUSTOMER SERVICE INSPECTIONS

1.22.1 Certification Requirements

A Customer Service Inspection and Certification must be performed in accordance with the Texas Administrative Code, Title 30, Part 1, Chapter 290, Subchapter D, Rule 290.46 before providing continuous water service to new construction; on any existing service when the water purveyor has reason to believe that cross-connections or other potential contaminant hazards exist; or after any material improvement, correction, or addition to the private water distribution facilities.

1.22.2 Inspection

The Customer Inspection certifies that all performed work meets the requirements of the Texas Administrative Code, Title 30, Part 1, Chapter 290, Subchapter D, Rule 290.46.

1.22.3 Inspection Personnel

Customer Service Inspections must be performed by personnel meeting the requirements described in the Texas Administrative Code, Title 30, Part 1, Chapter 290, Subchapter D, Rule 290.46.

1.22.4 Inspection Certification Form

Original copies of the Customer Service Inspection Certification shall be provided to the Contracting Officer's Representative prior to final inspection and acceptance. Certification forms will be maintained by the by AWO&M, Inc. (Bldg. 49002, 254-213-0382). A sample form is provided at the end of this section. The form submitted shall meet all provisions of Rule 290.46.

1.23 PROTECTION OF NATURAL RESOURCES

1.23.1 Migratory Bird Treaty Act

The Migratory Bird Treaty Act states that, "Unless and except as permitted by regulations it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill any migratory bird, any part, nest, or eggs of any such bird concluded November 19, 1976." Therefore, tree removal must be limited to dates outside MBTA nesting season, 15 March through 15 August annually. During the nesting season, any tree or standing vegetation must be cleared by a Fort Hood MBTA biologist no more than 48 hours before the tree is to be trimmed or removed. If a nest is found, the nest shall be flagged and a 100 foot buffer will be observed around the tree, including ground around the treee, until the nest has fledged. No take of nest, eggs, or hatchlings will be allowed under any circumstances.

1.23.2 Endangered Species

The management and monitoring of federally listed species on Fort Hood is a natural resource management obligation for the Army and Fort Hood. In

accordance with the Endangered Species Act (ESA) 1973, as amended, the Army must assist in recovery of all listed threatened and endangered (T&E) species and their habitats under the Army's Endangered Species Management Component (ESMC) of the Installation's Natural and Cultural Resources Management Plan, for all listed T&E and candidate proposed T&E species. The U.S. Fish and Wildlife Service Biological Opinion for Fort Hood provides terms and conditions for endangered species management on Fort Hood. The objective of the ESMP is to provide a comprehensive plan for conserving and protecting populations and habitats of federally listed species and species of concern on Fort Hood while maintaining mission readiness in a manner consistent with Army and Federal environmental regulations. No tree removal or tree trimming is allowed withing T&E habitat between 15 March through 15 August annually.

1.24 PROCEDURE FOR RECEIPT OF MECHANICAL DOOR KEYS FROM CONTRACTORS (MAY 2005)

1.24.1 Attachment

The attachment "PROCEDURE FOR RECEIPT OF MECHANICAL KEYS FROM CONTRACTORS" is located at the end of the section.

1.24.2 Keyway

For all projects, the keyway will be a single bitted, 5 disc keyway based on the Fort's Lock KS00V key blank key coded to CAT 15.

Disassembly of knob or lockset shall not be required to remove core from lockset. All locksets, exit devices, and padlocks shall accept same interchangeable cores. Cores shall fit locksets without the use of adaptors and without play. The key shall easily lock and unlock the lockset without binding or other difficulties. Control key shall easily remove and install cores.

1.25 DOOR HARDWARE REQUIREMENTS FOR FORT HOOD

1.25.1 Closers:

ANSI/BHMA A156.4, Surface type closers shall be Grade 1, Series C02000 Full Cover with options PT-4H, Size 1 or 2 through Size 6, and PT-4D with back check position valve. Provide with brackets, arms, mounting devices, fasteners, full size covers, except at storefront mounting, pivots, cement cases, and other features necessary for the particular application. Provide manufacturer's 10 year warranty.

(1) Closers for out swinging exterior doors shall have parallel arms or shall be top jamb mounted. Provide narrow projection closers for doors close to a wall so as not to strike the wall at the 90-degree open position.

(2) Closers on doors accessible to the physically handicapped shall have the closing force set for a push-pull of 2.27 kg (5 pounds) applied at the knob or handle for interior doors; for exterior doors, set to the minimum required to re-latch the door.

1.26 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall,

unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area stibalized unless otherwise indicated.

Excavation, filling, and plowing of roadways will be required to restore the area to near normal conditions and permit the growth of vegetation thereon. The disturbed areas shall be graded and filled. Sufficient topsoil shall be spread to - provide a minimum depth of 100-mm (4 inches) of suitable soil for the growth of grass. The entire area seeded, and a uniform perennial vegetative cover with a density of 70 percent established. Restoration to original contours is not required.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 FORMS

3.1.1 Landfill Permit

LANDFILL PERMIT
US ARMY Corps of Engineers

COE POC and telephone phone number: _____

Contract Name: _____

Contract Number: _____

Contract completion date or end of authorization date: _____

Building or areas affected (i.e., Soldier's Development Center):

_____

_____

_____

Prime Contractor's Name: _____

Contractor POC and phone (i.e. someone on site that can get immediate action): _____

3.1.2 Appendix D. Customer Service Inspection Certificate
Figure: 30 TAC §290.47(d) Page 1 of 2

Figure: 30 TAC §290.47(d)

Appendix D: Customer Service Inspection Certificate

Customer Service Inspection Certificate

Name of PWS

US Army South Fort Hood I.D.# 0140107 ( )
US Army North Fort Hood I.D.# 0500037 ( )
US Army Belton Lake Outdoor Recreation Area I.D.# 0140156 ( )

Reason for Inspection: New construction. ( )
Existing service where contaminant hazards are suspected ( )
Major renovation or expansion of distribution facilities ( )

I _____, upon inspection of the private water distribution facilities connected to the aforementioned public water supply do hereby certify that, to the best of my knowledge:

	Compliance	Non-Compliance
(1) No direct connection between the public drinking water supply and a potential source of contamination exists. Potential sources of contamination are isolated from the public water system by an air gap or an appropriate backflow prevention assembly in accordance with Commission regulations.	( )	( )
(2) No cross-connection between the public drinking water supply and a private water system exists. Where an actual air gap is not maintained between the public water supply and a private water supply, an approved reduced pressure-zone backflow prevention assembly is properly installed and a service agreement exists for annual inspection and testing by a certified backflow prevention assembly tester.	( )	( )
(3) No connection exists which would allow the return of water used for condensing, cooling or industrial processes back to the public water supply.	( )	( )
(4) No pipe or pipe fitting which contains more than 8.0% lead exists in private water distribution facilities installed on or after July 1, 1988.	( )	( )
(5) No solder or flux which contains more than 0.2% lead exists in private water distribution facilities installed on or after July 1, 1988.	( )	( )

I further certify that the following materials were used in the installation of the private water distribution facilities:

Figure: 30 TAC §290.47(d) Page 2 of 2

Service lines Lead ( ) Copper ( ) PVC ( ) Other ( )
Solder Lead ( ) Lead Free ( ) Solvent Weld ( ) Other ( )

I recognize that this document shall become a permanent record of the aforementioned Public Water System and that I am legally responsible for the validity of the information I have provided.

Remarks:

Signature of Inspector	Registration Number
Title	Type of Registration
Date	

3.1.3 AFCM Certification Letter

Asbestos Free Construction Material
Certification Letter

Project Name: _____

Name of Contractor: _____

Project Delivery Order Number: _____

Facility Number: _____

Date: _____

To Whom It May Concern:

This letter is to certify that the project indicated above has been constructed using no asbestos containing materials in accordance with the design requirements.

Sincerely,

Typed Name: _____

Written / Typed Name _____

01 35 10.00 44 ATTACHMENTS

STANDARD OPERATING PROCEDURES FOR ARMS ROOM LOCKOUT AND RECEIPT OF MECHANICAL KEYS

INSTALLATION OF ELECTRONIC LOCKS AND UTILIZATION OF PLASTIC CARD KEYS STANDARD OPERATING PROCEDURES (SOP) OPERATIONS AND MAINTENANCE DIVISION (OMD)

PROPOSED PROJECT EMISSIONS INVENTORY QUESTIONNAIRE FOR NEW SOURCE

FORT HOOD REFRIGERANT EQUIPMENT SERVICE LOG

-- End of Section --

STANDARD OPERATING PROCEDURES
FOR ARMS ROOM LOCKOUT AND RECEIPT OF MECHANICAL KEYS
August 1, 2019

1. PURPOSE: To establish policies and procedures for the Directorate of Public Works (DPW), Operations and Maintenance Division (OMD), OMD Lock Shop, and all entities, regarding the Standard Operating Procedures (SOP) for the security of all Arm's Rooms and the standard practices of receiving mechanical keys (hard keys).

2. REFERENCES: None

3. APPLICABILITY: This SOP applies to all DPW employees, civilians, United States Army Corps of Engineers (USACE), contractors and all entities making changes or additions to all types of mechanical locking devices and associated keys on Real Property, including the security of all Arm's rooms on Fort Hood. Furthermore, this policy acts as a guide on information that shall be elevated to facility occupants and Senior Management (Supervisors, Division Chiefs, or Director) for the safe utilization of arms rooms on Fort Hood; as well, as receiving and tracking mechanical keys (hard keys).

4. ARMS ROOMS RESPONSIBILITIES:

a. During regular duty hours:

(1) The point of contact (POC) shall initiate a Demand Maintenance Order (DMO) through Work Reception by calling 254-287-2113 (Line is available 24 hours a day).

(2) OMD Locksmith will ensure the POC is authorized access to the arms room.

(a) Military Police (MP) station shall be contacted by the Locksmith and will verify with the MP's that the POC is on the authorized users list.

(b) MP's shall be notified by the Locksmith of all actions to be taken. Example information to be communicated is arrival and start time, departure and end time for repairs and any pertinent information regarding alarm notifications. Additional information shall be communicated to include; what repairs are being executed and estimated time frame Locksmith will need for entry.

b. After duty hours:

(1) The point of contact (POC) shall initiate a Demand Maintenance Order (DMO) through Work Reception by calling 254-287-2113 (Line is available 24 hours a day).

(2) Prior to the OMD Locksmith arriving to the work site, the Locksmith will contact the MP station, who will dispatch a patrol officer to the location, who will then verify that the point of contact is authorized entry to the arms room.

(3) Work can only begin when the MP's have reported back to the OMD Locksmith or the Lock Shop Supervisor, or Work Lead, giving notification that the all clear is complete.

(a) MP's will notify DES and receive appropriate approval from DES personnel in the event that emergency entry is necessary.

5. MECHANICAL KEYS (HARD KEYS) RESPONSIBILITIES:

a. Existing Facilities:

(1) DPW personnel, USACE personnel, and contractors shall provide keys that match the bitting codes and all hardware throughout all existing facilities where locking mechanisms are being installed or replaced. Patented cores will not be used for any locks under any circumstances.

(2) For projects that do not require total replacement of the locking systems for the facility, through written email request the contract COR, may obtain the appropriate facility bitting codes from the OMD Lock Shop located in Building 4616. The purpose of this requirement is to ensure that new or replacement keys are compatible with the respective key systems already installed in a facility.

(3) There shall be five (5) keys provided to Real Property Planning Division (RPPD) consisting of four (4) facility management keys and one (1) key to be used as a board key by the OMD Lock Shop. The keys will be stamped with the building number and room number (or location) in accordance with the marking specifications outlined in paragraph ten (10).

(4) Mechanical, electrical and utility room keys shall be keyed with a 3-1 keyed core. The OMD Lock Shop shall provide 3-1 keys to Real Property Planning Division (RPPD) for the contract COR to issue to the contractor until contract completion. If the project adds one or more mechanical, electrical or utility rooms to the building(s), the contractor will provide the required L keyway blank cores to the contract COR. The COR will provide the blank cores to the OMD Lock Shop and submit a demand maintenance order (DMO) to Work Reception section 254-287-2113, for the OMD Lock Shop to have the new cores pinned to 3-1 keys. The COR shall ensure that all the 3-1 locks are installed and working properly.

(5) Project COR's shall be responsible for turning in all car keys/ override keys, key schedules, bitting codes with room numbers/locations to DPW RPPD located in building 4622.

(6) Master key, control bitting, bitting codes, building code and all unused keys must be submitted to DPW RPPD before final payment is approved. DPW RPPD shall forward all keys to the DPW Housing Project Manager to be issue to the Building Managers.

(7) Bitting codes obtained from the manufacturer shall be sent via Registered Mail, to the requestor for control and tracking purposes.

b. New Facilities:

(1) DPW personnel, USACE personnel, and contractors shall provide keys, key schedule, bitting codes with room numbers and location. The following shall also be included next to the bitting codes: master, control bittings, building code with 500 unused bitting codes, hardware list and floor plans for all facilities where locking mechanisms shall be installed. Everything shall be submitted to DPW RPPD located in Bldg. 4622 as soon as possible but no later than 30 days prior to the turn-over of the facility to DPW. If the 30 day suspense date cannot be met, the contract COR will negotiate a new suspense date with Real Property.

(2) A pre-construction meeting of contractors, DPW, USACE and OMD Lock Shop personnel shall determine how locks shall be keyed in sets or subsets as scheduled. Locks shall be furnished with the manufacturers' standard construction key system. Patented cores will not be used for any locks.

(3) The following keys will be provided to OMD Lock Shop and Real Property; Five (5) change keys per lock set shall be provided for each room or door and each entry and and/or exit door to the facility. The five (5) keys shall consist of four (4) facility manager keys for Real Property and one (1) key to be used as a board key by the OMD Lock Shop. Six (6) master keys and six (6) control/core keys for use by OMD Lock Shop and Emergency Services. The keys will be stamped with the building number and room number or location in accordance with the marking specifications outlined in paragraph Ten (10).

(4) Keys for new facilities shall be provided to DPW RPPD five (5) business days prior to installing the new cylinders or I/C cores. Before keys are turned in, the contractor and COR shall maintain secure control of all keys.

(5) The contract COR or PM will be responsible for turning in all keys, key schedule, bitting codes with room numbers and location. The following shall also be included; next to the bitting codes: master, control bitting, building code and 500 unused bitting codes, and facility floors plans. Everything shall be submitted to DPW Real Property before final payment is made to the contractor. Floor plans shall be in one- half pint size drawings or larger, key designation shall be legible by eye, per paragraph 10. f. Bitting codes obtained from the manufacturer will be sent via Registered Mail for control and tracking purposes, to the requestor.

(6) Bitting codes may not be reused within a facility, with the exception of doors that are keyed alike. The control and master key bitting shall not be reused facility to facility and will be different from each other in every chamber.

(7) All locks, hardware, cores and keying systems shall be installed and serviced by professional personnel that properly licensed under The State of Texas Private Security, Chapter 1702, and Texas Occupation Code under the appropriate sections governing Locksmiths, Electronic Access Devices and Security Alarms.

6. MARKINGS:

a. The four (4) facility manager keys will be marked on the front with the building code and room number or location that corresponds with the placard identifying room or location, IAW the building floor plan.

b. The OMD Lock Shop board key (1) will be marked on the front with the building number and the room number. The board key will not be marked with the code of facility.

c. The six (6) master keys will be marked with the building number and the letter “M”.

d. The six (6) core keys will be marked with the building number and the letter “C”.

e. “US GOVERNMENT/ DO NOT DUPLICATE” will be marked on the back of all provided keys.

f. Key markings will be between 1/16 inch and 1/8 inch and will be legible to the eye, IAW Appendix A.

7. PROPONENT: The proponent for this standing operating procedure is the Chief, Operations and Maintenance Division, Directorate of Public Works, Fort Hood, Texas.

8. THIS POLICY REMAINS IN EFFECT UNTIL IT IS RESCINDED OR SUPERSEDED.

Adam H. Alexander
Chief, Operations & Maintenance Division
Directorate of Public Works

Directorate of Public Works DISTRIBUTION
DPW All Divisions
USACE - CTAO

Appendix A

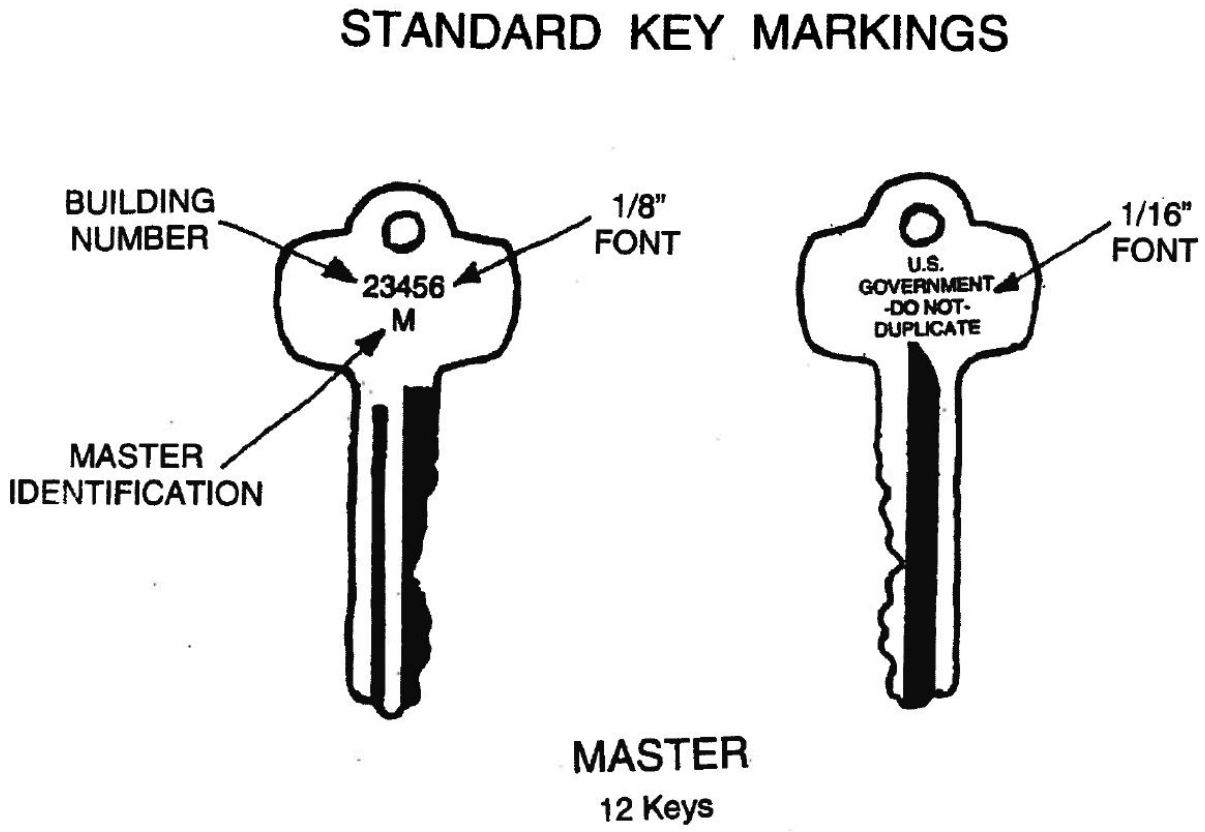
Standard Key Markings

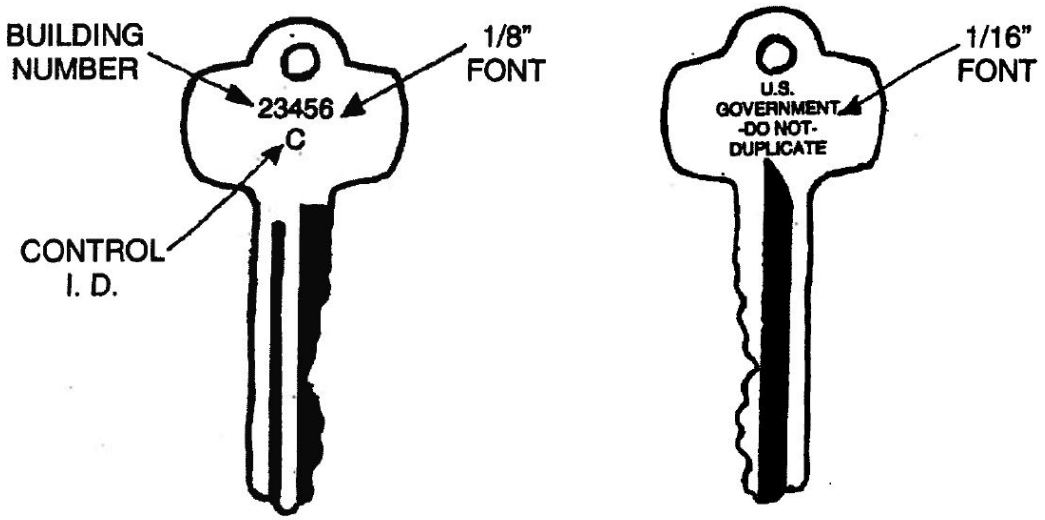
Appendix A.1

Bitting Codes Turn-in Example

Appendix A

Standard Key Markings

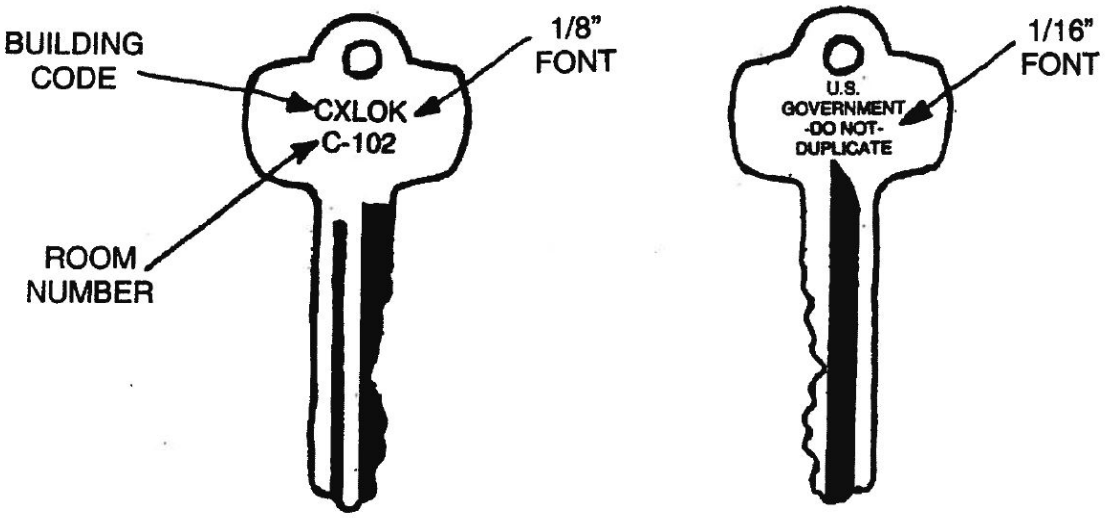




CONTROL / CORE

6 Keys

STANDARD KEY MARKINGS



CHANGE KEY

4 Keys

Appendix A.1

Bitting Codes Turn-in Example

Bldg # _____ Page: 1

Master _____ Date: _____ Control: _____

Bitting	Kwy	Core Qty	ROOM or LOCATION

BLDG Code _____ BLDG # _____

INSTALLATION OF ELECTRONIC LOCKS AND UTILIZATION OF PLASTIC CARD KEYS STANDARD OPERATING PROCEDURES (SOP) OPERATIONS AND MAINTENANCE DIVISION (OMD) August 1, 2019

1. PURPOSE: To establish policies and procedures for the Directorate of Public Works (DPW), Operations and Maintenance Division (OMD),OMD Lock Shop and all entities regarding the performance of, and installation, duplication, fabrication and issuance of, electronic locking devices and associated keys.

2. REFERENCES: None

3. APPLICABILITY: This SOP is applicable to all DPW employees, civilians, United States Army Corps of Engineers (USACE), contractors and any entities making changes or additions to all types of electronic locking devices and associated keys on Real Property on Fort Hood.

4. RESPONSIBILITIES:

a. Existing Facilities:

1) When performing work on existing facilities, DPW personnel, USACE personnel, and contractors shall only provide the electronic locking devices listed below in this paragraph. This shall also include Key Card Encoders that are compatible for the electronic locks installed within the facilities. The Contracting Officer's Representative (COR) and/or the assigned Project Manager shall ensure the contractor shall provide one (1) key encoder and ensure all of the necessary and updated versions of the software are installed by SAFLOK, Best/Dormakaba, or a Lenel licensed software representative. The software shall be compatible, updated and appropriate for the respective systems on Fort Hood and shall mirror the other building panels in the system. All locksets shall be programmed. The contractor shall fabricate and label all keys as approved by DPW's Information System Security Officer (ISSO). A two (2) year warranty shall be provided on the system, all of its components and locksets, be of grade 1 quality, to match the locking systems and hardware in existing facilities and are approved by DPW Lock Shop and DPW Real Property and Planning Division (RPPD)

- SAFLOK model number 6000 on limited remodel or replacement projects to match existing hardware.

- Best/Dormakaba series BASIS G models shall be used on remodel or replacement projects requiring total hardware replacement.

2) For projects where contractors are performing renovations, repairs or maintenance and facility re-keys are necessary; metal override keys shall be supplied on all locking systems for a facility by the contractor. For marking override keys, facility codes shall be obtained from the OMD Lock Shop Supervisor or Work Lead, through a written email request from the COR. Contractor shall provide three (3) metal override keys per room, two (2) facility manager keys, and one (1) DPW board key unless otherwise designated.

3) On existing facilities, the contractor shall provide the appropriate number of blank key cards as follows:

   (a) 100 locks or more – 2,000 blank key cards
   (b) 25 to 99 locks - 500 blank key cards
   (c) Less than 25 locks – 100 blank key cards

4) On existing facilities with SAFLOK the key cards shall have a smart chip. On existing facilities with BASIS G, the key cards shall have a magnetic strip.

5) Project COR's shall be responsible for turning in all card keys/override keys, key schedules, bitting codes with room numbers/locations to DPW RPPD located in building 4622.

6) Master key, control bitting, bitting codes, building code and 500 unused bitting codes must be submitted to DPW RPPD before final payment is approved. DPW RPPD shall forward the blank card keys to the DPW Housing Project Manager to be issued to the Building Managers.

7) Bitting codes obtained from the manufacturer shall be sent via Registered Mail, to the requestor, for control and tracking purposes.

b. New Facilities:

1) When constructing new facilities, DPW personnel, USACE personnel, and contractors shall provide electronic locking devices by Best/Dormakaba, series BASIS G, including the key card encoder that is compatible for all electronic locks within the facility. The COR and/or the assigned Project Manager shall ensure that extra locksets are provided as spares and one(1) additional encoding station, uninstalled with all necessary and updated versions of the software and licenses as approved by the DPW ISSO. The number of extra locksets to be provided shall be equal to 10% of the total locksets in the facility. A Best/Dormakaba or Lenel software licensed representative shall install the system with all necessary software, ensuring it is compatible and updated, mirrors the other building panels, program all locksets, and make and label all keys. The Best/Dormakaba or Lenel software licensed representative shall provide two (2) 4-hour classes of card encoding station training (to include two copies of training manuals) for DPW personnel.

2) A pre-construction meeting of contractors, OMD Lock Shop and USACE personnel shall be accomplished to determine how the locks shall be keyed or programmed, in sets or subsets, as scheduled. Locks shall be furnished with the manufacturer's standard construction key system. Patented cores shall not be used for any locks under any circumstances.

3) For new facilities, the contractor shall provide a complete master keyed locking system with metal override keys. Facility codes shall be obtained from the OMD Lock Shop Supervisor or Work Lead through a written email request from the COR. Contractor shall provide three (3) keys per room, two (2) facility manager keys and one (1) DPW board key unless otherwise designated.

4) Bitting codes shall not be reused within a facility, with the exception of doors that are keyed alike. Control and Master key bitting shall not be reused from facility to facility and shall be different from each other in every chamber. Floor plans on half print size (11X17) or larger, with room numbers, shall be provided by the contractor to the COR and DPW RPPD located in building 4622. The card keys, metal keys, and floor plans are to be provided to RPPD five (5) days prior to the day the facility is scheduled to be turned over to DPW. The contractor/COR shall maintain secure key control of all facilities until they have been turned over to RPPD.

5) Project COR's shall be responsible for turning in all card keys/override keys, key schedules, bitting codes with room numbers/locations to DPW RPPD located in building 4622.

6) Master key, control bitting, bitting codes, building code and 500 unused bitting codes must be submitted to DPW RPPD before final payment is approved. DPW RPPD shall forward the blank card keys to the DPW Housing Project Manager to be issued to the Building Managers.

7) Bitting codes obtained from the manufacturer shall be sent via Registered Mail, to the requestor, for control and tracking purposes.

5. MARKINGS:

a. Metal Override Keys shall be marked as follows:

1) Keys shall be stamped "US Government/ Do Not Duplicate" on one side and shall have the facility code or facility (building) number and room number or location stamped on the opposite side of the key.

2) Key codes shall be obtained from the OMD Lock Shop Supervisor or Work Lead by the COR through a written email request.

3) Key markings and designation shall be between 1/16 and 1/8 inch and be easily legible to the eye.

6. All locks, hardware, cores, keying systems, and related software shall be installed and serviced by personnel that are properly licensed under The State of Texas Private Security Act Chapter 1702, Texas Occupation Code under the appropriate sections governing Locksmith, Electronic Access Devices and Security Alarms.

7. PROPONENT. The proponent for this standing operating procedure is the Chief, Operations and Maintenance Division, Directorate of Public Works, Fort Hood, Texas.

8. THIS POLICY REMAINS IN EFFECT UNTIL IT IS RESCINDED OR SUPERSEDED.

Adam H. Alexander
Chief, Operations & Maintenance Division
Directorate of Public Works

DISTRIBUTION:
DPW all Divisions
USACE – CTAO

Appendix A

BEST and SAFLOK, Locking Mechanism Examples

Appendix A.1

Key Stamping Example

Appendix A.2

Bitting Codes Turn-in Example

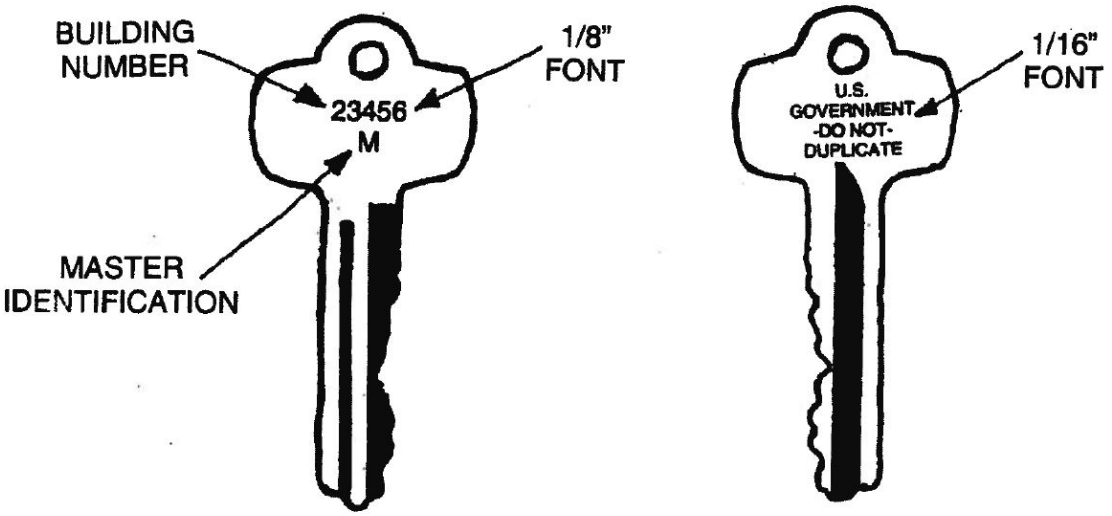
Appendix A, BEST and SAFLOK, Locking Mechanism Examples

Best Lock System with Card

SAFLOK

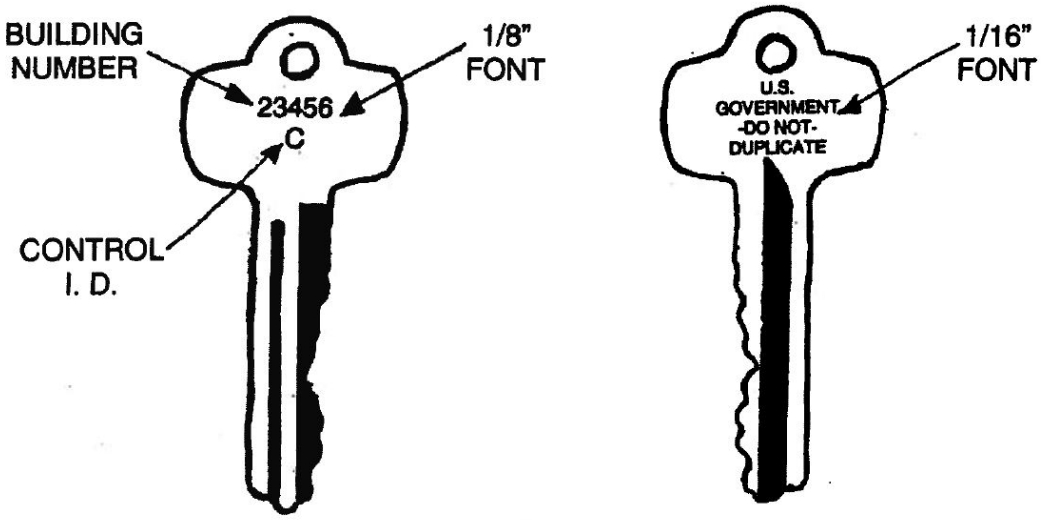
Appendix A.1, DPW-OMD Key Marking

STANDARD KEY MARKINGS



MASTER

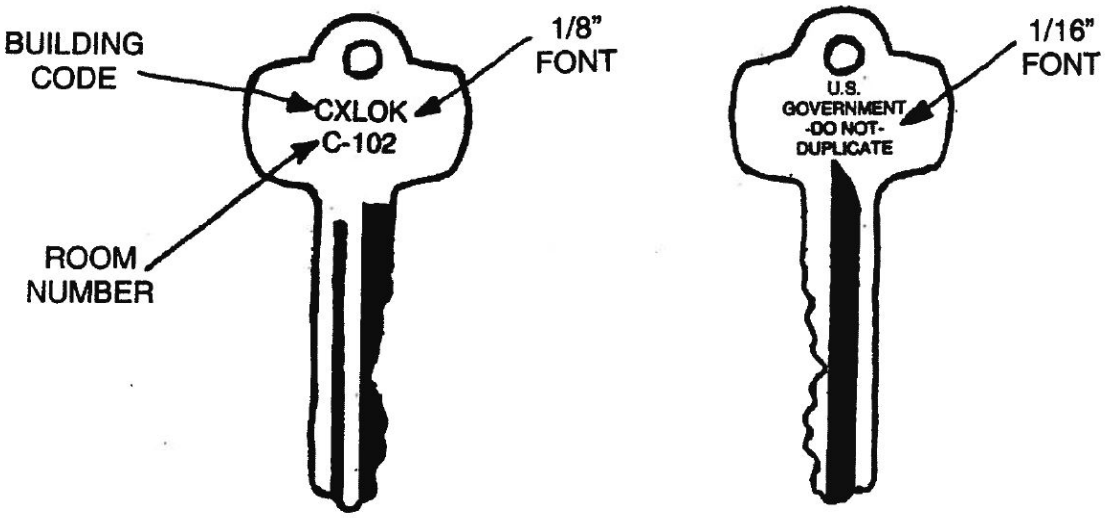
12 Keys



CONTROL / CORE

6 Keys

STANDARD KEY MARKINGS



CHANGE KEY

4 Keys

Appendix A.2 DPW-OMD Bitting Codes Turn-in Example

Bldg # _____ Page: 1

Master _____ Date: _____ Control: _____

Bitting	Kwy	Core Qty	ROOM or LOCATION

BLDG Code _____ BLDG # _____

Glossary:

SOP	Standard Operating Procedure
RPPD	Real Property and Planning Division
ENG	Engineering
USACE	United States Army Corps of Engineers
COR	Contracting Office Representative
Existing Facility	Facility that exist structurally and is already on the property book with RPPD
New Facility	a structure recently constructed but not yet on the property book with RPPD
Blank Card key	An electronic key card not yet programed to a facility or room.
ISSO	Information System Security Officer

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ANSI/ASSP A10.34	(2021) Protection of the Public on or Adjacent to Construction Sites
ANSI/ASSP A10.44	(2020) Control of Energy Sources (Lockout/Tagout) for Construction and Demolition Operations

ASTM INTERNATIONAL (ASTM)

ASTM F855	(2020) Standard Specifications for Temporary Protective Grounds to Be Used on De-energized Electric Power Lines and Equipment

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE 1048	(2016) Guide for Protective Grounding of Power Lines
IEEE C2	(2023) National Electrical Safety Code

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 51B	(2024) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
NFPA 70	(2023; ERTA 1 2024; TIA 24-1) National Electrical Code
NFPA 70E	(2024) Standard for Electrical Safety in the Workplace
NFPA 241	(2022) Standard for Safeguarding Construction, Alteration, and Demolition Operations
NFPA 306	(2024) Standard for the Control of Gas Hazards on Vessels

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

10 CFR 20	Standards for Protection Against Radiation
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1915	Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment
29 CFR 1926	Safety and Health Regulations for Construction
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
CPL 2.100	(1995) Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146

1.2 DEFINITIONS

The following definitions are for the convenience of the reader. If there is a referenced document in the text of this specification section, that is the document that should define terms for that paragraph. If further clarification is needed, contact the Contracting Officer.

1.2.1 Site Safety and Health Officer (SSHO)

A Contractor Employee that is responsible for overseeing and ensuring implementation of the prime Contractor's Safety and Occupational Health (SOH) program according to the Contract, EM 385-1-1, applicable federal, state, and local requirements.

1.2.1.1 Level One SSHO

A designated employee with full-time SOH responsibility that meets and follows the requirements of EM 385-1-1.

1.2.1.2 Level Two SSHO

A designated employee with Level Two SSHO responsibility that meets and follows the requirements of EM 385-1-1. Level Two SSHOs cannot be assigned to projects that have a residual Risk Assessment Code (RAC) of high or extremely high.

1.2.1.3 Level Three SSHO

A designated Qualified Person or Competent Person with SOH responsibility that meets and follows the requirements of EM 385-1-1. Level 3 SSHOs cannot be assigned to projects that have a residual RAC of high or extremely high.

1.2.1.4 Alternate SSHO

An employee that meets the definition of the contract-required level SSHO, but is not the primary SSHO.

1.2.2 Competent Person (CP)

The CP is a person designated in writing, who, through training, knowledge and experience, is capable of identifying, evaluating, and addressing existing and predictable hazards in the working environment or working conditions that are unsanitary, hazardous, or dangerous to personnel, and who has authorization to take prompt corrective measures to eliminate them.

1.2.3 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.

1.3 SUBMITTALS

Government Acceptance or Approval does not remove responsibility from the Contractors for their actions or liability.

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G,

SD-06 Test Reports

Accident Reports; G,

LHE Inspection Reports

Monthly Exposure Reports; G,

SD-07 Certificates

Activity Hazard Analysis (AHA); G,

Certificate of Compliance

Hot Work Permit

License Certificates

Portable Gauge Operations Planning Worksheet; G,

Radiography Operation Planning Work Sheet; G,

Standard Lift Plan; G,

1.4 PUBLIC HEALTH EMERGENCIES

In the event of a declared public health emergency, follow safety

precautions as required by the Occupational Safety and Health Administration (OSHA) www.osha.gov, the Centers for Disease Control and Prevention (CDC) www.cdc.gov, and as required by federal, state and local requirements.

1.5 MONTHLY EXPOSURE REPORTS

Provide a Monthly Exposure Report by the fifth of each month. 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 progress payment.

1.6 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this Contract, comply with the most recent edition of USACE EM 385-1-1, and the following federal, state, and local laws, ordinances, criteria, rules and regulations at the date of the Solicitation for this Contract. 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.

1.7 SITE QUALIFICATIONS, DUTIES, AND MEETINGS

1.7.1 Site Safety and Health Officer (SSHO)

1.7.1.1 Qualifications of SSHO

All SSHOs will have met the training, experience requirements identified in the EM 385-1-1 and this Contract.

1.7.1.2 Duties of SSHO

All SSHOs will carry out the roles and responsibilities as identified in this Contract and the EM 385-1-1. All SSHOs will be designated on an ENG Form 6282. The form can be found at https://www.publications.usace.army.mil/Portals/76/Eng_Form_6282_2023Aug28.pdf Superintendent, QC Manager, and SSHO are subject to dismissal if their 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.

1.7.1.3 Additional Site Safety and Health Officer (SSHO) Requirements and Duties

The SSHO may not serve as the Quality Control Manager. The SSHO may not serve as the Superintendent. The SSHO shall be assigned no other duties.

1.7.1.4 Safety Meetings

Conduct safety meetings to review past activities, plan for new or changed operations, review pertinent aspects of appropriate AHA (by trade), establish safe working procedures for anticipated hazards, and provide pertinent Safety and Occupational Health (SOH) training and motivation. Conduct meetings at least once a month for all supervisors at the project location. The SSHO, supervisors, or foremen must conduct meetings at

least once a week for the trade workers. Document meeting minutes to include the date, persons in attendance, subjects discussed, and names of individual(s) who conducted the meeting. Maintain documentation on-site and furnish copies to the Contracting Officer on request. Notify the Contracting Officer of all scheduled meetings 7 calendar days in advance.

1.7.2 Roles and Responsibilities of Prime Contractor and SSHO

The Prime Contractor and SSHO must ensure that the requirements of all applicable OSHA and EM 385-1-1 are met for the project. The Prime Contractor must ensure an SSHO or an equally qualified Alternate SSHO(s) is at the worksite at all times to implement and administer the Contractor's safety program and Government accepted Accident Prevention Plan. If the required SSHO has to temporarily (that is, up to 24 hours / 1 day) leave the site of work due to unforeseen or emergency situations, a Level One, Two, or Three SSHO may be used in the interim and must be on the site of work at all times when work is being performed.

If the SSHO must be off-site for a period longer than 24 hours / 1 day, a qualified alternate that meets the contract requirements must be onsite.

a. Prime contractor must ensure all SSHOs:

(1) Are designated on an ENG Form 6282.

(2) Meet minimum training and experience requirements identified in EM 385-1-1.

(3) Execute roles and responsibilities identified in EM 385-1-1.

1.7.3 Contract Site Safety And Health Officer(s)(SSHOs) Minimum Requirements

Provide a minimum of one Level One SSHO that meets the requirements of EM 385-1-1 for this project.

1.7.4 Competent Person for Confined Space Entry

Provide a CP for Confined Space Entry who meets the requirements of EM 385-1-1 and herein. The CP for Confined Space Entry must supervise the entry into each confined space in accordance with EM 385-1-1.

Since this work involves operations that handle combustible or hazardous materials, this person must have the ability to understand and follow through on the air sampling, Personal Protective Equipment (PPE), and instructions of a Marine Chemist, Coast Guard authorized persons, or Certified Industrial Hygienist. Confined space and enclosed space work must comply with NFPA 306, 29 CFR 1915, "Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment," or as applicable in 29 CFR 1910 for general industry, 29 CFR 1926 for construction.

1.7.5 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project must attend the preconstruction conference. This includes the project superintendent, Site Safety and Occupational Health Officer, quality control manager, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses

(AHAs) and special plans, program and procedures associated with it).

b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the Contract. This list of proposed AHAs will be reviewed and an agreement will be reached between the Contractor and the Contracting Officer as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, and Government review of AHAs to preclude project delays. The creation of the APP and Schedule will be created after being given Notice to Proceed.

c. Deficiencies in the submitted APP, identified during the Contracting Officer's review, must be corrected, and the APP re-submitted for review prior to the start of construction. Work is not permitted to begin until an APP is established that is acceptable to the Contracting Officer.

1.8 ACCIDENT PREVENTION PLAN (APP)

1.8.1 Accident Prevention Plan (APP) - Construction

Submit the Accident Prevention Plan (APP) for review and acceptance by the Government at least 15 calendar days prior to the start, after being given Notice to Proceed. A competent person must prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of EM 385-1-1, ENG Form 6293, and herein. The APP must be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP must interface with the Contractor's overall safety and occupational health program referenced in the APP in the applicable APP element, and made site-specific. Describe the methods to evaluate past safety performance of potential subcontractors in the selection process. Also, describe innovative methods used to ensure and monitor safe work practices of subcontractors. The Government considers the Prime Contractor to be the "controlling employer" for all worksite safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the Contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP must be signed in accordance with the APP and ENG Form 6293 Accident Prevention Plan Worksheet. The SSHO must provide and maintain the APP and a log of signatures by each subcontractor foreman, attesting that they have read and understand the APP, and make the APP and log available on-site to the Contracting Officer. If English is not the foreman's primary language, the Prime Contractor must provide an interpreter.

Submit the APP to the Contracting Officer within 30 calendar days of Contract award and not less than 10 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP. Once reviewed and accepted by the Contracting Officer, the APP and attachments will be enforced as part of the Contract. Disregarding the provisions of this Contract or the accepted APP is cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified. Continuously review and amend the APP, as necessary, throughout the life of the Contract. Changes to the accepted APP must be made with the knowledge and concurrence of the Contracting

Officer, project superintendent, SSHO and Quality Control Manager. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered. 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 Contracting Officer within 24 hours of discovery. Eliminate and remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ANSI/ASSP A10.34), and the environment.

1.8.2 Names and Qualifications

Provide plans in accordance with the requirements outlined in EM 385-1-1, including the following:

a. Names and qualifications (resumes including education, training, experience and certifications) of site safety and health personnel designated to perform work on this project to include the designated Site Safety and Health Officer and other competent and qualified personnel to be used. Specify the duties of each position.

b. As a minimum, designate and submit qualifications of Competent Persons (CP) for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; and personal protective equipment and clothing to include selection, use and maintenance. Designate and submit qualifications for additional CPs as applicable to the work performed under this Contract.

1.8.3 Plans

Provide plans in the APP in accordance with the requirements outlined in EM 385-1-1, including the following:

1.8.3.1 Site Demolition Plan

Identify the safety and health aspects, and prepare in accordance with Section 02 41 00 DEMOLITION and referenced sources.

1.9 ACTIVITY HAZARD ANALYSIS (AHA)

Before beginning each activity, task or Definable Feature of Work (DFOW) involving a type of work presenting hazards not experienced in previous project operations, or where a new work crew or subcontractor is to perform the work, the Contractor(s) performing that work activity must prepare an AHA. AHAs must be developed by the Prime Contractor, subcontractor, or supplier performing the work, and provided for Prime Contractor review and approval before submitting to the Contracting Officer. AHAs must be signed by the SSHO, Superintendent, QC Manager and the subcontractor Foreman performing the work. Format the AHA in accordance with EM 385-1-1 or as directed by the Contracting Officer. Submit the AHA for review at least 15 working days prior to the start of each activity task, or DFOW. The Government reserves the right to require the Contractor to revise and resubmit the AHA if it fails to effectively identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

AHAs must identify competent persons required for phases involving high risk activities, including confined entry, crane and rigging, excavations, trenching, electrical work, fall protection, and scaffolding.

1.9.1 AHA Management

Review the AHA list periodically (at least monthly) at the Contractor supervisory safety meeting, and update as necessary when procedures, scheduling, or hazards change. Use the AHA during daily inspections by the SSHO to ensure the implementation and effectiveness of the required safety and health controls for that work activity.

1.9.2 AHA Signature Log

Each employee performing work as part of an activity, task or DFOW must review the AHA for that work and sign a signature log specifically maintained for that AHA prior to starting work on that activity. The SSHO must maintain a signature log on site for every AHA. Provide employees whose primary language is other than English, with an interpreter to ensure a clear understanding of the AHA and its contents.

1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in paragraph REFERENCES. Maintain applicable equipment manufacturer's manuals.

1.11 EMERGENCY MEDICAL TREATMENT

Contractors must arrange for their own emergency medical treatment in accordance with EM 385-1-1. The Government has no responsibility to provide emergency medical treatment.

1.12 NOTIFICATIONS AND REPORTS

1.12.1 Accident Notification

Notify the Contracting Officer in accordance with the EM 385-1-1 Accident Reporting Timeline.

Table
Accident Reporting Required Timeline

Accident Type	Notify KO or COR	Complete Final Accident Report on ENG 3394 and provide to KO or COR
Fatality, in-patient hospitalization, amputation, eye loss, or property damage over $600,000.	Immediately, no later than (NLT) 8 Hours	Within 7 Days

Table Accident Reporting Required Timeline		
All other accidents and near misses	Immediately, no later than (NLT) 24 Hours	Within 7 Days

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 accident or near miss.

1.12.2 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. All accidents are reportable, regardless of whether or not it is recordable. Complete the applicable USACE Accident Report, ENG Form 3394, and provide the report to the Contracting Officer within 7 calendar days of the accident. The Contracting Officer will provide copies of any required or special forms. All accidents are reportable, regardless of whether or not it is recordable.

b. Near Misses: For Army projects, report all "Near Misses" to the Contracting Officer, using local accident reporting procedures, within 24 hours. The Contracting Officer will provide the Contractor the required forms. Near miss reports are considered positive and proactive Contractor safety management actions.

1.12.3 LHE Inspection Reports

Submit LHE inspection reports required in accordance with EM 385-1-1 and as specified herein with Daily Reports of Inspections.

1.12.4 Certificate of Compliance and Pre-lift Plan/Checklist for LHE and Rigging

Provide a Certificate of Compliance for LHE entering an activity under this Contract and in accordance with EM 385-1-1. Post certifications on the crane.

Develop a Standard Lift Plan (SLP) in accordance with EM 385-1-1 and using Standard Pre-Lift Crane Plan/Checklist for each lift planned. Submit SLP to the Contracting Officer for approval within 15 calendar days in advance of planned lift.

1.13 HOT WORK PERMIT

1.13.1 Permit and Personnel Requirements

Submit and obtain a written permit prior to performing "Hot Work" (i.e., welding or cutting) or operating other flame-producing/spark producing devices, from the Fire Division. A permit is required from the Explosives

Safety Office for work in and around where explosives are processed, stored, or handled. Contractors are required to meet all criteria before a permit is issued. Provide at least two 20 pound 4A:20 BC rated extinguishers for normal "Hot Work". The extinguishers must be current inspection tagged, and contain an 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 must 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.

When starting work in the facility, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Division phone number. Report any fire, no matter how small, to the responsible Fire Division immediately.

1.13.2 Work Around Flammable Materials

Obtain permit approval from a NFPA Certified Marine Chemist, or Certified Industrial Hygienist for "Hot Work" within or around flammable materials (such as fuel systems or welding/cutting on fuel pipes) or confined spaces (such as sewer wet wells, manholes, or vaults) that have the potential for flammable or explosive atmospheres.

Whenever these materials, except beryllium and chromium (VI), are encountered in indoor operations, local mechanical exhaust ventilation systems that are sufficient to reduce and maintain personal exposures to within acceptable limits must be used and maintained in accordance with manufacturer's instruction and supplemented by exceptions noted in EM 385-1-1.

1.14 RADIATION SAFETY REQUIREMENTS

Submit License Certificates, employee training records, and Leak Test Reports for radiation materials and equipment to the Contracting Officer and Radiation Safety Office (RSO) for all specialized and licensed material and equipment proposed for use on the construction project (excludes portable machine sources of ionizing radiation including moisture density and X-Ray Fluorescence (XRF)). Maintain on-site records whenever licensed radiological materials or ionizing equipment are on Government property.

Protect workers from radiation exposure in accordance with 10 CFR 20, ensuring any personnel exposures are maintained As Low As Reasonably Achievable.

1.14.1 Radiography Operation Planning Work Sheet

Submit a Gamma and X-Ray Radiography Operation Planning Work Sheet to Contracting Officer 14 days prior to commencement of operations involving radioactive materials or radiation generating devices. For portable machine sources of ionizing radiation, including moisture density and XRF, use and submit the Portable Gauge Operations Planning Worksheet instead. The Contracting Officer will review the submitted worksheet and provide questions and comments.

Contractors must use primary dosimeters process by a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory.

1.14.2 Site Access and Security

Coordinate site access and security requirements with the Contracting Officer for all radiological materials and equipment containing ionizing radiation that are proposed for use on a government facility. For gamma radiography materials and equipment, a Government escort is required for any travels on the Installation. The Government authorized representative will meet the Contractor at a designated location outside the Installation, ensure safety of the materials being transported, and will escort the Contractor for gamma sources onto the Installation, to the job site, and off the Installation. For portable machine sources of ionizing radiation, including moisture density and XRF, the Government authorized representative will meet the Contractor at the job site.

Provide a copy of all calibration records, and utilization records for radiological operations performed on the site.

1.14.3 Loss or Release and Unplanned Personnel Exposure

Loss or release of radioactive materials, and unplanned personnel exposures must be reported immediately to the Contracting Officer, RSO, and Base Security Department Emergency Number.

1.14.4 Site Demarcation and Barricade

Properly demark and barricade an area surrounding radiological operations to preclude personnel entrance, in accordance with EM 385-1-1, Nuclear Regulatory Commission, and Applicable State regulations and license requirements, and in accordance with requirements established in the accepted Radiography Operation Planning Work Sheet.

Do not close or obstruct streets, walks, and other facilities occupied and used by the Government without written permission from the Contracting Officer.

1.14.5 Security of Material and Equipment

Properly secure the radiological material and ionizing radiation equipment at all times, including keeping the devices in a properly marked and locked container, and secondarily locking the container to a secure point in the Contractor's vehicle or other approved storage location during transportation and while not in use. While in use, maintain a continuous visual observation on the radiological material and ionizing radiation equipment. In instances where radiography is scheduled near or adjacent to buildings or areas having limited access or one-way doors, make no assumptions as to building occupancy. Where necessary, the Contracting Officer will direct the Contractor to conduct an actual building entry, search, and alert. Where removal of personnel from such a building cannot be accomplished and it is otherwise safe to proceed with the radiography, position a fully instructed employee inside the building or area to prevent exiting while external radiographic operations are in process.

1.14.6 Transportation of Material

Comply with 49 CFR 173 for Transportation of Regulated Amounts of Radioactive Material. Notify Local Fire authorities and the site Radiation Safety Officer (RSO) of any Radioactive Material use.

1.14.7 Schedule for Exposure or Unshielding

Actual exposure of the radiographic film or unshielding the source must not be initiated until after 5 p.m. on weekdays.

1.14.8 Transmitter Requirements

Adhere to the base policy concerning the use of transmitters, such as radios and cell phones. Obey Emissions control (EMCON) restrictions.

1.15 CONFINED SPACE ENTRY REQUIREMENTS

Confined space entry must comply with EM 385-1-1, 29 CFR 1926, 29 CFR 1910, and Directive CPL 2.100. Any potential for a hazard in the confined space requires a permit system to be used.

1.15.1 Rescue Procedures and Coordination with Local Emergency Responders

Develop and implement an on-site rescue and recovery plan and procedures. The rescue plan must not rely on local emergency responders for rescue from a confined space.

1.16 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must comply with the applicable Storm Plan and:

a. Secure outside equipment and materials and place materials that could be damaged in protected areas.

b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.

c. Ensure that temporary erosion controls are adequate.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

Comply with EM 385-1-1, NFPA 70, NFPA 70E, NFPA 241, the APP, the AHA, Federal and State OSHA 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. Use personal hearing protection at all times in designated noise hazardous areas or when performing noise hazardous tasks. Safety glasses must be worn . Mandatory PPE includes:

a. Head Protection that meets ANSI/ISEA Z89.1, Type I or II, Class G

b. Long Pants

c. Safety Toe Boots

d. Minimum Class II Reflective Vests

e. Safety Glasses

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 phone, 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 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 Contracting Officer, 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 Contracting Officer approval. Notify the Radiation Safety Officer (RSO) prior to excepted items of radioactive material and devices being brought on base.

3.1.3 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 demolition, repair, renovation, or construction operations. Stop that portion of work and notify the Contracting Officer 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.

3.2 UTILITY OUTAGE REQUIREMENTS

Apply for utility outages in advance. Refer to Section 01 00 00.00 44 CONSTRUCTION SCHEDULE. 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. In accordance with EM 385-1-1, 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 Hazardous Energy Control Program (HECP) and HEC procedures, as well as applicable

Activity Hazard Analyses (AHAs). In accordance with EM 385-1-1 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 shut-down, conduct a pre-outage coordination meeting in accordance with EM 385-1-1. This meeting must include the Prime Contractor, the Prime and subcontractors performing the work, the Contracting Officer, 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. 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, 29 CFR 1910, 29 CFR 1915, ANSI/ASSP A10.44, NFPA 70E.

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. The meeting will occur 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. Install personal protective grounds, with tags, to eliminate the potential for induced voltage in accordance with EM 385-1-1.

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, 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 EM 385-1-1.

3.5.1 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 at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1.

Provide personal fall protection equipment, systems, subsystems, and components that comply with EM 385-1-1 and 29 CFR 1926.

3.5.1.1 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. 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.

3.5.1.2 Personal Fall Protection Equipment

Only a 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 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 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 in order to provide short-term

relief from the effects of orthostatic intolerance in accordance with EM 385-1-1.

3.6 EQUIPMENT

3.6.1 Use of Explosives

Explosives must not be used or brought to the project site without prior written approval from the Contracting Officer. 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 be only where directed and in approved storage facilities. These facilities must be kept locked at all times except for inspection, delivery, and withdrawal of explosives.

3.7 ELECTRICAL

Perform electrical work in accordance with EM 385-1-1.

3.7.1 Electrical Work

As described 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 Contracting Officer. 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 minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method.

When working in energized substations, only qualified electrical workers 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 footwear, 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.

3.7.2 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.

3.7.3 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.

3.7.4 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.

3.7.5 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 42 00

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization (e.g., ASTM B564 Standard Specification for Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided.

AACE INTERNATIONAL (AACE)
726 East Park Avenue #180
Fairmont, WV 26554 USA
Ph: 304-296-8444
Fax: 304-291-5728
Internet: https://web.aacei.org/

ACOUSTICAL SOCIETY OF AMERICA (ASA)
1305 Walt Whitman Road, Suite 110
Melville, NY 11747-4300
Ph: 516-576-2360
Fax: 631-923-2875
E-mail: asa@acousticalsociety.org
Internet: https://acousticalsociety.org/

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC. (AIA/NAS)
1000 Wilson Blvd, Suite 1700
Arlington, VA 22209-3928
Ph: 703-358-1000
E-mail: aia@aia-aerospace.org
Internet: https://www.aia-aerospace.org/

AIR BARRIER ASSOCIATION OF AMERICA (ABAA)
1600 Boston-Providence Hwy
Walpole, MA 02081
Ph: 1-866-956-5888
Fax: 1-866-956-5819
E-mail: abaa@airbarrier.org
Internet: https://www.airbarrier.org/

AIR CONDITIONING CONTRACTORS OF AMERICA (ACCA)
1520 Belle View Blvd #5220
Alexandria, VA 22307

Ph: 703-575-4477
Internet: https://www.acca.org/

AIR DUCT COUNCIL (ADC)
1300 Summer Ave.
Cleveland, OH 44115
Ph: 216-241-7333

E-mail: info@flexibleduct.org
Internet: https://flexibleduct.org/

AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC. (AMCA)
30 West University Drive
Arlington Heights, IL 60004-1893
Ph: 847-394-0150
Fax: 847-253-0088
E-mail: communications@amca.org
Internet: http://www.amca.org

AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE (AHRI)
2311 Wilson Blvd, Suite 400
Arlington, VA 22201
Ph: 703-524-8800
Internet: http://www.ahrinet.org

ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS (ATIS)
1200 G Street, NW, Suite 500
Washington, D.C. 20005
Ph: 202-628-6380

Internet: http://www.atis.org

ALUMINUM ASSOCIATION (AA)
1400 Crystal Drive
Suite 430
Arlington, VA 22202
Ph: 703-358-2960

Internet: https://www.aluminum.org/

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)
1900 E Golf Rd, Suite 1250
Schaumburg, IL 60173
Ph: 847-303-5664
E-mail: customerservice@FGIAonline.org
Internet: https://fgiaonline.org/

AMERICAN ASSOCIATION OF RADON SCIENTISTS AND TECHNOLOGISTS (AARST)
527 N Justice Street
Hendersonville, NC 28739
Ph: 828-348-0185

E-mail: info@aarst.org
Internet: http://aarst-nrpp.com/wp/

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
555 12th Street NW, Suite 1000
Washington, DC 20004

Ph: 202-624-5800
Fax: 202-624-5806
E-Mail: info@aashto.org
Internet: https://www.transportation.org/

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)
1 Davis Drive
P.O. Box 12215
Research Triangle Park, NC 27709-2215
Ph: 919-549-8141

E-Mail: ordering@aatcc.org
Internet: https://www.aatcc.org/

AMERICAN BEARING MANUFACTURERS ASSOCIATION (ABMA)
1001 N. Fairfax Street Suite 500
Alexandria, VA 22314
Ph: 703-842-0030
E-mail: info@americanbearings.org
Internet: https://www.americanbearings.org/

AMERICAN BOILER MANUFACTURERS ASSOCIATION (ABMA/BOIL)
8221 Old Courthouse Road, Suite 380
Vienna, VA 22182
Ph: 703-356-7172
E-mail: info@abma.com
Internet: https://www.abma.com/

AMERICAN BUREAU OF SHIPPING (ABS)
ABS Plaza
1701 City Plaza Drive
Spring, TX 77389 United States
Ph: 281-877-6000
Fax: 281-877-5976
E-Mail: ABS-WorldHQ@eagle.org
Internet: https://ww2.eagle.org/

AMERICAN COLLEGE OF RADIOLOGY (ACR)
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WASHINGTON STATE ADMINISTRATIVE CODE (WAC)
Legislative Information Center
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WASHINGTON STATE DEPARTMENT OF ECOLOGY (WSDE)
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E-mail: woolmark.americas@wool.com
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PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

-- End of Section --

SECTION 01 45 00

QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D3740	(2019) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E329	(2023) Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety and Occupational Health Requirements

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program. Include all associated costs in the applicable CLIN Schedule item.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.

SD-01 Preconstruction Submittals

Contractor Quality Control (CQC) Plan; G,

SD-06 Test Reports

Verification Statement

1.4 GENERAL REQUIREMENTS

Establish and maintain an effective Quality Control (QC) system to ensure the work complies with the contract requirements. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. QC is comprised of plans, procedures, and organization necessary to produce an

end product that complies with the Contract requirements. The QC system covers all construction operations, both onsite and offsite, and must be keyed to the proposed construction sequence. The Quality Control Manager, Superintendent, Site Safety and Health Officer (SSHO), and all on-site supervisors are responsible for the quality of work and are subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the Contract. The Quality Control Manager must maintain a physical presence at the work site at all times and is the primary individual responsible for all quality control.

1.5 QUALITY CONTROL (QC) PROGRAM REQUIREMENTS

Establish and maintain a QC program as described in this section. The QC program consists of a QC Organization, QC Plan, QC Plan Meeting(s), a Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review and approval, testing, completion inspections, QC certifications, independent Special Inspections in accordance with Section 01 45 35 SPECIAL INSPECTIONS, and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations that comply with the requirements of this Contract. The QC program must cover on-site and off-site work and be keyed to the work sequence. No construction work or testing may be performed unless the QC Manager is on the work site. The QC Manager must report to an officer of the firm and not be subordinate to the Project Superintendent or the Project Manager. The QC Manager, Project Superintendent and Project Manager must work together effectively. Although the QC Manager is the primary individual responsible for quality control, all individuals will be held responsible for the quality of work on the job.

1.5.1 Meetings

1.5.1.1 Quality Control Plan Meeting

Prior to submission of the QC Plan, the Contractor may request a meeting with the Contracting Officer to discuss the QC Plan requirements of this Contract.

The purpose of this meeting is to develop a mutual understanding of the QC Plan requirements prior to plan development and submission and to agree on the Contractor's list of Definable Feature of Work (DFOW).

1.5.1.2 Coordination and Mutual Understanding Meeting

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, meet with the Contracting Officer and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details must be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the QC Manager and signed by the Contractor and the Government. Provide a copy of the signed minutes to all attendees and include in the QC Plan. At a minimum the Coordination and Mutual Understanding Meeting must be repeated when a new QC Manager is appointed. There can be other occasions when subsequent conferences will be called by either party to reconfirm mutual understandings or address deficiencies in the CQC system or procedures which can require corrective

action by the Contractor.

1.5.1.2.1 Purpose

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, design intent, environmental requirements and procedures, coordination of activities to be performed, Special Inspections, and the coordination of the Contractor's management, production, and QC personnel. At the meeting, the Contractor must explain in detail how three phases of control will be implemented for each DFOW, as well as how each DFOW will be affected by each management plan or requirement as listed below:

a. Waste Management Plan.

b. Procedures for noise and acoustics management.

c. Environmental Protection Plan.

d. Environmental regulatory requirements.

e. Special Inspections.

1.5.1.2.2 Coordination of Activities

Coordinate activities included in various sections to assure efficient and orderly installation of each component. Coordinate operations included under different sections that are dependent on each other for proper installation and operation. Coordinate Special Inspections.

1.5.1.2.3 Attendees

As a minimum, the Contractor's personnel required to attend include an officer of the firm, the Project Manager, Project Superintendent, QC Manager, Alternate QC Manager, Special Inspector, Environmental Manager, and subcontractor representatives.

1.5.1.3 Quality Control (QC) Meetings

After the start of construction, conduct weekly QC meetings led by the QC Manager at the work site with the Project Superintendent, the Special Inspector, the Qualified Fire Protection Engineer (QFPE) and the other personnel as necessary. The QC Manager is to prepare the minutes of the meeting and provide a copy to the Contracting Officer within 2 working days after the meeting. The Contracting Officer may attend these meetings. As a minimum, accomplish the following at each meeting:

a. Review the minutes of the previous meeting.

b. Review the schedule and the status of work and deficiencies/rework. Review the most current approved schedule (in accordance with schedule specification) and the status of work and deficiencies/rework.

c. Review the status of submittals and Request For Information (RFIs).

d. Review the work to be accomplished in the next 3 weeks as defined by the schedule section paragraph WEEKLY PROGRESS MEETINGS in Section 01 32 01.00 10 PROJECT SCHEDULE and all documentation required for

that work.

e. Review Testing Plan and Log including status of tests performed since last QC Meeting.

f. Resolve QC and production problems. Discuss status of pending change orders.

g. Address items that may require revising the QC Plan.

h. Review Accident Prevention Plan (APP) and effectiveness of the safety program.

i. Review environmental requirements and procedures.

j. Review Environmental Management Plan.

k. Review Waste Management Plan.

l. Review the status of training completion.

1.5.2 Contractor Quality Control (CQC) Plan

Submit, no later than 10 calendar days after receipt of the Notice to Proceed, a CQC Plan describing the procedures, organization, responsibilities, and controls that will be used to ensure compliance with the contract requirements. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. The Government will consider an interim plan for the first 60 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan and other Contract requirements or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional work.

1.5.2.1 Content of Contractor Quality Control (CQC) Plan

Provide a CQC Plan, prior to start of construction that includes a table of contents, with major sections identified, pages numbered sequentially, and that documents the proposed methods and responsibilities for accomplishing quality control during the construction of the project. The CQC Plan must at a minimum include the following sections:

a. A description of the quality control organization and acknowledgment that the CQC staff will implement the three phase control system for all aspects of the work specified.

b. An organizational chart showing the quality control organization with individual names and job titles and lines of authority up to an executive of the company at the home office.

c. NAMES AND QUALIFICATIONS: Names and qualifications, in resume format, (including position titles and durations for qualifying experiences) for each person in the QC organization. Include the Construction Quality Management (CQM) for Contractor's course certifications for the QC personnel as required by the paragraph CONSTRUCTION QUALITY MANAGEMENT TRAINING.

d. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONNEL: Duties, responsibilities, and authorities of each person in the QC

organization.

e. 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.

f. 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 implementing and managing the QC program as described in this Contract. Include in this letter the responsibility of the QC Manager and Alternate QC Manager to implement and manage the three phases of control, and their authority to stop work that is not in compliance with the Contract. Letters of direction are to be issued by the QC Manager to all other QC quality control representatives outlining their duties, authorities, and responsibilities. Include copies of the letters in the QC Plan.

g. SUBMITTAL PROCEDURES: Procedures for reviewing, approving, scheduling, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents.

h. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraph ACCREDITATION REQUIREMENTS, as applicable.

i. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, associated feature of work required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test.

j. Procedures to complete construction deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected. These procedures are discussed as part of the preparatory meeting prior to beginning work on each definable feature of work, after all required plans, documents, materials are approved, and after copies are at the work site.

k. Reporting procedures, including proposed reporting formats.

l. Procedures for submitting and reviewing design changes/variations prior to submission to the Contracting Officer.

m. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task that is separate and distinct from other tasks and has control requirements and work crews unique to that task. A DFOW is identified by different trades or disciplines, or it is work by the same trade in a different environment. A DFOW is by definition any item or activity on the construction schedule, and the schedule specification provides direction regarding how the DFOWs are to be structured. Include in the list of DFOWs for all activities on the Construction Schedule. Although each section of the specifications can generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section. Identify the specification section number and schedule activity ID for each DFOW listed. The DFOW list will be reviewed in coordination with the construction schedule and agreed upon during the Coordination of Mutual Understanding Meeting.

n. PROCEDURES FOR PERFORMING AND TRACKING THE THREE PHASES OF CONTROL: Identify procedures used to ensure the three phases of control to manage the quality on this project. For each Definable Feature of Work (DFOW), a Preparatory and Initial phase checklist will be filled out during the Preparatory and Initial phase meetings. Conduct the Preparatory and Initial Phases and meetings with a view towards obtaining quality construction by planning ahead and identifying potential problems for each DFOW.

o. Coordinate scheduled work with Special Inspections required by Section 01 45 35 SPECIAL INSPECTIONS, the Statement of Special Inspections and the Special Inspections Project Manual. Where the applicable code issued by the International Code Council (ICC) calls for inspections by the Building Official, the Contractor must include the inspections in the Quality Control Plan and must perform the inspections required by the applicable ICC. The Contractor must perform these inspections using independent qualified inspectors. Include the Special Inspections Project Manual requirements in the QC Plan.

p. PROCEDURES FOR COMPLETION INSPECTION: Procedures for identifying and documenting the completion inspection process. Include in these procedures the responsible party for punch out inspection, pre-final inspection, and final acceptance inspection.

q. TRAINING PROCEDURES AND TRAINING LOG: Procedures for coordinating and documenting the training of personnel required by the Contract.

r. ORGANIZATION AND PERSONNEL CERTIFICATIONS LOG: Procedures for coordinating, tracking and documenting all certifications required for entities such as subcontractors, testing laboratories, suppliers, and personnel. The QC Manager will ensure that certifications are current, appropriate for the work being performed, and will not lapse during any period of the Contract that the work is being performed.

1.5.3 Acceptance of the Quality Control (QC) Plan

The Contracting Officer's acceptance of the Contractor QC Plan, or interim plan applicable to the particular feature of work to be started, is required prior to the start of construction. The Contracting Officer reserves the right to require changes in the QC Plan and operations as necessary, including removal or addition of personnel, to ensure the specified quality of work. The Contracting Officer reserves the right to interview any member of the QC organization at any time to verify the submitted qualifications. All QC organization personnel are subject to acceptance by the Contracting Officer. The Contracting Officer may require the removal of any individual for non-compliance with quality requirements specified in the Contract.

1.5.4 Notification of Changes

Notify the Contracting Officer, in writing, of any proposed changes in the QC Plan or changes to the QC organization personnel. Proposed changes are subject to acceptance by the Contracting Officer.

1.5.5 Special Inspections

Coordinate all required Special Inspections per Section 01 45 35 SPECIAL INSPECTIONS, the statement of Special Inspections and the Schedule of Special Inspections.

1.6 QUALITY CONTROL (QC) ORGANIZATION

1.6.1 Personnel Requirements

The requirements for the CQC organization are a Site Safety and Health Officer (SSHO), QC Manager, full time, onsite Submittals/RMS Data Clerk, and enough qualified personnel to ensure safety and Contract compliance. The SSHO reports directly to a senior project (or corporate) official independent from the QC Manager. The SSHO will also serve as a member of the CQC Staff Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly. The CQC staff always maintains a presence at the site during progress of the work and have complete authority and responsibility to take any action necessary to ensure Contract compliance. The CQC staff will be subject to acceptance by the Contracting Officer. Provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Promptly complete and furnish all letters, material submittals, shop drawing submittals, schedules, and all other project documentation to the CQC organization. The CQC organization is responsible for always maintaining these documents and records at the site, except as otherwise acceptable to the Contracting Officer.

1.6.2 Quality Control (QC) Manager

1.6.2.1 Duties

Provide a QC Manager at the work site to implement and manage the QC program. The QC Manager must be employed by the Prime Contractor. The only duties and responsibilities of the QC Manager are to manage and implement the QC program on this Contract. The QC Manager must attend the Coordination and Mutual Understanding Meeting, perform the three phases of control, perform submittal review and approval, ensure 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, testing laboratory personnel and any other inspection and testing personnel required by this Contract. The QC Manager is the manager of all QC activities. The QC manager is responsible for notifying the Special Inspector of activities which require their review. The QC manager is responsible for coordinating the Special Inspection activities, see paragraph CONTRACTOR'S QUALITY CONTROL (QC) MANAGER, in Section 01 45 35 SPECIAL INSPECTIONS.

1.6.2.2 Qualifications

The QC Manager must possess at least a Bachelor's degree in engineering, architecture, or construction management, with a minimum of 5 years construction quality control experience on construction similar to this Contract or be a construction person with a minimum of ten years of construction experience, of which a minimum of five years experience must be in construction quality control on construction similar to this contract. The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification, safety compliance, and sustainability.

The QC Manager and all members of the QC organization must be capable of reading, writing, and conversing fluently in the English language.

1.6.2.3 Construction Quality Management Training

In addition to the above experience and education requirements, the QC Manager and all members of the QC team , except for the submittal/RMS Data clerk must have completed the CQM for Contractors course. If the QC Manager does not have a current certification, obtain the CQM for Contractors course certification within 90 days of award. This course is periodically offered by the Naval Facilities Engineering Systems Command and the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

The Construction Quality Management Training certificate expires after 5 years. Retake the course prior to certificate expiration to remain current with training through contract completion.

1.6.3 Organizational Changes

Maintain the QC staff with personnel as required by the specification section at all times. When it is necessary to make changes to the QC staff, revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

1.6.4 Alternate Quality Control (QC) Manager Duties and Qualifications

Designate an alternate for the QC Manager at the work site to serve in the event of the designated QC Manager's absence. The qualification requirements for the Alternate QC Manager must be the same as for the QC Manager.

1.6.5 Quality Control (QC) Specialists

Provide a separate QC Specialist at the work site for each of the areas as listed in the Matrix listed below, who must assist and report to the QC Manager and who may perform production related duties but must be allowed sufficient time to perform their assigned quality control duties. These individuals or specialized technical companies are directly employed by the Prime Contractor and cannot be employed by a supplier or subcontractor on this project. A single person can cover more than one area provided that the single person is qualified to perform quality control activities in each designated and that workload allows. QC Specialists must be physically present at the work site to participate in the QC Meetings, perform the three phases of control, including participation in Preparatory and Initial Phase meetings, and to perform and document Follow-up inspections as an extension of the QC Manager for each definable feature of work in their area of responsibility. QC Specialist must assist and be present for training events, and Critical System Acceptance inspections by the Government. Qualification, and experience are provided in Matrix listed herein.

1. Area	**2-1. Qualification and/or** **2-2. Experience**
Submittals/RMS Data Clerk	2-1. Submittal/RMS Data Clerk 2-2. 1 year experience

1.6.6 Special Inspector

The Special Inspector (SI) must be an independent third party hired directly by the Prime Contractor. The SI must not be a company employee of the Contractor or any subcontractor performing the work to be inspected. The qualifications of the SI are defined in Section 01 45 35 SPECIAL INSPECTION.

1.7 SUBMITTAL AND DELIVERABLES REVIEW AND APPROVAL

Procedures for submission, review and approval of submittals are described in Section 01 33 00 SUBMITTAL PROCEDURES. Procedures must include field verification of relevant dimensions and component characteristics by the QC organization prior to submittal being sent to the Contracting Officer. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the Contract.

1.8 THREE PHASES OF CONTROL

CQC enables the Contractor to ensure that the construction, including that of subcontractors and suppliers, complies with the requirements of the Contract. At least three phases of control must be conducted by the QC Manager to adequately cover both on-site and off-site work for each definable feature of the construction work as follows:

1.8.1 Preparatory Phase

Document the results of the preparatory phase actions by separate minutes prepared by the QC Manager and attach to the daily CQC report. Instruct applicable workers as to the acceptable level of workmanship required to meet Contract specifications.

Notify the Contracting Officer at least 2 business days in advance of each preparatory phase meeting. The meeting will be conducted by the QC Manager, the Project Superintendent, the Special Inspector,, and the foreman responsible for the DFOW, as applicable. When the DFOW will be accomplished by a subcontractor, that subcontractor's foreman must attend the preparatory phase meeting. This phase is performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. Perform the following prior to beginning work on each DFOW:

a. Review each paragraph of the applicable specification sections, reference codes, and standards. Make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by Government personnel until final acceptance of the work.

b. Review the Contract drawings.

c. Verify that field measurements are as indicated on construction or shop drawings or both before confirming product orders, to minimize waste due to excessive materials.

d. 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.

e. Review the testing plan and ensure that provisions have been made to provide the required QC testing.

f. Examine the work area to ensure that the required preliminary work has been completed and complies with the Contract and ensure any deficiencies/rework items in the preliminary work have been corrected and confirmed by the Contracting Officer.

g. Review coordination of product/material delivery to designated prepared areas to execute the work.

h. 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 and are properly stored.

i. Check to assure that all materials and equipment have been tested, submitted, and approved.

j. Discuss specific controls to be used, construction methods, construction tolerances, workmanship standards, and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each DFOW. Ensure any portion of the plan requiring separate Contracting Officer acceptance has been approved.

k. 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.

l. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

m. Discuss schedule and execution of the initial control phase and confirmation or construction quality compliance.

n. Review Special Inspections required by Section 01 45 35 SPECIAL INSPECTION, the Statement of Special Inspections and the Schedule of Special Inspections.

1.8.2 Initial Phase

Notify the Contracting Officer at least 2 business days in advance of each initial phase. When construction crews are ready to start work on a DFOW, the Project Superintendent, and the foreman responsible for that DFOW. Observe the initial segment of the DFOW to ensure that the work complies with Contract requirements. Document the results of the initial phase in the daily CQC Report and in the Initial Phase Checklist. Repeat the initial phase for each new crew to work on-site when acceptable levels of specified quality are not being met. Indicate the exact location of initial phase for definable feature of work for future reference and comparison with follow-up phases. Perform the following for each DFOW:

a. Check work to ensure that it is in full compliance with Contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full Contract compliance. Verify required control inspection and testing comply with the Contract.

c. Establish level of workmanship and verify that it meets the minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve any workmanship issues.

e. Ensure that testing is performed by the approved laboratory.

f. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.

g. Review project specific work plans (i.e., HAZMAT Abatement, Stormwater Management) to ensure all preparatory work items have been completed and documented.

h. Coordinate scheduled work with Special Inspections required by Section 01 45 35 SPECIAL INSPECTIONS, the Statement of Special Inspections and the Schedule of Special Inspections.

1.8.3 Follow-Up Phase

Perform the following for on-going DFOW daily, or more frequently as necessary, until the completion of each DFOW. The Final Follow-Up for any DFOW will clearly note in the daily report the DFOW is completed, and all deficiencies/rework items have been completed in accordance with the paragraph DEFICIENCY/REWORK ITEMS LIST. Each DFOW that has completed the Initial Phase and has not completed the Final Follow-up must be included on each daily report. If no work was performed on that DFOW for the period of that daily report, it must be so noted. Document all Follow-Up activities for DFOWs in the daily CQC Report:

a. Ensure the work including control testing complies with Contract requirements until completion of that particular work feature. Record checks in the CQC documentation.

b. Maintain the quality of workmanship required.

c. Ensure that testing is performed by the approved laboratory.

d. Ensure that deficiencies/rework items are being corrected. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work which may be affected by the deficient work.

e. Do not build upon nor conceal non-conforming work.

f. Assure manufacturers' representatives have performed necessary inspections if required and perform safety inspections.

g. Coordinate scheduled work with Special Inspections required by Section 01 45 35 SPECIAL INSPECTIONS, the Statement of Special Inspections and the Schedule of Special Inspections.

1.8.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases on the same DFOW if the quality of on-going work is unacceptable, if there are changes in the applicable QC organization, if there are changes in the on-site production

supervision or work crew, if work on a DFOW has not started within a susbstantial period of the initial preparatory meeting or has resumed after a substantial period of inactivity, or if other problems develop.

1.8.5 Notification of Three Phases of Control for Off-Site Work

Notify the Contracting Officer at least 2 weeks prior to the start of the preparatory and initial phases.

1.8.6 Deficiency/Rework Items List

The QC Manager must maintain a list of work that does not comply with the Contract, identifying what items need to be corrected, the activity ID number associated with the item, the date the item was originally discovered, the date the item will be corrected by, and the date the item was corrected.

The QC Manager reviews the list at each weekly QC Meeting:

a. There is no requirement to report a deficiency/rework item that is corrected the same day it is discovered.

b. No successor task may be advanced beyond the preparatory phase meeting until all deficiencies/rework items have been cleared by the QC Manager and concurred with by the Contracting Officer. This must be confirmed as part of the Preparatory Phase activities.

c. Attach a copy of the "Deficiency/Rework Items List" to the last daily CQC Report of each month.

d. The Contractor is responsible for including those items identified by the Contracting Officer.

e. All deficiencies/rework items must be confirmed as corrected by the QC Manager, and concurred by the Contracting Officer, prior to commencement of any completion inspections per paragraph COMPLETION INSPECTIONS unless specifically exempted by the Contracting Officer.

f. Non-Compliance with these requirements is grounds for removal in accordance with paragraph ACCEPTANCE OF THE QUALITY CONTROL (QC) PLAN.

g. All delays, concurrent or related to failure to manage, monitor, control, and correct deficiencies/rework items are entirely the responsibility of the Contractor and can not be made the subject, or any component of any request for additional time or compensation.

1.9 TESTING

Perform specified or required tests to verify that control measures are adequate to provide a product which conforms to Contract requirements. Upon request, furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and acceptance tests when specified. Procure the services of an U.S. Army Corps of Engineers approved testing laboratory or establish an approved testing laboratory. Perform the following activities and record and provide the following data:

a. Verify that testing procedures comply with Contract requirements.

b. Verify that facilities and testing equipment are available and comply with testing standards.

c. Check test instrument calibration data against certified standards.

d. Verify that recording forms and test identification control number system, including all test documentation requirements, have been prepared.

e. Record results of all tests taken, both passing and failing on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the Contracting Officer, actual test reports are submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the Contracting Officer. Failure to submit timely test reports as stated results in nonpayment for related work performed and disapproval of the test facility for this Contract.

f. Contractor to notify the Government at least 24 hours in advance of conduct of tests.

1.9.1 Laboratory Accreditation Authorities

All testing laboratories must be validated by the USACE Material Testing Center (MTC) for the tests to be performed. Information on the USACE MTC with web-links to both a list of validated testing laboratories and for the laboratory inspection request for can be found at: https://mtc.erdc.dren.mil

1.9.2 Capability Check

The Contracting Officer retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician's testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth in this Contract. Laboratories utilized for testing soils, concrete, asphalt, and steel must meet criteria detailed in ASTM D3740 and ASTM E329.

1.9.2.1 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of $2,000 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the Contract amount due the Contractor.

1.9.2.2 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

1.9.3 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 Contracting Officer 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 must be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the Contracting Officer via the QC Manager.

1.10 COMPLETION INSPECTIONS

1.10.1 Punch-Out Inspection

Near the completion of all work or any increment thereof, established by a completion time stated in the Contract Clause entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the QC Manager and QC staff must conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved drawings, specifications, and Contract. Include in the punch list any remaining items on the "Deficiency/Rework Items List", that were not corrected prior to the Punch-Out Inspection as approved by the Contracting Officer in accordance with the paragraph DEFICIENCY/REWORK ITEMS LIST. Include within the punch list the estimated date by which the deficiencies will be corrected. Provide a copy of the punch list to the Contracting Officer.

The QC Manager, or staff, must make follow-on inspections to ascertain that all deficiencies have been corrected. All punch list items must be confirmed as corrected by the QC Manager and concurred by the Contracting Officer. Once this is accomplished, notify the Government that the facility is ready for the Government "Pre-Final Inspection".

1.10.2 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" will be documented by the QC Manager as a result of this inspection. The QC Manager will ensure that all items on this list are corrected and concurred by the Contracting Officer prior to notifying the Government that a "Final" inspection with the Client can be scheduled. All items noted on the "Pre-Final" inspection must be corrected and concurred by the Contracting Officer in a timely manner and 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 unless exceptions are directed by the Contracting Officer.

1.10.3 Final Acceptance Inspection

Notify the Contracting Officer at least 14 calendar days prior to the date a final acceptance inspection can be held. State within the notice that all items previously identified on the pre-final punch list will be corrected and acceptable, along with any other unfinished Contract work, by the date of the final acceptance inspection. The Contractor must be represented by the QC Manager, the Project Superintendent, and others deemed necessary. Attendees for the Government will include the Contracting Officer, other Government QA personnel, and personnel representing the Client. Failure of the Contractor to have all Contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional

inspection cost in accordance with the Contract Clause entitled "Inspection of Construction."

1.11 QUALITY CONTROL (QC) CERTIFICATIONS

1.11.1 Contractor Quality Control (CQC) Report Certification

Contain the following statement within the CQC Report: "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 Completion Certification

Upon completion of work under this Contract, the QC Manager must furnish a certificate to the Contracting Officer attesting that "the work has been completed, inspected, tested and is in compliance with the Contract." Provide a copy of this final QC Certification for completion to the preparer of the Operation & Maintenance (O&M) documentation.

1.12 DOCUMENTATION AND INFORMATION FOR THE CONTRACTING OFFICER

Maintain current and complete records of on-site and off-site QC program operations and activities.

Contact the Contracting Officer for sample forms or print from RMS-CM as needed. Prior to commencing work on construction, the Contractor must obtain a copy set of the current report forms. The report forms will consist of the Contractor Quality Control (CQC) Report, CQC Report (Continuation Sheet), Contractor Production Report, Contractor Production Report (Continuation Sheet), Preparatory Phase Checklist, Initial Phase Checklist, Testing Plan and Log, and Rework Items List.

1.12.1 Construction Documentation

Reports are required for each day that work is performed and must be attached to the Contractor Quality Control Report prepared for the same day. Maintain current and complete records of on-site and off-site QC program operations and activities. Reports are required for each day work is performed. Account for each calendar day throughout the life of the Contract.

The Project Superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The reporting of work must be identified by terminology consistent with the construction schedule. In the "Remarks" sections of the reports, enter 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, a record of visitors to the work site, quality control problem areas, deviations from the QC Plan, construction deficiencies encountered, and meetings held. For each entry in the report(s), identify the Schedule Activity No. that is associated with the entered remark.

1.12.2 Quality Control Activities

CQC and Contractor Production reports will be prepared daily to maintain current records providing factual evidence that required quality control activities and tests have been performed. Include in these records the work of subcontractors and suppliers on an acceptable form that includes, as a minimum, the following information:

a. The name and area of responsibility of the Contractors and any subcontractors.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom. When a Network Analysis Schedule (NAS) is used, identify each item of work performed each day by NAS activity number.

d. Control phase activities performed. Preparatory, and Initial phase Checklists associated with the DFOW referenced to the construction schedule. Follow-up phase activities identified to the DFOW. If testing or specific QC Specialist activities are associated with the Follow-up phase activities for a specific DFOW note this and include those reports.

e. Test and control activities performed with results and references to specifications and drawings requirements. Identify the control phase (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action in accordance with the paragraph DEFICIENCY/REWORK ITEMS LIST.

f. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications and drawings requirements.

g. Submittals and deliverables reviewed, with Contract reference, by whom, and action taken.

h. Offsite surveillance activities, including actions taken.

i. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

j. Instructions given/received and conflicts in plans and specifications.

1.12.3 Verification Statement

Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. Cover both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the Contract.

Furnish the original of these records in report form to the Government at least 24 hours in advance of beginning the initial phase for definable feature of work. As a minimum, prepare and submit one report for every 7 days of no work and on the last day of a no work period. All calendar days need to be accounted for throughout the life of the Contract. The first report following a day of no work will be for that day only. Reports need to be signed and dated by the QC Manager. Include copies of

test reports and copies of reports prepared by all subordinate quality control personnel within the QC Manager Report.

1.12.4 Reports from the Quality Control (QC) Specialist(s)

Document inspection results on a QC specialist report prepared each day work is performed in their area of responsibility. The report must include a description of the visual inspection or observation performed, a written summary of findings, a conclusion on compliance with the Contract documents, and signature of the QC Specialist. In person inspections must be documented with Video/photographs. Video/photographic documentation of deficiencies must include before and after conditions and physical measurements, as necessary. Forward the QC daily report to the QC Manager who must include the report with the submission of their daily QC Report to the Government each day. Every site visit by the QC Specialist must be documented on a QC Specialist daily report.

1.12.5 Quality Control Validation

Establish and maintain the following in an electronic folder. Divide folder into a series of tabbed sections as shown below. Ensure folder is updated at each required progress meeting.

a. CQC Meeting minutes in accordance with paragraph QUALITY CONTROL (QC) MEETINGS.

b. All completed Preparatory and Initial Phase Checklists, arranged by specification section, further sorted by DFOW referenced to the construction schedule. Submit each individual Phase Checklist the day the phase event occurs as part of the CQC daily report.

c. All milestone inspections, arranged by Activity Number referenced to the construction schedule.

d. An up-to-date copy of the Testing Plan and Log with supporting field test reports, arranged by specification section referenced to the DFOW to which individual reports results are associated. Individual field test reports will be submitted within 2 working days after the test is performed in accordance with the paragraph QUALITY CONTROL ACTIVITIES.

e. Copies of all Contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.

f. An up-to-date copy of the paragraph DEFICIENCY/REWORK ITEMS LIST.

g. Special Inspection reports.

h. Upon commencement of Completion Inspections of the entire project or any defined portion, maintain up-to-date copies of all punch lists issued by the QC staff to the Contractor and subcontractors and all punch lists issued by the Government in accordance with the paragraph COMPLETION INSPECTIONS.

1.12.6 Testing Plan and Log

As tests are performed, the QC Manager will record on the "Testing Plan and Log" the date the test was performed and the date the test results were forwarded to the Contracting Officer. Attach a copy of the updated "Testing Plan and Log" to the last daily CQC Report of each month.

Provide a copy of the final "Testing Plan and Log" to the preparer of the Operation & Maintenance (O&M) documentation.

1.12.7 As-Built Drawings

The QC Manager must ensure the as-built drawings, required by Section 01 78 00 CLOSEOUT SUBMITTALS are kept current on a daily basis and marked to show deviations which have been made from the Contract drawings. The as-built drawings document commences with the QC Manager ensuring all amendments, or changes to the Contract prior to Contract award are accurately noted in the initial document set creating the accurate baseline of the Contract prior to any work starting. Ensure each deviation has been identified with the appropriate modifying documentation (e.g., PC No., Modification No., Request for Information No.). The QC Manager or QC Specialist assigned to an area of responsibility must initial each revision. Upon completion of work, the QC Manager will furnish a certificate attesting to the accuracy of the as-built drawings prior to submission to the Contracting Officer.

1.13 NOTIFICATION ON NON-COMPLIANCE

The Contracting Officer will notify the Contractor of any detected non-compliance with the Contract. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, is deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of a claim for extension of time for excess costs or damages by the Contractor.

1.14 DELIVERY, STORAGE, AND HANDLING

Designate receiving/storage areas for incoming material to be delivered according to installation schedule and to be placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. Store and handle materials in a manner as to prevent loss from weather and other damage. Keep materials, products, and accessories covered and off the ground, and store in a dry, secure area. Prevent contact with material that may cause corrosion, discoloration, or staining. Protect all materials and installations from damage by the activities of other trades.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

SECTION 01 45 00.15 10

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this section to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

1.2 MEASUREMENT AND PAYMENT

The work of this section is not measured for payment. The Contractor is responsible for the work of this section, without any direct compensation other than the payment received for contract items.

1.3 CONTRACT ADMINISTRATION

The Government will use the Resident Management System (RMS) to assist in its monitoring and administration of this contract. The Government accesses the system using the Government Mode of RMS (RMS GM) and the Contractor accesses the system using the Contractor Mode (RMS CM). The term RMS will be used in the remainder of this section for both RMS GM and RMS CM. The joint Government-Contractor use of RMS facilitates electronic exchange of information and overall management of the contract. The Contractor accesses RMS to record, maintain, input, track, and electronically share information with the Government throughout the contract period in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Closeout
Import/Export of Data

1.3.1 Correspondence and Electronic Communications

For ease and speed of communications, exchange correspondence and other documents in electronic format to the maximum extent feasible. Hard copies are not required unless specified or unless requested by the Contracting Officer.

1.3.2 Other Factors

Other portions of this contract have a direct relationship to reporting accomplished through RMS. Particular attention is directed to Section 01 32 01.00 10 PROJECT SCHEDULE, Section 01 33 00 SUBMITTAL PROCEDURES, Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS, and Section 01 45 00

QUALITY CONTROL.

Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS..

1.4 RMS SOFTWARE

RMS is a web based application. Download, install and be able to utilize the latest version of RMS within 7 calendar days of receipt of the Notice to Proceed. RMS software, user manuals, access and installation instructions, program updates and training information are available from the RMS website (https://rms.usace.army.mil). The Government and the Contractor will have different access authorities to the same contract database through RMS. The common database will be updated automatically each time a user finalizes an entry or change.

1.5 CONTRACT DATABASE - GOVERNMENT

The Government will enter the basic contract award data in RMS prior to granting the Contractor access. The Government entries into RMS will generally be related to submittal reviews, correspondence status, and Quality Assurance(QA)comments, as well as other miscellaneous administrative information.

1.6 CONTRACT DATABASE - CONTRACTOR

Contractor entries into RMS establish, maintain, and update data throughout the duration of the contract. Contractor entries generally include prime and subcontractor information, daily reports, submittals, RFI's, schedule updates and payment requests. RMS includes the ability to import attachments and export reports in many of the modules, including submittals. The Contractor responsibilities for entries in RMS typically include the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within 7 calendar days of receiving access to the contract in RMS. This includes, but is not limited to, Contractor's name, address, telephone numbers, management staff, and other required items.

1.6.1.2 Subcontractor Information

Enter all missing subcontractor administrative data and information into RMS CM within seven calendar days of receiving access to the Contract in RMS or within seven calendar days of the signing of the subcontractor agreement for agreements signed at a later date. This includes name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor is listed separately for each trade to be performed.

1.6.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office with "H". Letters are numbered starting from 0001. (e.g., H-0001 or

S-0001). The Government's letters to the Contractor will be prefixed with "C" or "RFP".

1.6.1.4 Equipment

Enter and maintain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates in accordance with Section 01 45 00 QUALITY CONTROL.

1.6.1.5 Reports

Track the status of the project using the reports available in RMS. The value of these reports reflects the quality of the data input. These reports include but are not limited to the Progress Payment Request worksheet, Quality Control (QC) comments, Deficiency Tracking Log, Submittal Register Status, and Three-Phase Control worksheets in accordance with Sections 01 32 01.00 10 PROJECT SCHEDULE, 01 33 00 SUBMITTAL PROCEDURES, and 01 45 00 QUALITY CONTROL.

1.6.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response. Provide status at weekly progress meeting in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE.

1.6.2 Finances

1.6.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the project schedule in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE. The sum of pay activities equals the total Contract amount, including modifications. Each pay activity must be assigned to a Contract Line Item Number (CLIN). The sum of the activities assigned to a CLIN equals the amount of each CLIN.

1.6.2.2 Payment Requests

Prepare all progress payment requests using RMS. Update the work completed under the Contract at least monthly, measured as percent or as specific quantities. After the update, generate a payment request and prompt payment certification using RMS. Submit the signed prompt payment certification and payment request as well as supporting data, electronically. Unless requested by the Contracting Officer, a signed paper copy of the approved payment certification and request is not required.

1.6.3 Quality Control (QC)

Enter and track implementation of the 3-phase QC Control System, QC testing, transferred and installed property and warranties in RMS. Link each deficiency and QC test to a pay activity. Prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements in RMS. Maintain all data on a daily basis. Ensure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments. Provide within seven calendar days of Government acceptance of the CQC Plan.

1.6.3.1 Quality Control (QC) Reports

The Contractor's Quality Control (QC) Daily Report in RMS is the official report. The Contractor can use other supplemental formats to record QC data, but information from any supplemental formats are to be consolidated and entered into the RMS QC Daily Report. Any supplemental information may be entered into RMS as an attachment to the report. QC Daily Reports must be finalized and signed in RMS within 24 hours after the date covered by the report. A printed signed copy of the QC Daily Report is not required unless specifically requested by the Contracting Officer.

1.6.3.2 Deficiency Tracking

Use the QC Daily Report Module to enter and track deficiencies. Deficiencies identified and entered into RMS by the Contractor or the Government will be sequentially numbered with a QC or QA prefix for tracking purposes. Enter each deficiency into RMS the same day that the deficiency is identified. Monitor, track and resolve all QC and QA entered deficiencies. A deficiency is not considered to be corrected until the Government indicates concurrence in RMS.

1.6.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS, and upload meeting minutes of the meetings. Worksheets for the three-phase control meetings are generated within RMS.

1.6.3.4 Labor and Equipment Hours

Enter labor and equipment exposure hours on a daily basis. Roll up the labor and equipment exposure data into a monthly exposure report.

1.6.3.5 Accident/Safety Reporting

Both the Contractor and the Government enter safety related comments in RMS as a deficiency. The Contractor must monitor, track and show resolution for safety issues in the QC Daily Report area of the RMS QC Module. In addition, follow all reporting requirements for accidents and incidents as required in EM 385-1-1, Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS and as required by any other applicable Federal, State or local agencies.

1.6.3.6 Definable Features of Work

Enter each feature of work, as defined in the approved CQC Plan, into the RMS QC Module. A feature of work may be associated with a single or multiple pay activities, however a pay activity is only to be linked to a single feature of work.

1.6.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager. Prepare activity hazard analysis in accordance with Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS.

1.6.4 Submittal Management

Enter all current submittal register data and information into within the time frame directed by the Contracting Officer. The Contractor will import the information shown in the submittal register following the specification Section 01 33 00 SUBMITTAL PROCEDURES unless otherwise directed by the Contracting Officer. Group electronic submittal documents into transmittal packages to send to the Government, except very large electronic files, samples, spare parts, mock ups, and color boards. Track transmittals and update the submittal register in RMS on a daily basis throughout the duration of the Contract.

Contractor may request submittals to be added to RMS throughout the lifecycle of the project. Approval/disapproval of Contractor requests is at the discretion of the Contracting Officer. Submittals entry into RMS must be updated daily or as practical for performance of the Contract, as approved by the Contracting Officer.

1.6.5 Schedule

Enter and update the contract project schedule in RMS by either manually entering all schedule data or by importing the Standard Data Exchange Format (SDEF) file, based on the requirements in Section 01 32 01.00 10 PROJECT SCHEDULE.

1.6.6 Closeout

Closeout documents, processes and forms are managed and tracked in RMS by both the Contractor and the Government. Ensure that all closeout documents are entered, completed and documented within RMS.

1.7 IMPLEMENTATION

Use of RMS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain contract data within the RMS system. RMS is an integral part of the Contractor's required management of quality control.

1.8 NOTIFICATION OF NONCOMPLIANCE

Take corrective action within seven calendar days after receipt of notice of RMS non-compliance by the Contracting Officer.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

SECTION 01 45 35

SPECIAL INSPECTIONS

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.

INTERNATIONAL CODE COUNCIL (ICC)

ICC IBC	(2024) International Building Code

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 3-301-01	(2023; with Change 6, 2026) Structural Engineering

1.2 GENERAL REQUIREMENTS

Perform Special Inspections in accordance with the Statement of Special Inspections, Schedule of Special Inspections, Chapter 17 of ICC IBC, and UFC 3-301-01. The Statement of Special Inspections and Schedule of Special Inspections are included as an attachment to this specification. Special Inspections are to be performed by an independent third party and are intended to ensure that the work of the Prime Contractor is in accordance with the Contract Documents and applicable building codes. Special inspections do not take the place of the three phases of control inspections performed by the Contractor's QC Manager or any testing and inspections required by other sections of the specifications.

1.3 DEFINITIONS

1.3.1 Continuous Special Inspections

Continuous Special Inspections is the constant monitoring of specific tasks by a special inspector. These inspections must be carried out continuously over the duration of the particular tasks.

1.3.2 Perform

Perform these tasks for each weld, fastener or bolted connection, and noted required verification.

1.3.3 Observe

Observe these items randomly during the course of each work day to insure that applicable requirements are being met. Observe these Special Inspections items on a periodic daily basis. Operations need not be delayed pending these inspections.

1.3.4 Special Inspector (SI)

A qualified person retained by the Contractor and approved by the

Contracting Officer as having the competence necessary to inspect a particular type of construction requiring Special Inspections. The SI must be an independent third party hired directly by the Prime Contractor.

1.3.5 Associate Special Inspector (ASI)

A qualified person who assists the SI in performing Special Inspections but who must perform inspection under the direct supervision of the SI and who cannot perform inspections without the SI on site.

1.3.6 Third Party

A Special inspector must not be an employee of the Contractor or of any Sub-Contractor performing the work to be inspected.

1.3.7 Contracting Officer

The Government official having overall authority for administrative contracting actions. Certain contracting actions may be delegated to the Contracting Officer's Representative (COR).

1.3.8 Quality Control (QC) Manager

An individual retained by the Prime Contractor and qualified in accordance with the Section 01 45 00 QUALITY CONTROL having the overall responsibility for the Contractor's QC organization.

1.3.9 Structural Engineer of Record (SER)

A registered design professional contracted by the Government as an A/E responsible for the overall design and review of submittal documents prepared by others. The SER is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws in the state in which the design professional works. The SER is also referred to as the Engineer of Record (EOR) in design documents.

1.3.10 Statement of Special Inspections (SSI)

A document developed by the SER identifying the materials, systems, components and work required to have Special Inspections. This statement is included at the end of this specification.

1.3.11 Schedule of Special Inspections (SSI)

A schedule which lists each of the required Special Inspections, the extent to which each Special Inspection is to be performed, and the required frequency for each in accordance with ICC IBC Chapter 17. This schedule is included at the end of this specification.

1.3.12 Definable Feature of Work (DFOW)

An inspection group that is separate and distinct from other inspection groups, having inspection requirements or inspectors that are unique.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for

information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-06 Test Reports

Special Inspection Daily Reports

Special Inspection Biweekly Reports

SD-07 Certificates

AISC Certified Steel Fabricator

Certificate of Compliance

SD-11 Closeout Submittals

Comprehensive Final Report of Special Inspections; G,

1.5 SPECIAL INSPECTOR QUALIFICATIONS

Submit qualifications for each special inspector according to the following certification requirements. The Government will consider alternate equivalent certification upon request. Without written acceptance deviations to the following qualifications are not approved.

1.5.1 Steel Construction and High Strength Bolting

1.5.1.1 Special Inspector

a. ICC Structural Steel and Bolting Special Inspector certificate with one year of related experience, or

b. Registered Professional Engineer with 3 years of related experience

1.5.1.2 Associate Special Inspector

Engineer-In-Training with one year of related experience.

1.5.2 Welding Structural Steel

1.5.2.1 Special Inspector

a. ICC Structural Welding Special Inspector certificate with one year of related experience, or

b. AWS Certified Welding Inspector

1.5.2.2 Associate Special Inspector

AWS Certified Associate Welding Inspector

1.5.3 Nondestructive Testing of Welds

1.5.3.1 Special Inspector

NDT Level III Certificate

1.5.3.2 Associate Special Inspector

NDT Level II Certificate plus one year of related experience

1.5.4 Concrete Construction

1.5.4.1 Special Inspector

a. ICC Reinforced Concrete Special Inspector Certificate with one year of related experience, or

b. ACI Concrete Construction Special Inspector, or

c. Registered Professional Engineer with 3 years of related experience

1.5.4.2 Associate Special Inspector

a. ACI Concrete Construction Special Inspector-in-Training, or

b. Engineer-In-Training with one year of related experience

1.5.5 Verification of Site Soil Condition, Fill Placement and Load-Bearing Requirements

1.5.5.1 Special Inspector

a. ICC Soils Special Inspector Certificate with one year of related experience, or

b. National Institute for Certification in Engineering Technologies (NICET) Soils Technician Level II Certificate in Construction Material Testing, or

c. Geologist-In-Training with 3 years of related experience, or

d. Registered Professional Engineer with 3 years of related experience

1.5.5.2 Associate Special Inspector

a. NICET Soils Technician Level I Certificate in Construction Material Testing with one year of related experience, or

b. Engineer-In-Training with one year of related experience

PART 2 PRODUCTS

2.1 SPECIAL INSPECTION OF FABRICATED ITEMS

Special Inspection of fabricator's work performed in the fabricator's shop is required to be inspected in accordance with the Statement of Special Inspections and the Schedule of Special Inspections unless the fabricator is certified by the approved agency to perform such work without Special Inspections. Submit the following to the Contracting Officer for information to allow work performed in the fabricator's shop to not be subjected to Special Inspections.

AISC Certified Steel Fabricator.

At the completion of fabrication, submit a certificate of compliance, to be included with the comprehensive final report of Special Inspections, stating that the materials supplied and work performed by the fabricator are in accordance with the construction documents.

PART 3 EXECUTION

3.1 RESPONSIBILITIES

3.1.1 Quality Control Manager

a. Supervise all Special Inspectors required by the Contract Documents and the IBC.

b. Verify the qualifications of all the Special Inspectors.

c. Verify the qualifications of all fabricators.

d. Maintain a 3-ring binder for the Special Inspector's special inspection daily reports and special inspection biweekly reports. This binder must be located in a conspicuous place in the project trailer/office to allow review by the Contracting Officer and the SER.

e. e. Maintain a rework items list that includes discrepancies noted on the Special Inspector's daily report.

3.1.2 Special Inspectors

a. Inspect all elements of the project which the special inspector is qualified to inspect and which are identified in the Schedule of Special Inspections.

b. Attend preparatory phase meetings related to the Definable Feature of Work (DFOW) which the Special Inspector is qualified to inspect.

c. Submit a copy of the special inspection daily reports to the QC Manager.

d. Report discrepancies that are observed during Special Inspections to the QC Manager for correction. If discrepancies are not corrected before the special inspector leaves the site the observed discrepancies must be documented in the daily report.

e. Submit a biweekly Special Inspection Report until all inspections are complete. A report is required for each biweekly period in which Special Inspections activity occurs, and must include the following:

(1) A brief summary of the work performed during the reporting time frame.

(2) Changes from and discrepancies with the drawings, specifications that were observed during the reporting period.

(3) Discrepancies which were resolved or corrected.

(4) A list of nonconforming items requiring resolution.

(5) All applicable test result, including nondestructive testing reports.

f. At the completion of the project, submit a comprehensive final report of Special Inspections that documents the Special Inspections completed for the project and corrections of all discrepancies noted in the daily reports. The comprehensive final report of Special Inspections must be signed and dated and it must indicate the certification of the Special Inspector qualifying them to conduct the inspection.

3.2 DEFECTIVE WORK

Check work as it progresses, but failure to detect any defective work or materials must in no way prevent later rejection if defective work or materials are discovered, nor obligate the Contracting Officer to accept the defective work or materials.

-- End of Section --

SCHEDULE OF SPECIAL INSPECTIONS

Reference UFGS 01 45 35 for all requirements not noted as part of this schedule.

INSPECTION DEFINITIONS:

PERFORM: Perform these tasks for each weld, fastener or bolted connection, and required verification.

OBSERVE: Observe these items randomly during the course of each work day to insure that applicable requirements are being met. Operations need not be delayed pending these inspections at contractor's risk.

DOCUMENT: Document, with a report, that the work has been performed in accordance with the contract documents. This is in addition to any other reports required in the Special Inspections guide specification.

CONTINUOUS: Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

PERIODIC: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

The Seismic Design Category for this project is: ☒ A, ☐ B, ☐ C, ☐ D, ☐ E, ☐ F (check appropriate box)

A. STRUCTURAL STEEL – WELDING

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒

STEEL INSPECTION PRIOR TO WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-1 and Table C-N5.4-1		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Verify that the welding procedures specification (WPS) is available	**PERFORM**	
2. Verify manufacturer certifications for welding consumables are available	**PERFORM**	
3. Verify material identification	**PERFORM**	Type and grade.
4. Verify use of qualified welders	**PERFORM**	Welding by welders, welding operators, and tack welders who are qualified in conformance with requirements.
5. Welder Identification System	OBSERVE	✓ Fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. ✓ Die stamping of members subjected to fatigue shall be prohibited unless approved by the engineer of record.
6. Fit-up of groove welds (including joint geometry)	OBSERVE	✓ Joint preparation ✓ Dimensions (alignment, root opening, root face, bevel) ✓ Cleanliness (condition of steel surfaces) ✓ Tacking (tack weld quality and location) ✓ Backing type and fit (if applicable)
7. Fit-up of CJP groove welds of HSS T-, Y-, and K-connections without backing (including joint geometry	**PERFORM**	✓ Joint preparations ✓ Dimensions (alignment, root opening, root face, bevel) ✓ Cleanliness (condition of steel surfaces) ✓ Tacking (tack weld quality and location)
8. Configuration and finish of access holes	OBSERVE	
9. Fit-up of fillet welds	OBSERVE	✓ Dimensions (alignment, gaps at root) ✓ Cleanliness (condition of steel surfaces) ✓ Tacking (tack weld quality and location)
STEEL INSPECTION DURING WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-2 and Table C-N5.4-2		
TASK	INSPECTION TYPE	DESCRIPTION
10. Control and handling of welding consumables	OBSERVE	✓ Packaging ✓ Electrode atmospheric exposure control
11. No welding over cracked tack welds	OBSERVE	
12. Environmental conditions	OBSERVE	✓ Wind speed within limits ✓ Precipitation and temperature

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

STEEL INSPECTION DURING WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-2 and Table C-N5.4-2		
TASK	INSPECTION TYPE	DESCRIPTION
13. Welding Procedures Specification followed	OBSERVE	✓ Settings on welding equipment ✓ Travel speed ✓ Selected welding materials ✓ Shielding gas type/flow rate ✓ Preheat applied ✓ Interpass temperature maintained (min./max.) ✓ Proper position (F, V, H, OH) ✓ Intermix of filler metals avoided
14. Welding techniques	OBSERVE	✓ Interpass and final cleaning ✓ Each pass within profile limitations ✓ Each pass meets quality requirements
STEEL INSPECTION AFTER WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-3 and Table C-N5.4-3		
TASK	INSPECTION TYPE[1]	DESCRIPTION
15. Welds cleaned	OBSERVE	✓
16. Verify size, length, and location of all welds	**PERFORM**	✓ Size, length, and location of all welds conform to the requirements of the construction drawings.
17. Verify welds meet visual acceptance criteria	**PERFORM AND DOCUMENT**	✓ Crack prohibition ✓ Weld/base-metal fusion ✓ Crater cross section ✓ Weld profiles ✓ Weld size ✓ Undercut ✓ Porosity
18. Check for arc strikes	**PERFORM**	
19. Visually inspect *k*-area	**PERFORM**	When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 in. (75 mm) of the weld
20. Verify backing removed, weld tabs removed and finished, and fillet welds added where required	**PERFORM**	
21. Repair activities	**PERFORM AND DOCUMENT**	
22. Acceptance or rejection of welded joint or member	**PERFORM AND DOCUMENT**	
23. No prohibited welds have been added without the approval of the engineer of record	OBSERVE	

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.

B. STRUCTURAL STEEL – BOLTING

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒

STEEL INSPECTION TASKS PRIOR TO BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.6-1 and Table C-N5.6-1		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Verify manufacture's certifications available for fastener materials	**PERFORM**	
2. Fasteners marked in accordance with ASTM requirements	OBSERVE	
3. Proper fasteners selected for joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	OBSERVE	
4. Proper bolting procedure selected for joint detail	OBSERVE	
5. Connecting elements, including appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	OBSERVE	
6. Pre-installation verification testing for each fastener assembly performed by installation personnel, carefully observing and documenting the installation methods.	OBSERVE	Check if the fastener assemblies and the installation methods are capable of achieving 105%, or more, of the minimum required bolt pretension.
7. Proper storage provided for bolts, nuts, washers, and other fastener components	OBSERVE	
STEEL INSPECTION TASKS DURING BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.6-2 and Table C-N5.6-2		
TASK	INSPECTION TYPE	DESCRIPTION
8. Fastener assemblies of suitable condition, placed in all holes and washers (if required) are positioned as required	OBSERVE	
9. Joint brought to the snug-tight condition prior to pretensioning operation	OBSERVE	
10. Fastener component not turned by the wrench prevented from rotating	OBSERVE	
11. Bolts are pretensioned in accordance with RCSC *Specification*, progressing systematically from the most rigid point toward the free edges	OBSERVE	
STEEL INSPECTION TASKS AFTER BOLTING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.6.3 and Table C-N5.6-3		
TASK	INSPECTION TYPE	DESCRIPTION
12. Acceptance or rejection of all bolted connections	**DOCUMENT**	

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.

C. STRUCTURAL STEEL - NONDESTRUCTIVE TESTING

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒

NONDESTRUCTIVE TESTING OF WELDED JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Section N5.5		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Verify use of qualified nondestructive testing personnel	**PERFORM**	Visual weld inspection and nondestructive testing (NDT) shall be conducted by personnel qualified in accordance with AWS D1.8 Clause 7.2
2. CJP groove welds	OBSERVE	Dye penetrant testing (DT) and ultrasonic testing (UT) shall be performed on 20% of CJP groove welds for materials greater than 5/16" (8 mm) thick. Testing rate must be increased to 100% if greater than 5% of welds tested have unacceptable defects.
3. Welded joints subject to fatigue	OBSERVE	Dye penetrant testing (DT) and Ultrasonic testing (UT) shall be performed on 100% of welded joints identified on contract drawings as being subject to fatigue. Table A-3.1 in AISC 360-22 provides Fatigue Design Parameters for welded joints that must be checked.

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

D. STRUCTURAL STEEL – AISC 341 REQUIREMENTS (SEISMIC PROVISIONS)

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

NONDESTRUCTIVE TESTING OF WELDED JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 341-22: Section J7.2		
TASK	INSPECTION TYPE[1]	DESCRIPTION
[NOTE: DOR may uncheck this section for projects NOT designed in accordance with AISC 341 (Seismic Provisions) or for projects designed according to AISC 341, but using an R value equal to 3]		
4. CJP groove welds	OBSERVE	Ultrasonic testing (UT) shall be performed on 100% of complete-joint-penetration (CJP) groove welds in materials 5/16 in. (8 mm) thick or greater. UT in materials less than 5/16 in. (8 mm) thick is not required. Welds shall be inspected by UT in compliance with AWS D1.8/D1.8M. Magnetic particle testing (MT) shall be performed on 25% of all beam-to-column CJP groove welds. Welds shall be inspected by MT in compliance with AWS D1.8/ D1.8M. For ordinary moment frames in structures in risk categories I or II, UT and MT of CJP groove welds shall be required only for demand critical welds.
5. Beam cope and access hole.	OBSERVE	At welded splices and connections, thermally cut surfaces of beam copes and access holes shall be tested using magnetic particle testing (MT) or dye penetrant testing (DT), when the flange thickness exceeds 1 1/2 in. for rolled shapes, or when the web thickness exceeds 1 1/2 in. for built-up shapes.
6. *k*-area NDT (AISC 341 Table J7.1 and AWS D1.8 Clause 7.4)	**PERFORM AND DOCUMENT**	Where welding of doubler plates, continuity plates or stiffeners has been performed in the *k*-area, the web shall be tested for cracks using magnetic particle testing (MT). The MT inspection area shall include the *k*-area base metal within 3 in. of the weld. The MT shall be performed no sooner than 48 hours following completion of the welding.
7. Placement of reinforcing or contouring fillet welds (Table J7.1)	**PERFORM AND DOCUMENT**	
8. Weld tab removal sites	OBSERVE	At the end of welds where weld tabs have been removed, magnetic particle testing shall be performed on the same beam-to-column joints receiving UT.

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports

E. STRUCTURAL STEEL - COMPOSITE CONSTRUCTION[1]

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

COMPOSITE CONSTRUCTION PRIOR TO PLACING CONCRETE – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22: Table N5.4-2, AISC 341-22: Table J10.1		
TASK	INSPECTION TYPE	DESCRIPTION
1. Placement and installation of steel headed stud anchors	**PERFORM**	
2. Material identification of reinforcing steel (Type/Grade)	OBSERVE	
3. Determination of carbon equivalent for reinforcing steel other than ASTM A706	OBSERVE	
4. Proper reinforcing steel size, spacing, clearances, support, and orientation	OBSERVE	
5. Reinforcing steel has not been rebent in the field	OBSERVE	
6. Required reinforcing steel clearances have been provided	OBSERVE	
7. Reinforcing steel has been tied and supported as required	OBSERVE	
8. Composite member has required size	OBSERVE	

END SECTION

F. STRUCTURAL STEEL - OTHER INSPECTIONS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

OTHER STEEL INSPECTIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.1, AISC 360-22 Section N5.8, AISC 341-22: Tables J9.1 & J11.1		
TASK	INSPECTION TYPE [2]	DESCRIPTION
1. Verify anchor rods and other embedments supporting structural steel	**PERFORM**	Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement of concrete.
2. Fabricated steel or erected steel frame	OBSERVE	Verify compliance with the details shown on the construction documents, such as braces, stiffeners, member locations and proper application of joint details at each connection.
3. Check reduced beam sections (RBS) where/if they occur	**PERFORM AND DOCUMENT**	✓ Contour and finish ✓ Dimensional tolerances
4. Check protected zones	**PERFORM AND DOCUMENT**	No holes or unapproved attachments made by fabricator or erector
5. Check H-piles where/if they occur	**PERFORM AND DOCUMENT**	No holes or unapproved attachments made by the responsible contractor

END SECTION

G. STRUCTURAL COLD-FORMED METAL DECK PLACEMENT

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[1] See Concrete Construction Section for all concrete related inspection of composite steel construction.

[2] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

METAL DECK INSPECTION PRIOR TO DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.1		
TASK	INSPECTION TYPE [1]	DESCRIPTION
1. Verify compliance of materials (deck and all deck accessories) with construction documents, including profiles, material properties, and base metal thickness	**PERFORM**	
2. Acceptance or rejection of deck and deck accessories	**DOCUMENT**	
METAL DECK INSPECTION AFTER DECK PLACEMENT – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.2		
TASK	INSPECTION TYPE	DESCRIPTION
3. Verify compliance of deck and all deck accessory installation with construction documents	**PERFORM**	
4. Verify deck materials are represented by the mill certifications that comply with the construction documents	**PERFORM**	
5. Acceptance or rejection of installation of deck and deck accessories	**DOCUMENT**	
METAL DECK INSPECTION PRIOR TO WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.3		
TASK	INSPECTION TYPE	DESCRIPTION
6. Verify welding procedure specification (WPS) is available	**PERFORM**	
7. Verify manufacturer's certifications for welding consumables are available	**PERFORM**	
8. Material identification (type/grade)	OBSERVE	
9. Check welding equipment	**PERFORM**	

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.

H. STRUCTURAL COLD-FORMED METAL DECK – WELDING

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

METAL DECK INSPECTION DURING WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.4		
TASK	INSPECTION TYPE [1]	DESCRIPTION
1. Use of qualified welders	OBSERVE	
2. Control and handling of welding consumables	OBSERVE	
3. Environmental conditions (wind speed, moisture, temperature)	OBSERVE	
4. WPS followed	OBSERVE	
METAL DECK INSPECTION AFTER WELDING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.5		
TASK	INSPECTION TYPE	DESCRIPTION
5. Verify size and location of welds, including support, sidelap, and perimeter welds.	**PERFORM**	
6. Verify welds meet visual acceptance criteria	**PERFORM**	
7. Verify repair activities	**PERFORM**	
8. Acceptance or rejection of welds	**DOCUMENT**	

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.

I. STRUCTURAL COLD-FORMED METAL DECK – FASTENING

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

METAL DECK INSPECTION BEFORE MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.6		
TASK	INSPECTION TYPE	DESCRIPTION
1. Manufacturer installation instructions available for mechanical fasteners	OBSERVE	
2. Proper tools available for fastener installation	OBSERVE	
3. Proper storage for mechanical fasteners	OBSERVE	✓ Fasteners are located away from moisture and in a protected location, such as off the ground and away from excessive handling. ✓ Uncoated fasteners are stored in airtight containers to reduce corrosion and rust.
METAL DECK INSPECTION DURING MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.7		
TASK	INSPECTION TYPE	DESCRIPTION
4. Fasteners are positioned as required	OBSERVE	
5. Fasteners are installed in accordance with manufacturer's instructions	OBSERVE	
METAL DECK INSPECTION AFTER MECHANICAL FASTENING – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.3, SDI QA/QC-2022, Appendix 1, Table 1.8		
TASK	INSPECTION TYPE[1]	DESCRIPTION
6. Check spacing, type, and installation of support fasteners	**PERFORM**	
7. Check spacing, type, and installation of side-lap fasteners	**PERFORM**	
8. Check spacing, type, and installation of perimeter fasteners	**PERFORM**	
9. Verify repair activities	**PERFORM**	
10. Acceptance or rejection of mechanical fasteners	**DOCUMENT**	

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.

J. STRUCTURAL COLD-FORMED STEEL FRAMING AND/OR COLD-FORMED TRUSSES

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

COLD-FORMED STEEL CONSTRUCTION AND CONNECTIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.2.5, 1705.12.2, 1705.12.3, 1705.13.3, 1705.13.9, UFC 4 023 03		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Verify compliance of trusses spanning 60-feet or greater where/if applicable	**PERFORM**	Verify that temporary and permanent truss restraint/bracing is installed in accordance with approved truss submittal package.
2. Welded connections (seismic and/or wind resisting system)	OBSERVE	Visually inspect all welds that are part of the main wind or seismic force resisting system, including shear walls, braces, collectors (drag struts), and hold-downs. **[NOTE: DOR must identify critical wind and/or seismic force resisting welds in the contract drawings so that the special inspector can confirm compliance.]**
3. Connections (seismic and/or wind resisting system)	OBSERVE	Visually inspect all screw attachment, bolting, anchoring and other fastening of components within the main wind or seismic force resisting system, including roof deck, roof framing, exterior wall covering, wall to roof/floor connections, braces, collectors (drag struts) and hold-downs. **[NOTE: DOR must identify critical wind and/or seismic force resisting connection/fastener components in the contract drawings so that the special inspector can confirm compliance.]**
4. Cold-formed steel (progressive collapse resisting system where/if applicable)	OBSERVE	Verify proper welding operations, screw attachment, bolting, anchoring and other fastening of components within the progressive collapse resisting system, including horizontal tie force elements, vertical tie force elements and bridging elements (UFC 4 023 03). **[NOTE: DOR must identify critical progressive collapse resisting connection/fastener components in the contract drawings so that the special inspector can confirm compliance.]**

END SECTION

K. STRUCTURAL OPEN-WEB STEEL JOISTS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

OPEN-WEB STEEL JOISTS AND JOIST GIRDERS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC TABLE 1705.2.4, 2024 IBC 2207.1, SJI 100 OR 200		
	INSPECTION TYPE [1]	DESCRIPTION
1. Installation of open-web steel joists and joist girders	OBSERVE	✓ End connections – welded or bolted for compliance with SJI 100 or 200 ✓ Bridging – horizontal and diagonal for compliance with SJI 100 or 200

END SECTION

[1] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.
OBSERVE: Observe these items on a random sampling basis daily to ensure that applicable requirements are met. Operations need not be delayed pending these inspections at contractor's risk.

L. STRUCTURAL CONCRETE CONSTRUCTION

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒

CONCRETE CONSTRUCTION, INCLUDING COMPOSITE DECK – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC TABLE 1705.3 (ACI 318-19 REFERENCES NOTED IN IBC TABLE)		
TASK	INSPECTION TYPE [1]	DESCRIPTION
1. Inspect reinforcement, including prestressing tendons, and verify placement.	PERIODIC	Verify prior to placing concrete that reinforcement is of specified type, grade and size; that it is free of oil, dirt and unacceptable rust; that it is located and spaced properly; that specified cover has been provided; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that specified lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
2. Inspect reinforcing bar welding	PERIODIC	✓ Verify weldability of reinforcing bars other than ASTM A 706 ✓ Inspect single-pass fillet welds, maximum 5/16" in accordance with AWS D1.4
	CONTINUOUS	✓ Inspect welding of reinforcement for special moment frame, boundary elements of special shear walls, and coupling beams. ✓ Inspect welded reinforcement splices. ✓ Inspect welding of primary tension reinforcement in corbels.
	PERIODIC	✓ Inspect all other welds in accordance with AWS D1.4
3. Inspect cast-in-place anchors, post-installed drilled anchors, and adhesive anchors other than those in item 4 below	PERIODIC	✓ Verify prior to placing concrete that cast in place anchors and post installed drilled anchors have proper embedment, spacing and edge distance. ✓ Inspection requirements for adhesive anchors are different from those for other post-installed anchors and require assessment and qualification under the provisions of ACI 355.4 which may require proof loading.
4. Inspect post-installed adhesive anchors in horizontal or upward inclined orientations and	CONTINUOUS AND DOCUMENT	✓ Inspect as required per approved ICC-ES report

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.
DOCUMENT: Document in a report that the work has been performed as required. This is in addition to all other required reports.
CONTINUOUS: Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

CONCRETE CONSTRUCTION, INCLUDING COMPOSITE DECK – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC TABLE 1705.3 (ACI 318-19 REFERENCES NOTED IN IBC TABLE)		
TASK	INSPECTION TYPE [1]	DESCRIPTION
subject to sustained tension loading.		✓ Verify that installer is certified for installation of horizontal and overhead installation applications ✓ Verify proof loading as required by the contract documents
5. Verify use of required mix design	PERIODIC	Verify that all mixes used comply with the approved construction documents
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	CONTINUOUS	At the time fresh concrete is sampled to fabricate specimens for strength test, verify these tests are performed by qualified technicians.
7. Inspect concrete and/or shotcrete placement for proper application techniques	CONTINUOUS	Verify proper application techniques are used during concrete conveyance and that depositing avoids segregation or contamination. Verify that concrete is properly consolidated.
8. Verify maintenance of specified curing temperature and technique	PERIODIC	Inspect curing and cold weather, or hot weather protection procedures.
9. Inspect prestressed concrete	CONTINUOUS	Verify application of prestressing forces and grouting of bonded prestressing tendons.
10. Inspect erection of precast concrete members	PERIODIC	✓ Verify dimensional tolerances for precast members and interfacing members. ✓ Verify details of lifting devices, embedments, and related reinforcement required to resist temporary loads from handling, storage, transportation, and erection, if designed by the licensed design professional.
11. Inspect precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability element (MDE or HDE) in structures assigned to Seismic Design Category C, D, E, or F	**CONTINUOUS**	Inspect such connections and reinforcement in the field for: ✓ Installation of the embedded parts ✓ Completion of the continuity of reinforcement across joints. ✓ Completion of connections in the field
12. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5	PERIODIC	

CONCRETE CONSTRUCTION, INCLUDING COMPOSITE DECK – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC TABLE 1705.3 (ACI 318-19 REFERENCES NOTED IN IBC TABLE)		
TASK	INSPECTION TYPE [1]	DESCRIPTION
13. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	PERIODIC	See ACI 318 26.11.2
14. Inspect formwork for shape, location and dimensions of the concrete member being formed.	PERIODIC	Formwork fabrication and installation shall result in final structure that conforms to shapes, lines, and dimensions of the members as required by the construction documents.

END SECTION

M. STRUCTURAL - MASONRY CONSTRUCTION (ALL RISK CATEGORIES)

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒

MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH AT START OF CONSTRUCTION 2024 IBC 1705.4 (TMS 402/602-22 TABLE 3 & 4)		
TASK	INSPECTION TYPE [1]	DESCRIPTION
1. Verify compliance with approved submittals prior to start	PERIODIC	
2. Verify proportions of site-mixed mortar.	PERIODIC	
3. Verify grade, type and size of reinforcement, connectors, and anchor bolts	PERIODIC	
4. Verify sample panel construction	PERIODIC	
MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH PRIOR TO GROUTING IBC 1705.4 (TMS 402/602-22 TABLE 4)		
TASK	INSPECTION TYPE	DESCRIPTION
5. Verify grout space	PERIODIC	
6. Verify placement of reinforcement, connectors, and anchor bolts	PERIODIC	
7. Verify proportions of site-prepared grout	PERIODIC	
MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH DURING CONSTRUCTION IBC 1705.4 (ACI 530-16 TABLE 4)		
TASK	INSPECTION TYPE	DESCRIPTION
8. Verify compliance of materials and procedures with the approved submittals	PERIODIC	
9. Verify placement of masonry units and mortar joint construction	PERIODIC	
10. Verify size and location of structural elements	PERIODIC	
11. Verify type, size and placement of reinforcement, connectors, anchor bolts, and anchorages, including details of anchorage of masonry to structural members, frames, or other construction	PERIODIC	
12. Verify type, size and location of veneer ties and movement joints	PERIODIC	Periodic inspection of veneers is required when the height of the veneer exceeds 60 ft (18.3 m) above grade plane. See Commentary in Appendix A.
MASONRY CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH DURING CONSTRUCTION IBC 1705.4 (ACI 530-16 TABLE 4)		
TASK	INSPECTION TYPE	DESCRIPTION
13. Verify installation of adhered veneer	PERIODIC	Periodic inspection of veneers is required when the height of the veneer exceeds 60 ft (18.3 m) above grade plane
14. Verify welding of reinforcement	**CONTINUOUS**	
15. Verify preparation, construction, and protection of masonry during cold weather (temperature	PERIODIC	

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

CONTINUOUS: Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

below 40°F (4.4°c) or hot weather (temp above 90°F (32.2°C))		
16. Verify placement of grout	**CONTINUOUS**	
17. Observe preparation of grout specimens, mortar specimens, and/or prisms	PERIODIC	

END SECTION

N. STRUCTURAL – WOOD CONSTRUCTION – SPECIALTY ITEMS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

WOOD CONSTRUCTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.5		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. High-load diaphragms where applicable	PERIODIC	Verify thickness and grade of sheathing, size of framing members at panel edges, nail diameters and length, and the number of fastener lines and that fastener spacing is per approved contract documents.
2. Metal-plate connected wood trusses spanning 60 feet or greater	PERIODIC	Verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the approved truss submittal package
Mass timber elements in Type IV-A, IV-B, and IV-C construction. Refer to 2024 IBC 602.4 for details about Type IV construction		
3. Inspect anchorage and connections of mass timber construction to timber deep foundation systems	PERIODIC	
4. Inspect erection of mass timber construction	PERIODIC	
5. Inspect connections where installation methods are required to meet design loads		
a) Threaded fasteners	PERIODIC	✓ Verify use of proper installation equipment ✓ Verify use of pre-drilled holes where required ✓ Inspect screws, including diameter, length, head type, spacing, installation angle and depth
b) Adhesive anchors connections installed in horizontal or upwardly inclined orientation to resist sustained tension loads.	CONTINUOUS	
c) Adhesive anchors not defined in preceding cell	PERIODIC	
d) Bolted connections	PERIODIC	
e) Concealed connections	PERIODIC	

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.
CONTINUOUS: Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

O. STRUCTURAL WOOD CONSTRUCTION - SEISMIC & WIND

THIS SECTION IS APPLICABLE IF BOX IS CHECKED: ☐

WOOD CONSTRUCTION SEISMIC AND WIND – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.12 & 1705.13.2		
TASK	INSPECTION TYPE[1]	DESCRIPTION
[NOTE: DOR may uncheck this section where the lateral resistance is provided by structural sheathing, the sheathing nailing/fasteners (shear walls, shear panels and diaphragms) are consistently greater than 4" on center, or if the design wind speed (ASD) is less than 140 mph (62.6 meters/sec) AND the seismic design category is A or B]		
1. Nailing, bolting, anchoring and other fastening of elements of the main wind/seismic force-resisting system	PERIODIC	Includes connectors for: shear wall sheathing, roof/floor sheathing, drag struts/collectors (double top plates), braces, hold downs, roof connections to exterior walls.
2. Field gluing operations of elements of the main wind/seismic force-resisting system	**CONTINUOUS**	

END SECTION

P. STRUCTURAL ISOLATION AND ENERGY DISSIPATION SYSTEMS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

ISOLATION AND ENERGY DISSIPATION SYSTEMS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.13.8, 1705.14.4		
[NOTE: This section is not applicable to Seismic Design Category A. Uncheck this section if this category applies]		
TASK	INSPECTION TYPE[2]	DESCRIPTION
1. Verify fabrication and installation of isolator units and energy dissipation devices	PERFORM	Verify that fabrication and installation of isolator units and energy dissipation devices conform to manufacturer's recommendations and approved construction documents
2. Test of seismic isolation systems in seismically isolated structures	PERFORM	Seismic isolation systems in seismically isolated structures shall be tested in accordance with ASCE 7, Section 17.8

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.
CONTINUOUS: Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

[2] **PERFORM**: Perform these tasks for each weld, fastener, or bolted connection, and required verification.

Q. GEOTECHNICAL - SOILS INSPECTION

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☒

SOILS INSPECTION – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.6 and TABLE 1705.6		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	PERIODIC	
2. Verify excavations are extended to proper depth and have reached proper material	PERIODIC	
3. Perform classification and testing of compacted fill materials	PERIODIC	
4. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly	PERIODIC	
5. During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of compacted fill	**CONTINUOUS**	

END SECTION

R. GEOTECHNICAL - DRIVEN DEEP FOUNDATION ELEMENTS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

DRIVEN DEEP FOUNDATION ELEMENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.7 and TABLE 1705.7		
TASK	INSPECTION TYPE	DESCRIPTION
1. Verify element materials, sizes and lengths comply with requirements	**CONTINUOUS**	
2. Inspect driving operations and maintain complete and accurate records for each element	**CONTINUOUS**	
3. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element	**CONTINUOUS**	
4. Determine capacities of test elements and conduct additional load tests if required.	**CONTINUOUS**	
5. For steel, concrete, concrete-filled, perform additional special inspections in accordance with the steel and concrete sections in this schedule		
6. For specialty elements, perform additional inspections as determined by the licensed design professional in responsible charge		In accordance with Statement of Special Inspections

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.
CONTINUOUS: Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

S. GEOTECHNICAL - HELICAL PILE FOUNDATIONS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

HELICAL PILE FOUNDATIONS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.9		
TASK	INSPECTION TYPE	DESCRIPTION
1. Record installation equipment used, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation data as required. The approved geotechnical report and the contract documents prepared by the licensed design professional in responsible charge shall be used to determine compliance	**CONTINUOUS**	
2. Determine capacities of test elements and conduct additional load tests if required.	**CONTINUOUS**	

END SECTION

T. GEOTECHNICAL – CAST-IN-PLACE CONCRETE DEEP FOUNDATION ELEMENTS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

CAST-IN-PLACE CONCRETE DEEP FOUNDATION ELEMENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.8		
TASK	INSPECTION TYPE [1]	DESCRIPTION
1. Inspect drilling operations and maintain complete and accurate records for each element	**CONTINUOUS**	
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes	**CONTINUOUS**	
3. For concrete elements, perform tests and additional special inspections in accordance with Concrete section of this schedule	**CONTINUOUS**	
4. Determine capacities of test elements and conduct additional load tests if required.	**CONTINUOUS**	

END SECTION

[1] **CONTINUOUS:** Constant monitoring of identified tasks by a special inspector over the duration of performance of said tasks.

U. FIRE PROTECTION - SPRAYED FIRE-RESISTANT MATERIALS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

SPRAYED FIRE RESISTANT MATERIALS (SFRM) – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.15		
TASK	INSPECTION TYPE [1]	DESCRIPTION
1. Check substrate condition	PERIODIC	Prior to application, confirm that surfaces have been prepared according to the approved fire-resistant design and manufacturer's instructions. See 2024 IBC 1705.15.2 and 1705.15.3 for more details.
2. Verify material thickness	PERIODIC	Verify SFRM thickness according to 2024 IBC 1705.15.4
3. Verify material density	PERIODIC	Verify SFRM density according to 2024 IBC 1705.15.5
4. Verify bond strength	PERIODIC	Verify bond strength of cured SFRM according to 2024 IBC 1705.15.6
5. Inspect the condition of finished application	PERIODIC	

END SECTION

V. FIRE PROTECTION - INTUMESCENT FIRE-RESISTIVE MATERIALS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

INTUMESCENT FIRE-RESISTIVE MATERIALS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.16		
TASK	INSPECTION TYPE	DESCRIPTION
1. Inspect according to AWCI 12-B and the contract documents	PERIODIC	Inspections shall be performed in accordance with AWCI 12-B, Standard Practice for the Testing and Inspection of Field Applied Thin Film Intumescent Fire-Resistive Materials. Inspections shall be performed during construction. Additional visual inspection shall be performed after rough installation and where applicable, prior to the concealment of electrical, automatic sprinkler, mechanical and plumbing systems.

END SECTION

W. FIRE PROTECTION – FIRE-RESISTANT PENETRATIONS AND JOINTS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

FIRE-RESISTANT PENETRATIONS AND JOINTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.18		
TASK	INSPECTION TYPE	DESCRIPTION
1. Inspect of penetration firestop systems conducted in accordance with ASTM E2174.	PERIODIC	**[NOTE: This section applies to Risk Category III, IV, & V structures, or in fire areas containing Group R occupancies with an occupant load greater than 250. DOR may choose to uncheck this section where project is assigned to Risk Category I or II. Confirm Risk Category with licensed design professional in responsible charge]**
2. Inspecti of fire-resistant joint systems conducted in accordance with ASTM E2393	PERIODIC	

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

X. FIRE PROTECTION – SMOKE CONTROL

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

SMOKE CONTROL – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.19		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Verify device locations and perform leakage testing	PERIODIC	Perform during erection of ductwork and prior to concealment
2. Perform pressure difference testing, flow measurements and detection and control verification	PERIODIC	Perform prior to occupancy and after sufficient completion

END SECTION

Y. SEALANT – SEALING OF MASS TIMBER

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

SEALING OF MASS TIMBER – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.20		
TASK	INSPECTION TYPE	DESCRIPTION
1. Inspect sealants or adhesives	PERIODIC	Inspect sealants or adhesives where sealant and adhesive are required by 2024 IBC 703.7

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

Z. ARCHITECTURAL - EXTERIOR INSULATION AND FINISH SYSTEMS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.17		
TASK	INSPECTION TYPE[1]	DESCRIPTION
1. Water-resistive barrier coating applied over a sheathing substrate.	PERIODIC	Verify that water-resistive barrier coating complies with ASTM E2570. **[NOTE: Not required for EIFS applications installed over:** **a) a water-resistive barrier with a means of draining moisture to the exterior.** **b) masonry or concrete walls** **Uncheck this section in those cases]**

END SECTION

AA. ARCHITECTURAL – ARCHITECTURAL COMPONENTS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

ARCHITECTURAL COMPONENTS – VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH 2024 IBC 1705.13.5, 1705.13.7 and TABLE 1705.13.7		
TASK	INSPECTION TYPE	DESCRIPTION
[NOTE: This section is not applicable to Seismic Design Categories A, B, & C. Uncheck this section if one of those categories applies. Confirm Seismic Design Category with the licensed design professional in responsible charge.]		
1. Erection and fastening of exterior cladding and interior and exterior veneer.	PERIODIC	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. **[NOTE: Inspection not required if height is less than 30 feet or weight is less than 5psf]**
2. Interior and exterior non-load-bearing walls	PERIODIC	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. **[NOTE: Inspection not required if interior non-load-bearing walls weigh less than 15psf]**
3. Access floors	PERIODIC	Verify that anchorage complies with approved construction documents.
4. Storage racks	PERIODIC	Steel storage racks and steel cantilevered storage racks that are 8 feet in height or greater shall be inspected for: ✓ Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents ✓ Fabricated storage rack elements ✓ Storage rack anchorage installation ✓ Completion of storage rack system Inspection of post-installed anchors shall comply with approved ICC-ES report. **[NOTE: Not required for racks less than 8 feet in height]**

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

BB. PLUMBING/MECHANICAL/ELECTRICAL - DESIGNATED SEISMIC SYSTEMS

ALL OR PORTIONS OF THIS SECTION ARE APPLICABLE IF BOX IS CHECKED: ☐

PLUMBING, MECHANICAL AND ELECTRICAL – DESIGNATED SEISMIC SYSTEMS 2024 IBC 1705.13.6		
TASK	INSPECTION TYPE[1]	DESCRIPTION
[NOTE: This section is not applicable to Seismic Design Categories A or B. Uncheck this section if one of those categories applies. Confirm Seismic Design Category with licensed design professional in responsible charge.]		
1. Check anchorage of electrical equipment for emergency and standby power systems	PERIODIC	✓ Check for general conformance
2. Check anchorage of all other electrical equipment in Seismic Design Categories E and F only (See first page of this schedule for Seismic Design Category)	PERIODIC	✓ Check for general conformance
3. Check installation and anchorage of piping designed to carry hazardous materials and their associated mechanical units.	PERIODIC	✓ Check for general conformance
4. Check installation and anchorage of vibration isolation systems where the construction documents require a nominal clearance of ¼" or less between support framing and restraint.	PERIODIC	✓ Check for general conformance
5. Verify clearance between fire sprinkler piping and surrounding mechanical and electrical equipment, including ductwork, piping and their structural supports.	PERIODIC	✓ Check for minimum clearances noted in ASCE 7 13.2.3 or a nominal clearance of not less than 3 in.

END SECTION

[1] **PERIODIC**: Special inspection by a special inspector who is intermittently present where the work to be inspected has been or is being performed.

APPPENDIX A

Commentary on M12

Table 4 of TMS 602-22 does not have any Level 3 inspection requirements (for Risk Category IV structures). The leadership of the standard committee was contacted. They indicated that there are no requirements because veneers are covered under Part 4: Prescriptive Design Methods, and for prescriptive design there is never any Level 3 inspection requirement according to Table 3.1 of TMS 402-22. Although veneer is covered in Part 4, Chapter 13 of TMS 402-22, in Section 13.2.3, there is Engineered Design of Anchored Masonry Veneer and in Section 13.3.3, there is Engineered Design of Adhered Masonry Veneer. Engineered Design is covered in Part 3 of the standard, and for Part 3, Engineered Design, there are Level 3 inspection requirements in Table 3.1 of TMS 402-22. Upon further discussion, the leadership of the standard committee suggested to keep inspection Periodic for all Risk Category structures.

Project:	B90176 Hangar Door Expansion
Location:	Fort Hood, TX
Project #:	W9126G25F0273
Date:	3/4/2026

STATEMENT OF SPECIAL INSPECTIONS

Seismic Design Category:	A
Risk Category:	II
Number of Stories above Grade:	1
Height of Highest Occupied Roof or Floor above the Lowest Level of Fire Department Vehicle Access:	0
Hazardous Occupancy or attached to such?	No Group H Occupancies

Special Inspector of Record (SIOR)

A Special Inspector of Record (SIOR) **IS NOT** required (per UFGS 01 45 35, Section 1.3.7)

Lateral Force Resisting System (LFRS)

2024 IBC 1704.3.2 and 1704.3.3

Following is a listing of critical elements of the main wind/seismic force-resisting system for this structure. Carefully inspect these elements as part of the roles and responsiblities of the Special Inspector (reference the Schedule of Special Inspections for inspection checklists).

Vertical LFRS Elements	Notes
Existing Steel Moment Frames	
Existing Steel Concentrically Braced Frames	
New Steel Concentrically Braced Frames	

Horizontal LFRS Elements	Notes
Existing Diaphragm Horizontal Angle Braces	

Project: B90176 Hangar Door Expansion
Location: Fort Hood, TX
Project #: W9126G25F0273
Date: 3/4/2026

Designated Seismic Systems (DSS)

(2024 IBC 1705.13.4) (ASCE 7-22, 13.2.3, C13.2.2) (UFC 3-301-1, 2-5.3)

ELECTRICAL Components that are part of the Designated Seismic System (DSS) , which require a Certificate of Compliance
N/A
N/A
N/A
N/A
N/A

If additional space is required, append an additional sheet listing the remaining DSS

MECHANICAL/PLUMBING Components that are part of the Designated Seismic System (DSS), which require a Certificate of Compliance
N/A
N/A
N/A
N/A
N/A
N/A

If additional space is required, append an additional sheet listing the remaining DSS

OTHER Designated Seismic Systems (DSS) requiring a Certificate of Compliance
N/A
N/A
N/A
N/A
N/A
N/A

Final Walk-Down Inspection and Report

(UFC 3 301 01 SECTION 2-5.4)

Final Walk Down Inspection of non-structural Designated Seismic Systems does not apply to this project (no Designated Seismic Systems)

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SECTION 01 50 00

TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

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.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2023) National Electrical Code
NFPA 241	(2022) Standard for Safeguarding Construction, Alteration, and Demolition Operations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD	(2023) Manual on Uniform Traffic Control Devices

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Site Plan; G,

Traffic Control Plan; G,

Haul Road Plan; G,

Contractor Computer Cybersecurity Compliance Statements; G,

1.3 CONSTRUCTION SITE PLAN

Prior to the start of work, submit for Government approval a site plan showing the locations and dimensions of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area and details of the fence installation. Identify any areas

which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

1.4 DOD CONDITION OF READINESS (COR)

DOD will set the Condition of Readiness (COR) based on the weather forecast for sustained winds 50 knots (58 mph) or greater. Contact the Contracting Officer for the current COR setting.

Monitor weather conditions a minimum of twice a day and take appropriate actions according to the approved Emergency Plan in the accepted Accident Prevention Plan, EM 385-1-1 Emergency Plan requirements and the instructions below.

Unless otherwise directed by the Contracting Officer, comply with:

a. Condition FOUR (Sustained winds of 58 mph or greater expected within 72 hours): Normal daily jobsite cleanup and good housekeeping practices. Collect and store in piles or containers scrap lumber, waste material, and rubbish for removal and disposal at the close of each work day. Maintain the construction site including storage areas, free of accumulation of debris. Stack form lumber in neat piles less than 3.3 feet high. Remove all debris, trash, or objects that could become missile hazards. Review requirements pertaining to "Condition THREE" and continue action as necessary to attain "Condition FOUR" readiness. Contact Contracting Officer for weather and COR updates and completion of required actions.

b. Condition THREE (Sustained winds of 58 mph or greater expected within 48 hours): Maintain "Condition FOUR" requirements and commence securing operations necessary for "Condition ONE" which cannot be completed within 18 hours. Cease all routine activities which might interfere with securing operations. Commence securing and stow all gear and portable equipment. Make preparations for securing buildings. Reinforce or remove formwork and scaffolding. Secure machinery, tools, equipment, materials, or remove from the jobsite. Expend every effort to clear all missile hazards and loose equipment from general base areas. Contact Contracting Officer for weather and COR updates and completion of required actions. Review requirements pertaining to "Condition TWO" and continue action as necessary to attain "Condition THREE" readiness.

c. Condition TWO (Sustained winds of 58 mph or greater expected within 24 hours): Secure the jobsite, and leave Government premises.

d. Condition ONE. (Sustained winds of 58 mph or greater expected within 12 hours): Contractor access to the jobsite and Government premises is prohibited.

1.5 CYBERSECURITY DURING CONSTRUCTION

{For Reference Only: This subpart (and its subparts) relates to AC-18, SA-3, CCI-00258.} Meet the following requirements throughout the construction process.

1.5.1 Contractor Computer Equipment

Contractor owned computers may be used for construction. When used, contractor computers must meet the following requirements:

1.5.1.1 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.

1.5.1.2 Anti-Malware Software

The computer must run anti-malware software from a reputable software manufacturer. Anti-malware software must be a version currently supported by the software manufacturer, must be current on all patches and updates, and must use the latest definitions file. All computers used on this project must be scanned using the installed software at least once per day.

1.5.1.3 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.

1.5.1.4 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 https://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/ufgs-01-50-0 Each Statement must be signed by a cybersecurity representative for the relevant company.

1.5.2 Temporary IP Networks

Temporary Contractor-installed IP networks may be used during construction. Provide Government access to Contractor furnished temporary IP networks during construction. When used, temporary contractor-installed IP networks must meet the following requirements:

1.5.2.1 Network Boundaries and Connections

The network must not extend outside the project site and must not connect to any IP network other than IP networks provided under this project or Government furnished IP networks provided for this purpose. Any and all network access from outside the project site is prohibited.

1.5.3 Government Access to Network

Government personnel, as defined, prescribed, and identified by the Contracting Officer, must be allowed to have complete and immediate access to the network at any time in order to verify compliance with this specification. If there is a Government agency responsible for network access, identify that agency.

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 and other information approved by the Contracting Officer. Coordinate requirements herein with 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Locate the bulletin board at the project site in a conspicuous place easily accessible to all employees, and in location as approved by the Contracting Officer.

2.1.2 Project Identification Signs

The requirements for the signs, their content, and location are as specified in Section 01 58 00 PROJECT IDENTIFICATION. Erect signs within 15 days after receipt of the notice to proceed. Correct the data required by the safety sign daily, with light colored metallic or non-metallic numerals.

2.1.3 Warning Signs

Post temporary signs, tags, and labels to give workers and the public adequate warning and caution of construction hazards according to the EM 385-1-1. 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. Construct with suitable grades and widths; avoid sharp curves, blind corners, and dangerous cross traffic. Submit haul road plan for approval. Provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, must be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and haul roads are subject to approval by the Contracting Officer. Lighting must be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations.

2.2.2 Barricades

Erect and maintain temporary barricades to limit public access to hazardous areas. Barricades are required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Securely place barricades clearly visible with adequate illumination to provide sufficient visual warning of

the hazard during both day and night.

2.3 FENCING

Provide fencing along the construction site and at all open excavations and tunnels to control access by unauthorized personnel. Safety fencing must be highly visible to be seen by pedestrians and vehicular traffic. All fencing must meet the requirements of EM 385-1-1. Remove the fence upon completion and acceptance of the work.

To block public view of the construction, enclose the project work area and Contractor lay-down area with a 6 ft high chain link fence and gates with brown, UV light resistant, plastic inserts.

2.3.1 Polyethylene Mesh Safety Fencing

Temporary safety fencing must be a high visibility orange colored, high density polyethylene grid, a minimum of 48 inches high and maximum mesh size of 2 inches. Fencing must extend from the grade to a minimum of 48 inches above the grade and be tightly secured to T-posts spaced as necessary to maintain a rigid and taut fence. Fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection.

2.3.2 Chain Link Panel Fencing

Temporary panel fencing must be galvanized steel chain link panels 6 feet high. Multiple fencing panels may be linked together at the bases to form long spans as needed. Each panel base must be weighted down using sand bags or other suitable materials in order for the fencing to withstand anticipated winds while remaining upright. Fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection. Equip fence with a lockable gate. Gate must remain locked when construction personnel are not present.

2.3.3 Post-Driven Chain Link Fencing

Temporary post-driven fencing must be galvanized chain link fencing 6 feet high supported by an tightly secured to galvanized steel posts driven below grade. Fence posts must be located on minimum 10 foot centers. Posts may be set in various surfaces such as sand, soil, asphalt or concrete as necessary. Chain link fencing must remain rigid and taut with a minimum of 200 pounds of force exerted on it from any direction with less than 4 inches of deflection. Completely remove fencing and posts at the completion of construction and restore surfaces disturbed or damaged to its original condition. Locate and identify underground utilities prior to setting fence posts. Equip fence with a lockable gate. Gate must remain locked when construction personnel are not present. Include plastic strip inserts, colored brown, so that visibility through the fence is obstructed.

2.4 TEMPORARY WIRING

Provide temporary wiring in accordance with EM 385-1-1, NFPA 241 and NFPA 70. Include monthly inspection and testing of all equipment and apparatus.

PART 3 EXECUTION

3.1 EMPLOYEE PARKING

Construction contract employee must park privately owned vehicles within the construction site limits or the laydown/storage area. 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 Payment for Utility Services

a. The Contractor must provide their own utilities. Contractor must coordinate with Fort Hood DPW.

3.2.3 Meters and Temporary Connections

Provide and maintain necessary temporary connections, distribution lines, and meter bases required to measure the amount of each utility used for the purpose of determining charges. Do not make the final electrical connection until the Government has inspected and approved the Contractor's temporary wiring installation.

3.2.4 Sanitation

Provide and maintain within the construction area minimum field-type sanitary facilities in accordance with EM 385-1-1. Locate the facilities behind the construction fence or out of the public view. Clean units and empty wastes at least once a week or more frequently into a municipal, district, or station sanitary sewage system, or remove waste to a commercial facility. Obtain approval from the system owner prior to discharge into a municipal, district, or commercial sanitary sewer system. Penalties or fines associated with improper discharge will be the responsibility of the Contractor. Coordinate with the Contracting Officer and follow station regulations and procedures when discharging into the station sanitary sewer system. Maintain these conveniences at all times. Include provisions for pest control and elimination of odors. Government toilet facilities will not be available to Contractor's personnel.

3.2.5 Telephone

Make arrangements and pay all costs for telephone facilities desired.

3.2.6 Fire Protection

Provide temporary fire protection equipment for the protection of personnel and property during construction. Remove debris and flammable materials daily to minimize potential hazards.

3.3 TRAFFIC PROVISIONS

3.3.1 Maintenance of Traffic

a. Conduct operations in a manner that will not close a thoroughfare or interfere with traffic on railways or highways except with written permission of the Contracting Officer at least 15 calendar days prior to the proposed modification date, and provide a Traffic Control Plan for Government approval detailing the proposed controls to traffic movement for approval. The plan must be in accordance with State and local regulations and the MUTCD, Part VI. Make all notifications and obtain all permits required for modification to traffic movements outside Installation's jurisdiction.

b. Conduct work so as to minimize obstruction of traffic, and maintain traffic on at least half of the roadway width at all times. Obtain approval from the Contracting Officer prior to starting any activity that will obstruct traffic.

c. Provide, erect, and maintain, at Contractor's expense, lights, barriers, signals, passageways, detours, Life Safety Signage, overhead protection, and other items that may be required by the authority having jurisdiction.

d. Provide cones, signs, barricades, lights, or other traffic control devices and personnel required to control traffic. Do not use foil-backed material for temporary pavement marking because of its potential to conduct electricity during accidents involving downed power lines.

3.3.2 Protection of Traffic

Maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by the State and local authorities having jurisdiction. Provide self-illuminated (lighted) barricades during hours of darkness. All personnel working in roadways will wear brightly-colored vests or other high visibility apparel in accordance with EM 385-1-1. Protect the traveling public from damage to person and property. Minimize the interference with public traffic on roads selected for hauling material to and from the site. Investigate the adequacy of existing roads and their allowable load limit. Contractor is responsible for the repair of damage to roads caused by construction operations.

3.3.3 Rush Hour Restrictions

Do not interfere with the peak traffic flows preceding and during normal operations without notification to and approval by the Contracting Officer.

3.3.4 Dust Control

Dust control methods and procedures must be approved by the Contracting Officer. Coordinate dust control methods with 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS.

3.4 CONTRACTOR'S TEMPORARY FACILITIES

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. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

3.4.1 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.

3.4.2 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 Contracting Officer away from the vicinity of the construction site but within the installation boundaries. Trailers, equipment, or materials must not be open to public view with the exception of those items which are in support of ongoing work on the current day. Do not stockpile materials outside the fence in preparation for the next day's work. Park mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment within the fenced area at the end of each work day.

Keep fencing in a state of good repair and proper alignment. 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.

3.4.3 Supplemental Storage Area

Upon request, and pending availability, the Contracting Officer will designate another or supplemental area for the use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but will be within the installation boundaries. Maintain the area in a clean and orderly fashion and secured if needed to protect supplies and equipment. Utilities will not be provided to this area by the Government.

3.4.4 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.

3.4.5 Safety Systems

Protect the integrity of all installed safety systems or personnel safety devices. Obtain prior approval from the Contracting Officer if entrance into systems serving safety devices is required. If it is temporarily necessary to remove or disable personnel safety devices in order to accomplish Contract requirements, provide alternative means of protection prior to removing or disabling any permanently installed safety devices or equipment and obtain approval from the Contracting Officer.

3.4.6 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.

3.4.6.1 Building and Site Storm Protection

When a warning of gale force winds is issued, take precautions to minimize danger to persons, and protect the work and nearby Government property. Precautions must include, but are not limited to, closing openings; removing loose materials, tools and equipment from exposed locations; and removing or securing scaffolding and other temporary work. Close openings in the work when storms of lesser intensity pose a threat to the work or any nearby Government property.

3.5 PLANT COMMUNICATIONS

Whenever the individual elements of the plant are located so that operation by normal voice between these elements is not satisfactory, install a satisfactory means of communication, such as telephone or other suitable devices and make available for use by Government personnel.

3.6 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, furnish and erect temporary project safety fencing at the work site. Maintain the safety fencing during the life of the Contract and, upon completion and acceptance of the work, remove from the work site.

3.7 CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. Store all salvageable materials resulting from demolition activities within the fenced area described above or at the supplemental storage area. Neatly stack stored materials not in trailers, whether new or salvaged.

3.8 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletin board, signs, barricades, haul roads, and all other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence. Restore areas used during the performance of the Contract to the original or better condition. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil and seeding as necessary.

-- End of Section --

SECTION 01 57 19

TEMPORARY ENVIRONMENTAL CONTROLS

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)

29 CFR 1910.1053	Respirable Crystalline Silica
29 CFR 1910.1200	Hazard Communication
29 CFR 1926.1153	Respirable Crystalline Silica
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards
40 CFR 64	Compliance Assurance Monitoring
40 CFR 112	Oil Pollution Prevention
40 CFR 241	Guidelines for Disposal of Solid Waste
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste
40 CFR 258	Subtitle D Landfill Requirements
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 261.7	Residues of Hazardous Waste in Empty Containers
40 CFR 262.11	Hazardous Waste Determination and Recordkeeping
40 CFR 268	Land Disposal Restrictions
40 CFR 273	Standards for Universal Waste Management
40 CFR 279	Standards for the Management of Used Oil
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 300.125	National Oil and Hazardous Substances Pollution Contingency Plan - Notification

	and Communications
40 CFR 355	Emergency Planning and Notification
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packagings

1.2 DEFINITIONS

1.2.1 Class I and II Ozone Depleting Substance (ODS)

Class I ODS is defined in Section 602(a) of The Clean Air Act. A list of Class I ODS can be found on the EPA website at the following weblink. https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances.

Class II ODS is defined in Section 602(s) of The Clean Air Act. A list of Class II ODS can be found on the EPA website at the following weblink. https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances.

1.2.2 Contractor Generated Hazardous Waste

Contractor generated hazardous waste is materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e., methyl ethyl ketone, toluene), waste thinners, excess paints, excess solvents, waste solvents, excess pesticides, and contaminated pesticide equipment rinse water.

1.2.3 Electronics Waste

Electronics waste is discarded electronic devices intended for salvage, recycling, or disposal.

1.2.4 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally or historically.

1.2.5 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other

pollutants.

1.2.6 Hazardous Debris

As defined in paragraph SOLID WASTE, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) in accordance with 40 CFR 261. Hazardous debris also includes debris that exhibits a characteristic of hazardous waste in accordance with 40 CFR 261.

1.2.7 Hazardous Materials

Hazardous material is any material that: Is defined in 49 CFR 171, listed in 49 CFR 172, regulated as a hazardous material in accordance with 49 CFR 173; or requires a Safety Data Sheet (SDS) in accordance with 29 CFR 1910.1200; or during end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D. Designation of a material by this definition, when separately regulated or controlled by other sections or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this section for "control" purposes. Such material includes ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs).

1.2.8 Hazardous Waste

Hazardous Waste is any material that meets the definition of a solid waste and exhibits a hazardous characteristic (ignitability, corrosivity, reactivity, or toxicity) as specified in 40 CFR 261, Subpart C, or contains a listed hazardous waste as identified in 40 CFR 261, Subpart D, or meets a state, local, or host nation definition of a hazardous waste.

1.2.9 Installation Pest Management Coordinator

Installation Pest Management Coordinator (IPMC) is the individual officially designated by the Installation Commander to oversee the Installation Pest Management Program and the Installation Pest Management Plan.

1.2.10 Land Application

Land Application means spreading or spraying discharge water at a rate that allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" must occur. Comply with federal, state, and local laws and regulations.

1.2.11 Municipal Separate Storm Sewer System (MS4) Permit

MS4 permits are those held by municipalities or installations to obtain NPDES permit coverage for their stormwater discharges.

1.2.12 National Pollutant Discharge Elimination System (NPDES)

The NPDES permit program controls water pollution by regulating point

sources that discharge pollutants into waters of the United States.

1.2.13 Oily Waste

Oily waste are those materials that are, or were, mixed with Petroleum, Oils, and Lubricants (POLs) and have become separated from that POLs. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, POLs and may be appropriately tested and discarded in a manner which is in compliance with other state and local requirements.

This definition includes materials such as oily rags, "kitty litter" sorbent clay and organic sorbent material. These materials may be land filled provided that: It is not prohibited in other state regulations or local ordinances; the amount generated is "de minimus" (a small amount); it is the result of minor leaks or spills resulting from normal process operations; and free-flowing oil has been removed to the practicable extent possible. Large quantities of this material, generated as a result of a major spill or in lieu of proper maintenance of the processing equipment, are a solid waste. As a solid waste, perform a hazardous waste determination prior to disposal. As this can be an expensive process, it is recommended that this type of waste be minimized through good housekeeping practices and employee education.

1.2.14 Pesticide

Pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

1.2.15 Pesticide Treatment Plan

A plan for the prevention, monitoring, and control to eliminate pest infestation.

1.2.16 Pests

Pests are arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.17 Project Pesticide Coordinator

The Project Pesticide Coordinator (PPC) is an individual who resides at a Civil Works Project office and who is responsible overseeing of pesticide application on project grounds.

1.2.18 Regulated Waste

Regulated waste are solid wastes that have specific additional federal, state, or local controls for handling, storage, or disposal.

1.2.19 Sediment

Sediment is soil and other debris that have eroded and have been

transported by runoff water or wind.

1.2.20 Solid Waste

Solid waste is a solid, liquid, semi-solid or contained gaseous waste. A solid waste can be a hazardous waste, non-hazardous waste, or non-Resource Conservation and Recovery Act (RCRA) regulated waste. Types of solid waste typically generated at construction sites may include:

1.2.20.1 Debris

Debris is non-hazardous solid material generated during the construction, demolition, or renovation of a structure that exceeds 2.5-inch particle size that is: a manufactured object; plant or animal matter; or natural geologic material (for example, cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.

1.2.20.2 Green Waste

Green waste is the vegetative matter from landscaping, land clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.

1.2.20.3 Material Not Regulated As Solid Waste

Material not regulated as solid waste is nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation return flows, or other regulated point source discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

1.2.20.4 Non-Hazardous Waste

Non-hazardous waste is waste that is excluded from, or does not meet, hazardous waste criteria in accordance with 40 CFR 261.

1.2.20.5 Recyclables

Recyclables are materials, equipment and assemblies such as doors, windows, door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable, and structural components. It also includes commercial-grade refrigeration equipment with Freon removed, household appliances where the basic material content is metal, clean polyethylene terephthalate bottles, cooking oil, used fuel oil, textiles, high-grade paper products and corrugated cardboard, stackable pallets in good condition, clean crating material, and clean rubber/vehicle tires. Metal meeting the definition of "lead contaminated" or "lead based paint contaminated" may be included as recyclable only if the metal is handled and transported in accordance with regulations, and the facility receiving the material is permitted and authorized to accept and process lead contaminated materials. Paint cans that meet the definition of empty

containers in accordance with 40 CFR 261.7 may be included as recyclable if sold to a scrap metal company.

1.2.20.6 Surplus Soil

Surplus soil is existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars, and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included and must be managed in accordance with paragraph HAZARDOUS MATERIAL MANAGEMENT.

1.2.20.7 Scrap Metal

This includes scrap and excess ferrous and non-ferrous metals such as reinforcing steel, structural shapes, pipe, and wire that are recovered or collected and disposed of as scrap. Scrap metal meeting the definition of hazardous material or hazardous waste is not included.

1.2.20.8 Wood

Wood is dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included. Treated wood includes, but is not limited to, lumber, utility poles, crossties, and other wood products with chemical treatment.

1.2.21 Surface Discharge

Surface discharge means discharge of water into drainage ditches, storm sewers, or creeks meeting the definition of "waters of the United States". Surface discharges from construction sites are discrete, identifiable sources and require a permit from the governing agency. Comply with federal, state, and local laws and regulations.

1.2.22 Wastewater

Wastewater is the aqueous liquid waste generated by a project, to include both domestic wastewater (sewage) and industrial wastewater.

1.2.22.1 Stormwater

Stormwater is any precipitation in an urban or suburban area that does not evaporate or soak into the ground, but instead collects and flows into storm drains, rivers, and streams.

1.2.23 Waters of the United States

Waters of the United States means Federally jurisdictional waters, including wetlands, that are subject to regulation under Section 404 of the Clean Water Act or navigable waters, as defined under the Rivers and Harbors Act.

1.2.24 Wetlands

Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

1.2.25 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (for example, thermostats), and lamps (for example, fluorescent bulbs). The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier for universal waste handlers to collect these items and send them for recycling or proper disposal. These regulations can be found at 40 CFR 273.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Preconstruction Survey

Regulatory Notifications

Employee Training Records

Environmental Protection Plan; G, RO

Dirt and Dust Control Plan

Solid Waste Management Permit

Spill Prevention Control And Countermeasure (SPCC) Plan; G, RO

SD-06 Test Reports

Monthly Solid Waste Disposal Report; G, SD-07 Certificates

Employee Training Records; G,
Certificate of Competency

SD-11 Closeout Submittals

Regulatory Notifications; G, RO

Assembled Employee Training Records; G, RO

Solid Waste Management Permit; G, Waste Determination Documentation; G, RO

Project Solid Waste Disposal Documentation Report; G, RO

Sales Documentation; G,

1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

Provide and maintain, during the life of the contract, environmental

protection as defined. Plan for and provide environmental protective measures to control pollution that develops during construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Protect the environmental resources within the project boundaries and those affected outside the limits of permanent work during the entire duration of this Contract. Comply with federal, state, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

Tests and procedures assessing whether construction operations comply with Applicable Environmental Laws may be required. Analytical work must be performed by qualified laboratories; and where required by law, the laboratories must be certified.

1.4.1 Conformance with the Environmental Management System

Perform work under this contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS). Perform work in a manner that conforms to objectives and targets of the environmental programs and operational controls identified by the EMS. Support Government personnel when environmental compliance and EMS audits are conducted by escorting auditors at the Project site, answering questions, and providing proof of records being maintained. Provide monitoring and measurement information as necessary to address environmental performance relative to environmental, energy, and transportation management goals. In the event an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, take corrective and preventative actions. In addition, employees must be aware of their roles and responsibilities under the installation EMS and of how these EMS roles and responsibilities affect work performed under the contract.

Coordinate with the installation's EMS coordinator to identify training needs associated with environmental aspects and the EMS, and arrange training or take other action to meet these needs. Provide training documentation to the Contracting Officer. The Installation Environmental Office will retain associated environmental compliance records. Make EMS Awareness training completion certificates available to Government auditors during EMS audits and include the certificates in the Employee Training Records. See paragraph EMPLOYEE TRAINING RECORDS.

1.5 QUALITY ASSURANCE

1.5.1 Preconstruction Survey and Protection of Features

Prior to start of any onsite construction activities, perform a Preconstruction Survey of the project site with the Contracting Officer, and take photographs showing existing environmental conditions in and adjacent to the site. Submit a report for the record. Include in the report a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. The Contractor and the Contracting Officer will sign this survey report upon mutual agreement regarding its accuracy and completeness. Protect those environmental features included

in the survey report and any indicated on the drawings, regardless of interference that their preservation may cause to the work under the Contract. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.5.2 Regulatory Notifications

Provide regulatory notification requirements in accordance with federal, state and local regulations. In cases where the Government will also provide public notification (such as stormwater permitting), coordinate with the Contracting Officer. Submit copies of regulatory notifications to the Contracting Officer at least 7 days prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all-inclusive): demolition, renovation, NPDES defined site work, construction, removal or use of a permitted air emissions source, and remediation of controlled substances (asbestos, hazardous waste, lead paint).

1.5.3 Environmental Brief

Attend an environmental brief to be included in the preconstruction meeting. Provide the following information: types, quantities, and use of hazardous materials that will be brought onto the installation; and types and quantities of wastes/wastewater that may be generated during the Contract. Discuss the results of the Preconstruction Survey at this time.

Prior to initiating any work on site, meet with the Contracting Officer and installation Environmental Office to discuss the proposed Environmental Protection Plan (EPP) or equipment local requirement. Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural and cultural resources, required reports, required permits, permit requirements (such as mitigation measures), and other measures to be taken.

1.5.4 Employee Training Records

Prepare and maintain Employee Training Records throughout the term of the contract meeting applicable 40 CFR requirements. Provide Employee Training Records in the Environmental Records Binder. Submit these Assembled Employee Training Records to the Contracting Officer at the conclusion of the project, unless otherwise directed.

Train personnel to meet EPA requirements. Conduct environmental protection/pollution control meetings for personnel prior to commencing construction activities. Conduct additional meetings for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, waters of the United States, and endangered species and their habitat that are known to be in the area.

1.5.4.1 Pest Control Training

Trained personnel in pest control. Conduct a pest control meeting for personnel prior to commencing construction activities. Conduct additional

meetings for new personnel and when site conditions change. Include in the training and meeting agenda: methods of detecting and pest infestation; familiarization with statutory and contractual pest control standards; installation and care of devices, and instruments, if required, for monitoring purposes to ensure adequate and continuous pest control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of waters of the United States, and endangered species and their habitat that are known to be in the area. Provide a Certificate of Competency for the personnel who will be conducting the pesticide application and management of pest control.

1.5.5 Non-Compliance Notifications

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with federal, state or local environmental laws or regulations, permits, and other elements of the Contractor's EPP. After receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. All Delays, disruptions, or interruptions resulting from the Contractor's fault, negligence, or failure to comply with contract requirements shall be the responsibility of the Contractor. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. In addition to a suspension of work, the Contracting Officer may use additional authorities under the contract or law.

1.6 ENVIRONMENTAL PROTECTION PLAN

The purpose of the EPP is to present an overview of known or potential environmental issues that must be considered and addressed during construction. Incorporate construction related objectives and targets from the installation's EMS into the EPP. Include in the EPP measures for protecting natural and cultural resources, required reports, and other measures to be taken. Meet with the Contracting Officer or Contracting Officer Representative to discuss the EPP and develop a mutual understanding relative to the details for environmental protection including measures for protecting natural resources, required reports, and other measures to be taken. Submit the EPP within 30 days after notice to proceed and not less than 10 days before the preconstruction meeting. Revise the EPP throughout the project to include any reporting requirements, changes in site conditions, or contract modifications that change the project scope of work in a way that could have an environmental impact. No requirement in this section will relieve the Contractor of any applicable federal, state, and local environmental protection laws and regulations. During Construction, identify, implement, and submit for approval any additional requirements to be included in the EPP. Maintain the current version onsite.

The EPP includes, but is not limited to, the following elements:

1.6.1 General Overview and Purpose

1.6.1.1 Duties

The duties and level of authority assigned to the person(s) on the job site who oversee environmental compliance, such as who is responsible for adherence to the EPP, who is responsible for spill cleanup and training personnel on spill response procedures, who is responsible for manifesting

hazardous waste to be removed from the site (if applicable), and who is responsible for training the Contractor's environmental protection personnel.

1.6.1.2 Procedures

A copy of any standard or project-specific operating procedures that will be used to effectively manage and protect the environment on the project site.

1.6.1.3 Communications

Communication and training procedures that will be used to convey environmental management requirements to Contractor employees and subcontractors.

1.6.1.4 Contact Information

Emergency contact information contact information (office phone number, cell phone number, and e-mail address).

1.6.2 General Site Information

1.6.2.1 Drawings

Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, jurisdictional wetlands, material storage areas, structures, sanitary facilities, storm drains and conveyances, and stockpiles of excess soil.

1.6.2.2 Work Area

Work area plan showing the proposed activity in each portion of the area and identify the areas of limited use or nonuse. Include measures for marking the limits of use areas, including methods for protection of features to be preserved within authorized work areas and methods to control runoff and to contain materials on site, and a traffic control plan.

Show where any fuels, hazardous substances, solvents, or lubricants will be stored. Provide a spill plan to address any releases of those materials.

1.6.3 Management of Natural Resources

a. Land resources

b. Tree protection

c. Replacement of damaged landscape features

d. Temporary construction

1.6.4 Stormwater Management and Control

a. Ground cover

b. Erodible soils

c. Temporary measures

(1) Structural Practices

(2) Temporary and permanent stabilization

d. Effective selection, implementation and maintenance of Best Management Practices (BMPs).

e. Stormwater Pollution Prevention Plan (SWPPP).

1.6.5 Protection of the Environment from Waste Derived from Contractor Operations

This item consists of the management procedures for hazardous waste to be generated. The elements of those procedures will coincide with the Installation Hazardous Waste Management Plan when within an installation. The Contracting Officer will provide a copy of the Installation Hazardous Waste Management Plan as applicable.

As a minimum, include the following:

a. List of the types of hazardous wastes expected to be generated

b. Procedures to ensure a written waste determination is made for appropriate wastes that are to be generated

c. Sampling/analysis plan, including laboratory method(s) that will be used for waste determinations and copies of relevant laboratory certifications

d. Methods and proposed locations for hazardous waste accumulation/storage (that is, in tanks or containers)

e. Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless specifically noted)

f. Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions (40 CFR 268)

g. Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and similar

h. Used oil management procedures in accordance with 40 CFR 279; Hazardous waste minimization procedures

i. Plans for the disposal of hazardous waste by permitted facilities; and Procedures to be employed to ensure required employee training records are maintained.

1.6.6 Prevention of Releases to the Environment

Procedures to prevent releases to the environment

Notifications in the event of a release to the environment

1.6.7 Regulatory Notification and Permits

List what notifications and permit applications must be made. Some permits require up to 180 days to obtain. Demonstrate that those permits have been obtained or applied for by including copies of applicable environmental permits. The EPP will not be approved until the permits have been obtained.

1.6.8 Clean Air Act Compliance

1.6.8.1 Haul Route

Submit truck and material haul routes along with a Dirt and Dust Control Plan for controlling dirt, debris, and dust on Installation roadways. As a minimum, identify in the plan the subcontractor and equipment for cleaning along the haul route and measures to reduce dirt, dust, and debris from roadways.

1.6.8.2 Pollution Generating Equipment

Identify air pollution generating equipment or processes that may require federal, state, or local permits under the Clean Air Act. Determine requirements based on any current installation permits and the impacts of the project. Provide a list of all fixed or mobile equipment, machinery or operations that could generate air emissions during the project to the Installation Environmental Office (Air Program Manager). Ensure required permits are obtained prior to installing and operating applicable equipment/processes.

1.6.8.3 Air Pollution-engineering Processes

Identify planned air pollution-generating processes and management control measures (including, but not limited to, spray painting, abrasive blasting, demolition, material handling, fugitive dust, and fugitive emissions). Log hours of operations and track quantities of materials used.

1.6.8.4 Compliant Materials

Provide the Government a list of SDSs for all hazardous materials proposed for use on site. Materials must be compliant with all Clean Air Act regulations for emissions including solvent and volatile organic compound contents, and applicable National Emission Standards for Hazardous Air Pollutants requirements. The Government may alter or limit use of specific materials as needed to meet installation permit requirements for emissions.

1.7 LICENSES AND PERMITS

Obtain and maintain all licenses, permits, approvals, and certifications required for performance of the work. Notify the Government of any equipment, activities, or operations that require permits or special approvals prior to use onsite. This paragraph supplements the Contractor's responsibility to comply with all applicable Federal, State, and local laws, regulations, permits, and approval requirements associated with the work. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.

1.8 ENVIRONMENTAL RECORDS BINDER

Maintain on-site a separate three-ring Environmental Records Binder and submit at the completion of the project. Make separate parts within the binder that correspond to each submittal listed under paragraph CLOSEOUT SUBMITTALS in this section.

1.9 PESTICIDE DELIVERY, STORAGE, AND HANDLING

1.9.1 Delivery and Storage

Deliver pesticides to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Store pesticides according to manufacturer's instructions and under lock and key when unattended.

1.9.2 Handling Requirements

Formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and use the clothing and personal protective equipment specified on the labeling for use during each phases of the application. Furnish SDSs for pesticide products.

1.10 SOLID WASTE MANAGEMENT PERMIT

Provide the Contracting Officer with written notification of the quantity of anticipated solid waste or debris that is anticipated or estimated to be generated by construction. Include in the report the locations where various types of waste will be disposed or recycled. Include letters of acceptance from the receiving location or as applicable; submit one copy of the receiving location state and local Solid Waste Management Permit or license showing such agency's approval of the disposal plan before transporting wastes off Government property.

1.10.1 Monthly Solid Waste Disposal Report

Monthly, submit a solid waste disposal report to the Contracting Officer. For each waste, the report will state the classification (using the definitions provided in this section), amount, location, and name of the business receiving the solid waste.

1.11 FACILITY HAZARDOUS WASTE GENERATOR STATUS

Fort Hood is designated as a Large Quantity Generator. Meet the regulatory requirements of this generator designation for any work conducted within the boundaries of this Installation. Comply with provisions of federal, state, and local regulatory requirements applicable to this generator status regarding training and storage, handling, and disposal of construction derived wastes.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 STORMWATER

Do not discharge stormwater from construction sites to the sanitary

sewer. If the water is noted or suspected of being contaminated, it may only be released to the storm drain system if the discharge is specifically permitted. Obtain authorization in advance from the Installation Environmental Office for any release of contaminated water.

3.1.1 Work Area Limits

Mark the areas that need not be disturbed under this Contract prior to commencing construction activities. Mark or fence isolated areas within the general work area that are not to be disturbed. Protect monuments and markers before construction operations commence. Where construction operations are to be conducted during darkness, all markers must be visible in the dark. Personnel must be knowledgeable of the purpose for marking and protecting particular objects.

3.1.2 Contractor Facilities and Work Areas

Place field offices, staging areas, stockpile storage, and temporary buildings in areas designated on the drawings or as directed by the Contracting Officer. Move or relocate the Contractor facilities only when approved by the Government. Provide erosion and sediment controls for onsite borrow and spoil areas to prevent sediment from entering nearby waters. Control temporary excavation and embankments for plant or work areas to protect adjacent areas.

3.2 PROTECTION OF CULTURAL RESOURCES

3.2.1 Archaeological Resources

If, during excavation or other construction activities, any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, activities that may damage or alter such resources will be suspended. Resources covered by this paragraph include, but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. Cease all activities that may result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources. The Government retains ownership and control over archaeological resources.

3.3 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with 40 CFR 64 and state air emission and performance laws and standards.

3.3.1 Burning

Burning is prohibited on the Government premises.

3.3.2 Class I ODS Prohibition

Class I ODS are Government property and must be returned to the Government for appropriate management. Coordinate with the Installation

Environmental Office to determine the appropriate location for turn in of all reclaimed refrigerant.

3.3.3 Dust Control

Keep dust down at all times, including during nonworking periods. Dry power brooming will not be permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing will be permitted only for cleaning nonparticulate debris such as steel reinforcing bars. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Do not unnecessarily shake bags of cement, concrete mortar, or plaster. Since these products contain Crystalline Silica, comply with the applicable OSHA standard, 29 CFR 1910.1053 or 29 CFR 1926.1153 for controlling exposure to Crystalline Silica Dust.

3.3.3.1 Particulates

Dust particles, aerosols and gaseous by-products from construction activities, and processing and preparation of materials (such as from asphaltic batch plants) must be controlled at all times, including weekends, holidays, and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates that would exceed 40 CFR 50, state, and local air pollution standards or that would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators, or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp. Provide sufficient, competent equipment available to accomplish these tasks. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. Comply with state and local visibility regulations.

3.3.3.2 Abrasive Blasting

Blasting operations cannot be performed without prior approval of the Installation Air Program Manager. The use of silica sand is prohibited in sandblasting.

Provide tarpaulin drop cloths and windscreens to enclose abrasive blasting operations to confine and collect dust, abrasive agent, paint chips, and other debris.

3.3.4 Odors

Control odors from construction activities. The odors must be in compliance with state regulations and local ordinances and may not constitute a health hazard.

3.4 WASTE MINIMIZATION

Minimize the use of hazardous materials and the generation of waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the EPP. Obtain a copy of the installation's Pollution Prevention/Hazardous Waste Minimization Plan for reference material when preparing this part of the EPP. If no written plan exists, obtain information by contacting the Contracting Officer.

Describe the anticipated types of the hazardous materials to be used in the construction when requesting information.

3.4.1 Salvage, Reuse and Recycle

Identify anticipated materials and waste for salvage, reuse, and recycling. Describe actions to promote material reuse, resale or recycling. To the extent practicable, all scrap metal must be sent for reuse or recycling and will not be disposed of in a landfill.

Include the name, physical address, and telephone number of the hauler, if transported by a franchised solid waste hauler. Include the destination and, unless exempted, provide a copy of the state or local permit (cover) or license for recycling.

3.4.2 Nonhazardous Solid Waste Diversion Report

Maintain an inventory of nonhazardous solid waste diversion and disposal of construction and demolition debris. Submit a report to the Contracting Officer on the first working day after each fiscal year quarter, starting the first quarter that nonhazardous solid waste has been generated. Include the following in the report:

Construction and Demolition (C&D) Debris Disposed	tons, as appropriate
C&D Debris Recycled	tons, as appropriate
C&D Debris Composted	tons, as appropriate
Total C&D Debris Generated	tons, as appropriate
Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount)	tons, as appropriate

3.5 WASTE MANAGEMENT AND DISPOSAL

3.5.1 Waste Determination Documentation

Complete a Waste Determination form (provided at the pre-construction conference) for Contractor-derived wastes to be generated. All potentially hazardous solid waste streams that are not subject to a specific exclusion or exemption from the hazardous waste regulations (e.g., scrap metal, domestic sewage) or subject to special rules, (lead-acid batteries and precious metals) must be characterized in accordance with the requirements of 40 CFR 262.11 or corresponding applicable state or local regulations. Base waste determination on user knowledge of the processes and materials used, and analytical data when necessary. Consult with the Installation environmental staff for guidance on specific requirements. Attach support documentation to the Waste Determination form. As a minimum, provide a Waste Determination form for the following waste (this listing is not exhaustive): oil- and latex -based painting and caulking products, solvents, adhesives, aerosols, petroleum products, and containers of the original materials.

3.5.2 Solid Waste Management

3.5.2.1 Project Solid Waste Disposal Documentation Report

Provide copies of the waste handling facilities' weight tickets, receipts, bills of sale, and other sales documentation. In lieu of sales documentation, a statement indicating the disposal location for the solid waste that is signed by an employee authorized to legally obligate or bind the firm may be submitted. The sales documentation must include the receiver's tax identification number and business, EPA or state registration number, along with the receiver's delivery and business addresses and telephone numbers. For each solid waste retained for the Contractor's own use, submit the information previously described in this paragraph on the solid waste disposal report. Prices paid or received do not have to be reported to the Contracting Officer unless required by other provisions or specifications of this Contract or public law.

3.5.2.2 Control and Management of Solid Wastes

Pick up solid wastes, and place in covered containers that are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, leave the areas clean. Employ segregation measures so that no hazardous or toxic waste will become co-mingled with non-hazardous solid waste. Transport solid waste off Government property and dispose of it in compliance with 40 CFR 260, state, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill is the minimum acceptable offsite solid waste disposal option. Verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Solid waste disposal offsite must comply with most stringent local, state, and federal requirements, including 40 CFR 241, 40 CFR 243, and 40 CFR 258.

Manage hazardous material used in construction, including but not limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and used rags, in accordance with 49 CFR 173.

3.5.3 Releases/Spills of Oil and Hazardous Substances

3.5.3.1 Response and Notifications

Exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated in accordance with 40 CFR 300. Maintain spill cleanup equipment and materials at the work site. In the event of a spill, take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the Installation Fire Department, the Installation Command Duty Officer, the Installation Environmental Office, the Contracting Officer.

Submit verbal and written notifications as required by the federal (40 CFR 300.125 and 40 CFR 355), state, local regulations and instructions. Provide copies of the written notification and documentation that a verbal notification was made within 20 days. Spill response must be in accordance with 40 CFR 300 and applicable state and

local regulations. Contain and clean up these spills without cost to the Government.

3.5.3.2 Clean Up

Clean up hazardous and non-hazardous waste spills. Reimburse the Government for costs incurred including sample analysis materials, clothing, equipment, and labor if the Government will initiate its own spill cleanup procedures, for Contractor- responsible spills, when: Spill cleanup procedures have not begun within one hour of spill discovery/occurrence; or, in the Government's judgment, spill cleanup is inadequate and the spill remains a threat to human health or the environment.

3.6 HAZARDOUS MATERIAL MANAGEMENT

Include hazardous material control procedures in the Accident Prevention Plan (APP), in accordance with Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. Do not bring hazardous material onto Government property that does not directly relate to requirements for the performance of this contract. Submit an SDS and estimated quantities to be used for each hazardous material to the Contracting Officer prior to bringing the material on the installation. Typical materials requiring SDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. Use hazardous materials in a manner that minimizes the amount of hazardous waste generated. Containers of hazardous materials must have National Fire Protection Association labels or their equivalent. Certify that hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste, in accordance with 40 CFR 261 and state and installation requirements.

3.7 PREVIOUSLY USED EQUIPMENT

Clean previously used construction equipment prior to bringing it onto the project site. Equipment must be free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. Consult with the U.S. Department of Agriculture jurisdictional office for additional cleaning requirements.

3.8 PETROLEUM, OIL, LUBRICANT (POL) STORAGE AND FUELING

POL products include flammable or combustible liquids, such as gasoline, diesel, lubricating oil, used engine oil, hydraulic oil, mineral oil, and cooking oil. Store POL products and fuel equipment and motor vehicles in a manner that affords the maximum protection against spills into the environment. Manage and store POL products in accordance with EPA 40 CFR 112, and other federal, state, regional, and local laws and regulations. Use secondary containments, dikes, curbs, and other barriers, to prevent POL products from spilling and entering the ground, storm or sewer drains, stormwater ditches or canals, or navigable waters of the United States. Describe in the EPP (see paragraph ENVIRONMENTAL PROTECTION PLAN) how POL tanks and containers must be stored, managed, and inspected and what protections must be provided. Storage of oil, including fuel, on the project site is not allowed. Fuel must be brought to the project site each day that work is performed.

3.8.1 Used Oil Management

Manage used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while onsite exhibits a characteristic of hazardous waste. Used oil containing 1,000 parts per million of solvents is considered a hazardous waste and disposed of at the Contractor's expense. Used oil mixed with a hazardous waste is also considered a hazardous waste. Dispose in accordance with paragraph HAZARDOUS WASTE DISPOSAL.

3.8.2 Oil Storage Including Fuel Tanks

Provide secondary containment and overfill protection for oil storage tanks. A berm used to provide secondary containment must be of sufficient size and strength to contain the contents of the tanks plus 5 inches freeboard for precipitation. Construct the berm to be impervious to oil for 72 hours that no discharge will permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Use drip pans during oil transfer operations; adequate absorbent material must be onsite to clean up any spills and prevent releases to the environment. Cover tanks and drip pans during inclement weather. Provide procedures and equipment to prevent overfilling of tanks. If tanks and containers with an aggregate aboveground capacity greater than 1320 gallons will be used onsite (only containers with a capacity of 55 gallons or greater are counted), provide and implement a Spill Prevention Control and Countermeasure (SPCC) plan meeting the requirements of 40 CFR 112. Do not bring underground storage tanks to the installation for Contractor use during a project. Submit the SPCC plan to the Contracting Officer for approval.

Monitor and remove any rainwater that accumulates in open containment dikes or berms. Inspect the accumulated rainwater prior to draining from a containment dike to the environment, to determine there is no oil sheen present.

3.9 INADVERTENT DISCOVERY OF PETROLEUM-CONTAMINATED SOIL OR HAZARDOUS WASTES

If petroleum-contaminated soil, or suspected hazardous waste is found during construction that was not identified in the Contract documents, immediately notify the Contracting Officer. Do not disturb this material until authorized by the Contracting Officer.

3.10 SOUND INTRUSION

Make the maximum use of low-noise emission products, as certified by the EPA. Blasting or use of explosives are not permitted without written permission from the Contracting Officer, and then only during the designated times. Confine pile-driving operations to the period between 8 a.m. and 4 p.m., Monday through Friday, exclusive of holidays, unless otherwise specified.

Keep construction activities under surveillance and control to minimize environment damage by noise.

3.11 POST CONSTRUCTION CLEANUP

Clean up areas used for construction in accordance with Contract Clause: "Cleaning Up". Unless otherwise instructed in writing by the Contracting Officer, remove traces of temporary construction facilities such as haul

roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. Grade parking area and similar temporarily used areas to conform with surrounding contours.

-- End of Section --

SECTION 01 58 00

PROJECT IDENTIFICATION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EP 310-1-6a	(2006; 2019 Change 2) Project Operation -- Sign Standards Manual, VOL 1
EP 310-1-6b	(2006) Sign Standards Manual, VOL 2, Appendices

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Sign Legend Orders; G,

1.3 PROJECT IDENTIFICATION SIGN

1.3.1 Construction Project Signs

Furnish the construction project sign package, maintain the signs during construction, and remove the signs from the job site upon completion of the project. The construction project sign package consists of two signs: one for project identification and the other to show the on-the-job safety performance of the contractor. Ensure that the package conforms to the requirements of EP 310-1-6a and EP 310-1-6b, specifically Section 16. Submit the sign legend orders as described in Section 16 of EP 310-1-6a before erecting the signs.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

CONSTRUCTION SIGN SCHEDULE

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the Construction Project Identification sign specified on page 16-2.

The graphic format, color, size and typefaces used on the sign are to be reproduced exactly as specified below. The title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

Safety record numbers are mounted on individual metal plates and are screw-mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with 8" (outside diameter) Safety Green first aid logo.
Color: To match Pantone system 347
Typeface: 3" Helvetica Bold
Color: Black

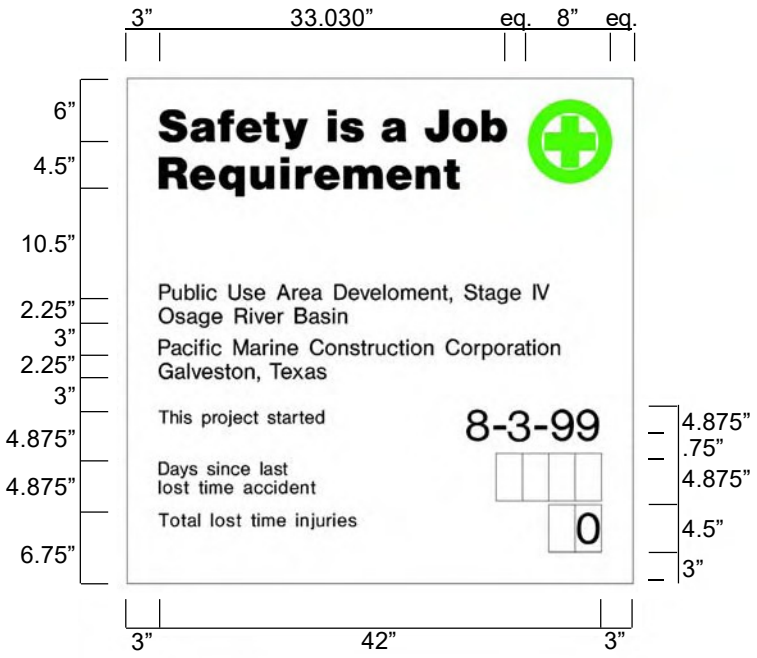
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Legend Group 3: One- to two-line identification: name of prime contractor and city, state address. Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

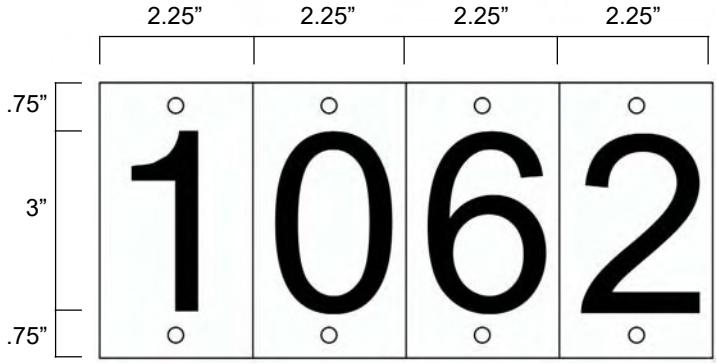
Legend Group 4: Standard safety record captions as shown.
Color: Black
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.
Color: Black
Typeface: 3" Helvetica Regular
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4'x4'	4"x4"	HDO-3	48"	WH/BK-SG



Fabrication and Mounting Guidelines

All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer representative and shall conform to the size, format, and typographic standards shown on pages16-2 and 16-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

For additional information on the proper method to prepare sign panel graphics, contact the district Sign Program Manager.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white nonreflective vinyl film with positionable adhesive backing.

All graphics except for the Communication Red background with Corps Signature on the project sign are to be die-cut or computer-cut nonreflective vinyl, prespaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16-2 and 16-3.

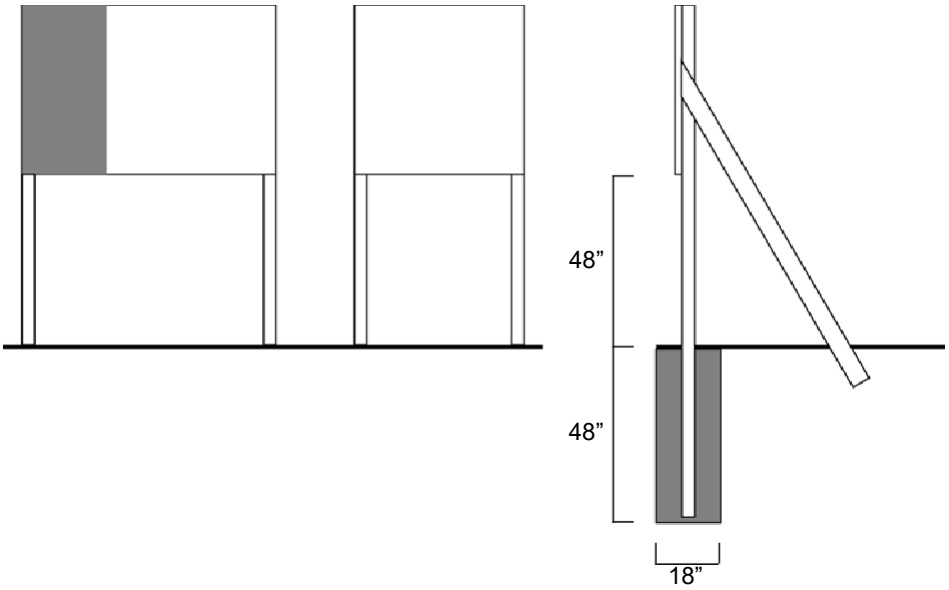
The 2'x 4' Communication Red panel (to match Pantone system 032) with full Corps Signature (reverse version) is to be screen-printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards.

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.



Construction Project Identification Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 2a: Military/Civil Works Sponsor

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Safety Performance Sign
Legend Group 2: Project Title

1. _____
2. _____

Legend Group 3: Contractor/A&E

1. _____
2. _____

SECTION 01 71 23.00 44

SURVEY, LAYOUT, AND OTHER DATA

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Survey Data;

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 CONTRACTOR VERIFICATION OF CONTRACT SURVEY DATA

During initial site layout and before existing conditions are disturbed the Contractor shall verify, in writing, the basic survey data provided on the contract drawings. Verification shall be initiated from the point shown on the contract drawings or from the contract drawing reference point designated by the Contracting Officer's Authorized Representative and shall include, as a minimum, benchmark elevations, horizontal control points, and sufficient spot checks of critical elevations to ensure that the survey data adequately reflects existing conditions. The Contractor shall not proceed with construction until survey verification is provided to the Contracting Officer's Authorized Representative. Before an existing benchmark referenced on the contract drawings is disturbed the Contractor shall establish a new benchmark which has been approved by the Contracting Officer's Authorized Representative. Benchmarks which are destroyed without authorization from the Contracting Officer's Authorized Representative must be replaced at the Contractor's expense as prescribed in Section 00 72 00 Contract Clause, "Layout of Work." The Contractor shall refer to Contract Clauses, "Differing Site Conditions" and "Site Investigation and Conditions Affecting the Work," for additional requirements.

-- End of Section --

SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 DEFINITIONS

1.1.1 Co-mingle

The practice of placing unrelated materials together in a single container, usually for benefits of convenience and speed.

1.1.2 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.

1.1.3 Demolition Debris/Waste

Waste generated from demolition activities, including minor incidental demolition waste materials generated as a result of Intentional dismantling of all or portions of a building, to include clearing of building contents that have been destroyed or damaged.

1.1.4 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).

1.1.5 Diversion

The practice of diverting waste from disposal in a landfill or incinerator, by means of eliminating or minimizing waste, or reuse of materials.

1.1.6 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.

1.1.7 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.

1.1.8 Reuse

The use of a product or materials again for the same purpose, in its

original form or with little enhancement or change.

1.1.9 Salvage

Usable, salable items derived from buildings undergoing demolition or deconstruction, parts from vehicles, machinery, other equipment, or other components.

1.1.10 Source Separation

The practice of administering and implementing a management strategy to identify and segregate unrelated waste at the first opportunity.

1.2 CONSTRUCTION WASTE (INCLUDES DEMOLITION DEBRIS/WASTE)

Divert a minimum of 60 percent by weight of the project construction waste and demolition debris/waste from the landfill or incinerator. Follow applicable industry standards in the management of waste. Apply sound environmental principles in the management of waste. (1) Practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction waste and demolition debris/waste from landfills and incinerators and to facilitate the recycling or reuse of excess construction materials.

1.3 CONSTRUCTION WASTE MANAGEMENT

Implement a Construction 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.

1.3.1 Implementation of Construction Waste Management Program

Develop and document how the Construction Waste Management Program will be implemented in a Construction Waste Management Plan. Submit a Construction Waste Management Plan to the Contracting Officer for approval. Construction waste and demolition debris/waste materials include un-used construction materials not incorporated in the final work, as well as demolition debris/waste materials from demolition activities or deconstruction activities. In the management of waste, consider the availability of viable markets, the condition of materials, the ability to provide material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates.

1.3.2 Oversight

The Quality Control Manager, as specified in Section 01 45 00 QUALITY CONTROL, is responsible for overseeing and documenting results from executing the Construction Waste Management Plan for the project.

1.3.3 Special Programs

Implement special programs involving rebates or similar incentives related to recycling of construction waste and demolition debris/waste materials. Retain revenue or savings from salvaged or recycling, unless otherwise directed. Ensure firms and facilities used for recycling, reuse, and

disposal are permitted for the intended use to the extent required by federal, state, and local regulations.

1.3.4 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.

1.3.5 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 steams not listed:

a. Land Clearing Debris

b. Asphalt

c. Masonry and CMU

d. Concrete

e. Metals (Includes, but is not limited to, banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized, stainless steel, aluminum, copper, zinc, bronze.)

f. Wood (nails and staples allowed)

g. Glass

h. Paper

i. Plastics (PET, HDPE,PVC,LDPE,PP,PS, Other)

j. Gypsum

k. Non-hazardous paint and paint cans

l. Carpet

m. Ceiling Tiles

n. Insulation

o. Beverage Containers

1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Waste Management Plan; G,

SD-06 Test Reports

Monthly Reporting

SD-11 Closeout Submittals

Final Construction Waste Diversion Report; S

1.5 MEETINGS

Conduct Construction Waste Management meetings. After award of the Contract and prior to commencement of work, schedule and conduct a meeting with the Contracting Officer to discuss the proposed Construction Waste Management Plan and to develop a mutual understanding relative to the management of the Construction Waste Management Program and how waste diversion requirements will be met.

The requirements of this meeting may be fulfilled during the coordination and mutual Understanding meeting outlined in Section 01 45 00 QUALITY CONTROL. At a minimum, discuss and document waste management goals at following meetings:

a. Preconstruction meeting.

b. Regular Quality Control meetings.

c. Work safety meeting (if applicable).

1.6 CONSTRUCTION WASTE MANAGEMENT PLAN

Submit Construction Waste Management Plan within 15 days after notice to proceed. Revise and resubmit Construction Waste Management Plan as necessary, in order for construction to begin.. Submit Construction Waste Management Plan not less than 60 calendar days before scheduled final site or building design approval. Revise and resubmit Construction Waste Management Plan until it receives final approval from the Contracting Officer, in order for construction to begin. Execute demolition or deconstruction activities in accordance with Section 02 41 00 DEMOLITION . Manage demolition debris/waste or deconstruction materials in accordance with the approved construction waste management plan.

An approved Construction Waste Management Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting project cumulative waste diversion requirement. Ensure all subcontractors receive a copy of the approved Construction Waste Management Plan. The plan demonstrates how to meet the project waste diversion requirement. Also, include the following in the plan:

a. Identify the names of individuals responsible for waste management and waste management tracking, along with roles and responsibilities on the project.

b. Actions that will be taken to reduce solid waste generation, including coordination with subcontractors to ensure awareness and participation.

c. Description of the regular meetings to be held to address waste

management.

d. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas on site and equipment to be used for processing, sorting, and temporary storage of materials.

e. Name of landfill and incinerator to be used.

f. Identification of local and regional re-use programs, including non-profit organizations such as schools, local housing agencies, and organization that accept used materials such as material exchange networks and resale stores. Include the name, location, phone number for each re-use facility identified, and provide a copy of the permit or license for each facility.

g. List of specific materials, by type and quantity, that will be salvaged for resale, salvaged and reused on the current project, salvaged and stored for reuse on a future project, or recycled. Identify the recycling facilities by name, address, and phone number.

h. Identification of materials that cannot be recycled or reused with an explanation or justification, to be approved by the Contracting Officer.

i. Description of the means by which materials identified in item (g) above will be protected from contamination.

j. Description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site).

k. Copy of training plan for subcontractors and other services to prevent contamination by co-mingling materials identified for diversion and waste materials.

l. Please submit a copy of the waste management plan to the DPW landfill engineer for review. It can be sent to: IMWE-HOD-PWF, Attn: Kevin Scholz, 4612 Engineer Dr., Fort Hood TX 76544.

Distribute copies of the waste management plan to each subcontractor, Quality Control Manager , and the Contracting Officer.

1.7 RECORDS (DOCUMENTATION)

1.7.1 General

Maintain records to document the types and quantities of waste generated and diverted though 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.

1.7.2 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.

1.8 REPORTS

1.8.1 General

Maintain current construction waste diversion information on site for periodic inspection by the Contracting Officer. Include in the monthly reports, and final reports: the project name, contract information, information for waste generated, diverted and disposed of for the current reporting period and show cumulative totals for the project. Reports must identify quantifies of waste by type and disposal method. Also include in each report, supporting documentation to include manifests, weigh tickets, receipts, and invoices specifically identifying the project and waste material type and weighted sum.

1.8.2 Monthly Reporting

See Section 01 35 10.00 44 SPECIAL PROJECT PROCEDURES FOR FORT HOOD (FORMERLY KNOWN AS FORT CAVAZOS)for monthly reporting requirements.

1.9 FINAL CONSTRUCTION WASTE DIVERSION REPORT

A Final Construction Waste Diversion Report is required at the end of the project. Provide Final Construction Waste Diversion Report 60 days prior to the final acceptance of the facility by the Contracting Officer.

1.10 COLLECTION

Collect, store, protect, and handle reusable and recyclable materials at the site in a manner which prevents contamination, and provides protection from the elements to preserve their usefulness and monetary value. Provide receptacles and storage areas designated specifically for recyclable and reusable materials and label them clearly and appropriately to prevent contamination from other waste materials. Keep receptacles or storage areas neat and clean.

Train subcontractors and other service providers to either separate waste streams or use the co-mingling method as described in the Construction Waste Management Plan. Handle hazardous waste and hazardous materials in accordance with applicable regulations and coordinate with Section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS. Separate materials by one of the following methods described herein:

1.10.1 Source Separation Method

Separate waste products and materials that are recyclable from trash and sort as described below into appropriately marked separate containers and then transport to the respective recycling facility for further processing. Deliver materials in accordance with recycling or reuse facility requirements (e.g., free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process). Separate materials into the category types as defined in the Construction Waste Management Plan.

1.10.2 Other Methods

Other methods proposed by the Contractor may be used when approved by the Contracting Officer.

1.11 DISPOSAL

Control accumulation of waste materials and trash. Recycle or dispose of collected materials off-site at intervals approved by the Contracting Officer and in compliance with waste management procedures as described in the waste management plan. Except as otherwise specified in other sections of the specifications, dispose of in accordance with the following:

1.11.1 Reuse

Give first consideration to reusing construction and demolition materials as a disposition strategy. Recover for reuse materials, products, and components as described in the approved Construction Waste Management Plan. Coordinate with the Contracting Officer to identify onsite reuse opportunities or material sales or donation available through Government resale or donation programs. Sale of recovered materials is not allowed on the Installation. Consider the use of surplus industrial supply broker services, who match entities with reusable or repurpose industrial materials with entities with need of such materials.

1.11.2 Recycle

Recycle non-hazardous construction and demolition/debris materials that are not suitable for reuse. Track rejection of contaminated recyclable materials by the recycling facility. Rejected recyclables materials will not be counted as a percentage of diversion calculation. Recycle all fluorescent lamps, HID lamps, mercury (Hg) -containing thermostats and ampoules, and PCBs-containing ballasts and electrical components as directed by the Contracting Officer. Do not crush lamps on site as this creates a hazardous waste stream with additional handling requirements.

1.11.3 Waste

Dispose by landfill or incineration only those waste materials with no practical use, economic benefit, or recycling opportunity.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used. -- End of Section --

SECTION 01 78 00

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ERDC/ITL SR-23-1	(2023) A/E/C Graphics Standard, Release 2.2
ERDC/ITL TR-19-7	(2019) A/E/C CAD Standard - Release 6.1

1.2 DEFINITIONS

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; design that is the responsibility of the Contractor, and differing site conditions. Maintain the as-builts throughout construction as 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.

1.2.3 USACE CAD/BIM Technology Center

The USACE CAD/BIM Technology Center hosts all standard content for USACE. This content can be accessed through the CAD/BIM Technology Center website, https://cadbimcenter.erdc.dren.mil/.

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 a 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 waives to the fullest extent permitted by law, any claim or cause of action of any nature against the Government, its agents or sub consultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic 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. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished Source drawing files, the signed and sealed construction documents govern. The Contractor is responsible for determining if any conflict exists. Use of these Source Drawing files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction drawings and data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

1.4 RECORD DRAWINGS

The Government will provide pdf and or program files at the preconstruction conference that contains one set of "as-designed" electronic CAD files in the specified software and format revised to reflect all amendments and the final contract PDF drawings. The CAD files are provided to enable preparation of as-built or as-constructed drawings. If discrepancies exist between the CAD files and the contract PDF drawings, correct the CAD files to show the contract PDF drawings.

1.4.1 Variation with Contract Drawings

The electronic files provided are not part of the contract documents. If there is any discrepancy between the electronic files and the contract drawings, the contract drawings govern. The Government has no responsibility to modify any GFM due to changes in the design that occur after award.

Evaluate the content and quality of the GFM upon receipt. If major discrepancies or omissions occur in the GFM, notify the Contracting Officer and indicate the nature of such variations.

1.4.2 Definition

Project Record documents are a record of the construction as installed and completed by the Contractor. They are a record of all deviations, modifications, or changes from contract set of drawings (the accepted 100% design drawings) and other documents, however minor, which were incorporated in the work. They include all the information shown on the contract set of drawings, any Contractor-original drawings, all additional work not appearing on the contract drawings, and all changes which are made after final inspection of the contract work.

1.4.3 Contractor-Original Record Drawings

Contractor-original record drawings are those drawings drawn by the Contractor, after acceptance of the 100% design documents and the start of construction, to further explain the Contract documents such as subcontractor submittals for fire protection/detection, communication, and other systems, and approved Contractor's solutions to problems. Submit these drawings as full-size reproducible sheets and CADD files. CADD files shall conform to the Working CADD file requirements specified in paragraph "Final Record Drawings."

1.4.4 Data Loss, Corruption, and Error

Transfer of GFM files may result in corrupted files resulting in data loss and errors. Use of GFM files at own risk. Verify data integrity upon receipt and request a replacement if necessary. Make any adjustment in file structure, format, or software version as needed to make GFM compatible with computer systems and/or software to meet the requirements of the contract.

1.4.5 Modeling Completeness and Quality

The Government makes no guarantee that the GFM provide the level of completeness or quality as required by the contract. Further, the Government makes no guarantee that identified variations will be corrected upon notification.

1.5 PROJECT RECORD DOCUMENTS

1.5.1 Preliminary Record Drawings

The Contractor shall mark up both a reproducible set and a set of prints to show as-built conditions. These two sets, hereafter called preliminary record drawings, or singly, reproducibles or prints, shall be kept current and available on the jobsite at all times, except as noted below. For drawings contained within the Specifications, the Contractor shall mark up copies of these drawings to show as-built conditions; these copies will be considered the preliminary record drawings and shall be kept current and available on the jobsite at all times, except as noted below. Assign a member of the Contractor's Quality Control Organization to be responsibility for the maintenance and currency of the preliminary record drawings. This assignment and any reassignment of duties concerning the maintenance of the record drawings shall be promptly reported to the Contracting Officer's representative for approval. All changes from the contract drawings which are made in the work or additional information which might be uncovered in the course of construction, including uncharted utilities, shall be accurately and neatly recorded as they occur by means of details and notes. Clearly identify all changes and/or required additions to the preliminary record drawings in a contrasting color and which is compatible with reproduction of the preliminary record drawings. Update preliminary record drawings by Friday of each week. During periods when the reproducibles are being copied and are therefore not available at the jobsite, continue posting all required data to the prints. Minimize the time that the reproducibles are away from the jobsite and update them with all as-built data immediately upon their return. The preliminary record drawings will be jointly inspected for accuracy and completeness by the Contracting Officer's representative and the assigned representative of the Contractor's Quality Control

Organization prior to submission of each monthly pay estimate. See paragraph, "Withholding for Preliminary Record Drawings." The record drawings shall show the following information, but not be limited thereto:

a. The location and description of utility lines or other installation of any kind or description known to or found to exist within the construction area. The location of exterior utilities includes actual measured horizontal distances from utilities to permanent facilities/ features. These measurements shall be within an accuracy range of 6 inches and shall be shown at sufficient points to permit easy location of utilities for future maintenance purposes. Show measurements for all change of direction points and all surface or underground components such as valves, manholes, drop inlets, cleanouts, meter, etc. Indicate the general depth range of each underground utility line (i.e., 3 to 4 feet in depth). The description of exterior utilities includes the actual quantity, size, and material of utility lines.

b. The location and size of all uncharted existing utilities encountered.

c. The location and dimensions of any changes within the building or structure.

d. Correct grade or alinement of roads, structures or utilities if any changes were made from contract drawings.

e. Correct elevations if changes were made in site grading.

f. Changes in details of design or additional information obtained from working 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.

g. The topography and grades of all drainage installed or affected as a part of the project construction.

h. Options

Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the record drawings.

i. Blue Line or Black Line Prints

Blue-line or black-line prints shall be full size. All blue or black line prints shall exhibit good readable print with clear, sharp, dark lines, and shall not be smeared, faded, double imaged, or have torn or ragged edges.

j. Prefinal Inspection For Each Item of Work

As part of the prefinal inspection for each item of work, the current updated preliminary marked-up record drawings and as-built CADD drawing files will be reviewed. They shall comply with this specification prior to scheduling the final inspection, and/or prior to substantial completion of the item of work.

k. Preliminary Record Drawing Final Submittal

Prior to scheduling the red zone meeting and the final acceptance inspection of the last or only bid schedule item of work, the updated preliminary marked-up record drawings and the updated as-built CADD drawing files shall be completed and delivered to the Contracting Officer's Representative for review and approval. If upon review, the drawings and files are found to contain errors and/or omissions, they will be returned to the Contractor for corrections. Failure of the Contractor to make timely delivery of the preliminary record drawings and files on any or all items of work will be cause for the Government to delay substantial completion and to withhold the amount indicated in paragraph "Withholding for Preliminary Record Drawings," in accordance with the terms and conditions of the contract.

l. Withholding for Preliminary Record Drawings

Failure by the Contractor to maintain current and satisfactory preliminary record drawings in accordance with these requirements will result in withholding from progress payments 10 percent of the progress payment amount until such time as the record drawings are brought into compliance. This withheld amount will be indicated on monthly payment estimates until the Contractor has fulfilled these contract requirements.

m. Final Inspection

For each interim item of work, furnish a copy of the preliminary record drawings for that item, which the Contractor has reproduced from the approved preliminary record drawing reproducibles, to the Contracting Officer's representative at the time of final inspection for that item. At the time of final inspection on the last or only item of work, the Contractor shall deliver a copy of the complete set of the approved preliminary record drawings to the Contracting Officer's Representative.

1.5.1.1 Final Record Drawings (No CADD Record Drawings)

For contracts that do not require the drawings' CADD files to be updated, the preliminary record drawings, including fire protection/detection shop drawings and other special drawings, upon approval, will be considered the final record drawings and both sets will be retained by the Contracting Officer.

1.5.1.2 Final Record Drawings

Upon approval of the preliminary record drawings, the Contracting Officer will return the approved preliminary record drawing prints back to the Contractor. The Contractor will then modify the CADD files as may be necessary to correctly show all the features of the project as it was constructed by bringing the contract set into agreement with the preliminary record drawings, including adding additional drawings and CADD files as may be necessary. The Contractor shall furnish the as-built drawings in accordance with 01 35 10 .00 44. The CADD files will be furnished to the Contractor on a separate CD-ROM disk, in Bentley Systems MicroStation. These CADD files are part of the permanent records of this project and the Contractor shall be responsible for the protection and safety thereof until returned to the Contracting Officer. Drawings, tracings, or CADD files damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at the Contractor's expense. CADD files will be audited by the Contracting Officer and for accuracy and conformance to the above specified drafting and CADD standards.

a. Drafting

Only personnel proficient in the preparation of engineering drawings and CADD shall be employed to modify the original contract drawings, prepare additional new drawings, and modify the CADD files. Additions and corrections to the contract drawings shall be neat, clean, and legible and shall match the adjacent existing line work and/or lettering being annotated in type, density, size and style. All modifications, CADD information, and new drawings shall conform to applicable requirements specified in the paragraph "CADD Standards." The Contractor shall ensure that all delivered CADD digital files and data (e.g., sheet files, model files, cell/block libraries) are compatible with the Government's target CADD system and operating system, and adhere to the standards and requirements specified. The term "compatible" means that data is in native digital format i.e., .dgn (MicroStation). It is the responsibility of the Contractor to ensure this level of compatibility.

b. CADD Standards

CADD drawings shall be prepared in accordance with the ERDC/ITL TR-19-7 (A/E/C CAD Standards) and the ERDC/ITL SR-23-1 (A/E/C Graphics Standards).

The Contractor shall submit a written request for approval of any deviations from the Government's established CADD standards. Deviations will not be permitted unless prior written approval of such deviations has been received from the Government.

c. Final Revisions

When final revisions have been completed, place the words "REVISED RECORD DRAWING," in letters at least 3/16 inch high, and the date of completion in the revision block above the latest existing revision notation on each drawing CADD file.

d. Border Sheets

The border sheet to be used for any new record drawings shall be the same as used on the original drawings.

f. Copies of the Final Record Drawings

Blue line or black line prints shall be full size. All blue or black line prints shall exhibit good readable print with clear, sharp, dark lines, and shall not be smeared, faded, double imaged, or have torn or ragged edges.

g. Submittal Requirements

The Contractor shall submit to the Contracting Officer the final record drawings, consisting of two sets each of corrected electronic (CADD and.pdf) files on CD-ROM or DVD disks; verification that the electronic (CADD and .pdf) files have been loaded and work on the designated computer systems and are error- and virus-free; the approved preliminary drawings; and all required reproduced items. The corrected.pdf files shall be compiled into sets so that the files can be viewed and printed by the Adobe PDF reader; sets shall be bookmarked by sheet number and title. All electronic CADD files will become the property of the Government.

1.5.1.3 Post-Record Drawing Work

In event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the record drawings, the Contractor shall furnish revised and/or additional drawings (electronic (CADD and.pdf) files), as required to depict as-built conditions. Incorporate revised and additional files into the completed sets of contract record electronic (CADD and .pdf) files. The requirements for these additional drawings and files, will be the same as for the record drawings included in the original submission.

1.5.1.4 Payment for Final Record Drawings

If there is no cost-loaded schedule activity for final record drawings, the Government will withhold the amount of $35,000, or 1% of the present construction value up to $200,000, whichever is the greater, until the final as-built drawing submittal has been approved by the Government.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Preliminary Record Drawings

Final Record Drawings

SD-03 Product Data

Warranty Management Plan

Warranty Tags

Spare Parts Data

warranty report

Inventory of Contractor Furnished and Insttalled Equipment

video

Red Zone Meeting

SD-08 Manufacturer's Instructions

Posted Instructions

SD-10 Operation and Maintenance Data

Operation and Maintenance Manuals; G,

SD-11 Closeout Submittals

As-Built Drawings; G,

Record Drawings; G,

As-Built Record of Equipment and Materials

Warranted Equipment and Materials

Final Approved Shop Drawings; G,

Certification Of USDA Designated Items; G,

1.7 SPARE PARTS DATA

Submit two copies of the Spare Parts Data list.

a. 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.

b. At acceptance of commissioning, ensure the required stock level is supplied as indicated in subparagraph a, for maintenance and repair activities through the facilities warranty period. Provision of spare parts does not relieve the Contractor of responsibilities listed under the contract guarantee provisions.

c. Supply extra items of each part for spare parts inventory. Provision of spare parts does not relieve the Contractor of responsibilities listed under the contract guarantee provisions.

1.8 QUALITY CONTROL

Additions and corrections to the contract drawings must be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols must conform to ERDC/ITL TR-19-7.

1.9 WARRANTY MANAGEMENT

1.9.1 Warranty Management Plan

Develop a Warranty Management Plan that defines the procedures, responsibilities, tracking methods, and documentation necessary to administer and manage warranty requirements throughout the warranty period. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS.. 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 assure 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 Contracting Officer for approval prior to each monthly pay estimate. Assemble approved information in a binder and turn 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 4 month 9-month and a 12-monthwarranty inspection, measured from time of acceptance; with the Contractor, Contracting Officer 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. Warranted 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 to warranty certificates as applicable.
(8) Starting point and duration of warranty period.
(9) Summary of maintenance procedures required to continue the warranty in force.
(10) Cross-reference to specific pertinent Operation and Maintenance manuals.
(11) Organization, names and phone numbers of persons to call for warranty service.
(12) Typical response time and repair time expected for various warranted equipment.

e. The plans for attendance at the 4- 9- and 12- 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.

1.9.2 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 Contracting Officer 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 Contracting Officer 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 Contracting Officer to proceed against the Contractor.

1.9.3 Pre-Warranty Conference

Prior to contract completion, and at a time designated by the Contracting Officer, meet with the Contracting Officer 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 Contracting Officer 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.

1.9.4 Contractor's Response to Construction Warranty Service Requirements

The following warranty service requirements are applicable to contracts for Fort Hood and will supplement requirements listed in Paragraph: Warranty of Construction. Following notification by the Contracting Officer or the Contracting Officer's Representative the Contractor shall respond to a warranty service requirement identified by the Contracting Officer's Representative in accordance with the "Warranty Service Priority List" of this program. This list prioritizes warranty work into the categories. The Contractor shall submit a warranty report on any warranty item that has been repaired during the warranty period. The report shall include the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframes specified, the Government may elect to acquire warranty repairs through other sources and, if so, shall backcharge the Contractor for the cost of such repairs. Such backcharges shall be accomplished under the Changes Clause of the Contract through a credit modification. Such modifications shall include a Government administration fee per occurrence.the Government will perform the work and backcharge the construction warranty payment item established.

Payment for this activity will be as follows: 25 percent after six months of the warranty period has passed; the remaining 75 percent will be paid at the end of the warranty period, if there are no outstanding warranty

items.:

First Priority 1A Perform on site inspection to evaluate situation, determine course of action, initiate work within 24 hours and work continuously to completion or relief.

Second Priority 1B Perform on site inspection to evaluate situation, determine course of action, initiate work within 48 hours and work continuously to completion or relief.

Third Priority All other work to be initiated within 5 work days and work continuously to completion or relief.

The "Warranty Service Priority List" is as follows:

1A Air Traffic Control and Air Navigation Systems and Equipment.

1A Air Conditioning System
- a. Hospital.
- b. Buildings with computer equipment.
- c. Commissary and Main PX.
- d. Clubs.
- e. Barracks, mess halls, BOQ/BEQ (entire building down).
- f. Troop medical and dental.

1B Air Conditioning Systems
- a. Recreational support.
- b. Air conditioning leak in part of building, if causing damage.
- c. Admin buildings with ADP equipment not on priority list.

1A Doors
- a. Overhead doors not operational.

1A Electrical
- a. Power failure (entire area or any building operational after 1600 hours).
- b. Traffic control devices.
- c. Security lights.

1B Electrical
- a. Power failure (no power to a room or part of building).
- b. Receptacle and lights.
- c. Fire alarm systems.

1A Gas
- a. Leaks and breaks.
- b. No gas to family housing unit or cantonment area.

1A Heat
- a. Hospital/Medical facilities.
- b. Commissary and Main PX.
- c. Clubs.
- d. Area power failure affecting heat.

1B Heat
- a. Medical storage.
- b. Barracks.

1A Intrusion Detection Systems
Finance, PX and Commissary, and high security areas.

1B Intrusion Detection Systems
Systems other than priority 1A.

1A Kitchen Equipment
a. Dishwasher.
b. All other equipment hampering preparation of a meal.

1B Kitchen Equipment
All other equipment not in priority 1A.

1B Plumbing
a. Flush valves.
b. Fixture drain, supply line commode, or water pipe leaking.
c. Commode leaking at base.

1A Refrigeration
a. Commissary.
b. Mess hall.
c. Cold storage.
d. Hospital.
e. Medical storage.

1B Refrigeration
Mess hall - other than walk-in refrigerators and freezers.

1A Roof Leaks
Temporary repairs will be made where major damage to property is occurring.

1B Roof Leaks
Check for location of leak during rain to be repaired on priority 2 (major damage to property is not occurring).

1A Swimming Pools
Chlorine leaks or broken pumps.

1A Tank Wash Racks (Bird Baths)
All systems which prevent tank wash.

1A Water (Exterior)
Normal operation of water pump station.

1B Water (Exterior)
No water to facility.

1A Water, Hot (and Steam)
a. Hospitals.
b. Mess halls.
c. BOQ, BEQ, barracks (entire building).
d. Medical and dental.

1B Water, Hot
No hot water in portion of building listed in priority 1A (items a through c).

1A Sprinkler System

All sprinkler systems, valves, manholes, deluge systems, and air systems to sprinklers.

Code 1-Building Automation and Control Systems
(1) Systems and equipment not working properly
(1) Equipment or software malfunction

Should parts be required to complete the work and the parts are not immediately available the Contractor shall have a maximum of 12 hours after arrival at the job site to provide the Contracting Officer's Representative with firm written proposals for emergency alternatives and temporary repairs for Government participation with the Contractor to provide emergency relief until the required parts are available on site for the Contractor to perform permanent warranty repair. The Contractors proposals shall include a firm date and time that the required parts shall be available on site to complete the permanent warranty repair. The Contracting Officer's Representative will evaluate the proposed alternatives and negotiate the alternative considered to be in the best interest of the Government to reduce the impact of the emergency condition. Alternatives considered by the Contracting Officer's Representative will include the alternative for the Contractor to "Do Nothing" while waiting until the required parts are available to perform permanent warranty repair. Negotiating a proposal which will require Government participation and the expenditure of Government funds shall constitute a separate procurement action by the using service.

1.9.5 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 by the Contracting Officer. Show the following information on the tag.

Type of product/material	
Model number	
Serial number	
Contract number	
Warranty period from/to	
Inspector's signature	
Construction Contractor	
Address	

Telephone number	
Warranty contact	
Address	
Telephone number	
Warranty response time priority code	
WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.	

PART 2 PRODUCTS

2.1 RECORD DRAWINGS

Prepare the CAD drawing files in MicroStation V8 format compatible with a Windows 10 operating system.

2.1.1 Additional Drawings

If additional drawings are required, prepare them using the specified electronic file format applying ERDC/ITL TR-19-7 and ERDC/ITL SR-23-1. The title block and drawing border to be used for any new final record drawings must be identical to that used on the contract drawings.

2.1.1.1 Sheet Numbers and File Names

If a sheet needs to be added between two sequential sheets, append a Supplemental Drawing Designator in accordance with ERDC/ITL TR-19-7 Adding a drawing sheet, and ERDC/ITL SR-23-1 Adding or deleting drawing sheets and index sheet procedures.

2.2 CERTIFICATION OF USDA DESIGNATED ITEMS

Submit the Certification of USDA Designated Items. Applicable contract clauses are contained in Section 00 72 00 GENERAL CONDITIONS. Include on the certification form the following information: project name, project number, Contractor name, license number, Contractor address, and certification. The certification will read as follows and be signed and dated by the Contractor. "I hereby certify the information provided herein is accurate and that the requisition/procurement of all materials listed on this form comply with current USDA standards for biobased materials content. The following exemptions may apply to the non-procurement of biobased content materials:

a. The product does not meet appropriate performance standards;

b. The product is not available within a reasonable time frame;

c. The product is not available competitively (from two or more sources);

d. The product is only available at an unreasonable price (compared with

a comparable bio-based content product)."

2.3 INVENTORY OF CONTRACTOR FURNISHED AND INSTALLED EQUIPMENT

A list of equipment or units of equipment that require electrical power or fuel, or may require removal or replacement such as AHUs, fans, air conditioners, compressors, condensers, boiler, thermal exchangers, pumps, cooling towers, tanks, fire hydrants, sinks, water closets, lavatories, urinals, shower stalls, and any other large plumbing fixtures, light fixtures, etc., shall be made and kept up to date as installed. The list shall be reviewed periodically by the Government to insure completeness and accuracy. Partial payment will be withheld for equipment not incorporated in the list. List shall include on each item as applicable: Description, Manufacturer, Model or Catalog No., Serial No., Input (power, voltage, BTU, etc.), Output (power, voltage, BTU, tons, etc.), Size or Capacity (tanks), and net inventory costs; any other data necessary to describe item and shall list all warrantors and warranty periods for each item of equipment. Final list shall be turned over to the Authorized Representative of the Contracting Officer at the time of the Contractor's quality control completion inspection.

2.4 PDF AS-BUILT FILES

Provide electronic PDF "plots" of all contract drawings sheets associated with the as-built drawing submittal. Compile and organize the PDF set to match the contract drawings. Bookmark and label the pages of the PDF file.

2.5 REDLINES AND MARKUPS

Provide PDFs of the current working redlines and/or markups complying with the as-builts drawing and markup requirements contained in this specification.

2.6 GEO-DATA-BASE FILES

Provide a SDSFIE/FGDC GeoReferenced personal GeoDataBase. For all information outside of the building walls, provide a personal GeoDataBase in .mdb format using the latest version of Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE) as the database structure. Provide a shell database to define the projection and database structure.

For all drawings within and including the exterior walls, utilize the advanced modeling formats described and referenced herein. Provide a short GeoDataBase read-me file explaining the deliverable. The read-me file will include a description of the software used to create the data, projection, and include the attribute tables used.

2.7 AS-BUILT OR ADVANCED MODELING RE-SUBMISSION REQUIREMENTS

If elements of an as-built submittal or advanced modeling package are rejected, provide the following for each re-submission, in addition to any information required in Section 01 33 00 SUBMITTAL PROCEDURES:

a. Re-submit all components required under paragraph As-Builts or Advanced Modeling Package, including a new Advanced Modeling Submittal Checklist and updated content in response to Government comments.

b. Provide a copy of all Government review comments.

c. Provide a disposition/response to each Government review comment for a back-check of the re-submission deliverable.

PART 3 EXECUTION

3.1 AS-BUILT DRAWINGS

Provide and maintain two black line print copies of the PDF contract drawings for As-Built Drawings. Maintain the as-builts throughout construction as red-lined hard copies on site and or red-lined PDF files. Submit As-Built Drawings 30 days prior to final inspection and acceptance of the facility by the Contracting Officer.

3.1.1 Markup Guidelines

Make comments and markup the drawings complete without reference to letters, memos, or materials that are not part of the As-Built drawing. Show what was changed, how it was changed, where item(s) were relocated and change related details. These working as-built markup prints must be neat, legible and accurate as follows:

a. Use base colors of red, green, and blue. Color code for changes as follows:

   (1) Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes.

   (2) Deletions (Red) - Over-strike deleted graphic items (lines), lettering in notes and leaders.

   (3) Additions (Green) - Added items, lettering in notes and leaders.

b. Provide a legend if colors other than the "base" colors of red, green, and blue are used.

c. Add and denote any additional equipment or material facilities, service lines, incorporated under As-Built Revisions if not already shown in legend.

d. Use frequent written explanations on markup drawings to describe changes. Do not totally rely on graphic means to convey the revision.

e. Use legible lettering and precise and clear digital values when marking prints. Clarify ambiguities concerning the nature and application of change involved.

f. Wherever a revision is made, also make changes to related section views, details, legend, profiles, plans and elevation views, schedules, notes and call out designations, and mark accordingly to avoid conflicting data on all other sheets.

g. For deletions, cross out all features, data and captions that relate to that revision.

h. For changes on small-scale drawings and in restricted areas, provide large-scale inserts, with leaders to the applicable location.

i. Indicate one of the following when attaching a print or sketch to a

markup print:

1) Add an entire drawing to contract drawings.

2) Change the contract drawing to show changes on the drawing.

3) Provided for reference only to further detail the initial design.

j. Incorporate all shop and fabrication drawings into the markup drawings.

3.1.2 As-Built Drawings Content

Revise As-Built Drawings and or red-lined PDF files in accordance with ERDC/ITL SR-23-1 and ERDC/ITL TR-19-7. Keep these working as-built markup drawings current on a weekly basis and at least one set available on the jobsite at all times. Changes from the contract drawings which are made during construction or additional information which might be uncovered in the course of construction must be accurately and neatly recorded as they occur by means of details and notes. Submit the working as-built markup drawings for approval prior to submission of each monthly pay estimate. For failure to maintain the working and final record drawings as specified herein, the Contracting Officer will withhold 10 percent of the monthly progress payment until approval of updated drawings. Show on the as-built drawings, but not limited to, the following information:

a. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, show by offset dimensions to two permanently fixed surface features the end of each run including each change in direction on the record drawings. Locate valves, splice boxes and similar appurtenances by dimensioning along the utility run from a reference point. Also record the average depth below the surface of each run.

b. The location and dimensions of any changes within the building structure.

c. Layout and schematic drawings of electrical circuits and piping.

d. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

e. Changes in details of design or additional information obtained from working drawings specified to be prepared or furnished by the Contractor; including but not limited to shop drawings, fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment, and foundations.

f. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

g. Changes or Revisions which result from the final inspection.

h. Where contract drawings or specifications present options, show only the option selected for construction on the working as-built markup drawings.

i. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, furnish a contour map of the final borrow pit/spoil area elevations.

j. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarm, fire sprinkler, and irrigation systems.

k. Changes in location of equipment and architectural features.

l. Modifications.

m. Actual location of anchors, construction and control joints, etc., in concrete.

n. Unusual or uncharted obstructions that are encountered in the contract work area during construction.

o. Location, extent, thickness, and size of stone protection particularly where it will be normally submerged by water.

3.2 RECORD DRAWING FILES

If additional drawings are required, prepare them using the specified electronic file format applying ERDC/ITL TR-19-7 and ERDC/ITL SR-23-1. The title block and drawing border to be used for any new final record drawings must be identical to that used on the contract drawings. Accomplish additions and corrections to the contract drawings using CAD files. Provide all program files and hardware necessary to prepare final PDF record drawings. The Contracting Officer will review final PDF record drawings for accuracy and return them to the Contractor for required corrections, changes, additions, and deletions.

3.2.1 Rename the CAD Drawing files

Rename the CAD Drawing files using the contract number as the Project Code field,(e.g., W91238-15-C-10A-102.DGN) as instructed in the Pre-Construction conference. Use only those renamed files for the Marked-up changes. Make all changes on the layer/level as the original item.

a. For MicroStation files (DGN), enter all as-built delta changes and notations on:

- Level #63
- Level/Layer Name contains: ANNO-REVS
- Level/Layer Description: Revisionsb. When final revisions have been completed, show the wording "RECORD DRAWING AS-BUILTS" followed by the name of the Contractor in letters at least 3/16 inch high on the cover sheet drawing. Date RECORD DRAWING AS-BUILTS" drawing revisions in the revision block.

c. Within 10 days after Government approval of all of the working record drawings for a phase of work, prepare the final CAD record drawings for that phase of work and submit PDF drawing files and two sets of prints for review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within 10 days revise the CAD files accordingly at no additional cost and submit one set of final prints for the completed phase of work to the Government. Within 10 days of substantial completion of all phases of

work, submit the final record drawing package for the entire project. Submit one set of electronic CAD files, and one set of the approved working record PDF and or program files with two sets of prints. The CAD files must be complete in all details and identical in form and function to the CAD drawing files supplied by the Government. Prepare MicroStation files for transmittal using the Packager (Archive). Make any transactions or adjustments necessary to accomplish this. The Government reserves the right to reject any drawing files it deems incompatible with the customer's CAD system. Paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final record PDF drawing files, CAD files and marked prints as specified will be cause for withholding any payment due under this contract. Approval and acceptance of final record drawings must be accomplished before final payment is made.

3.3 RECORD DRAWINGS

Prepare final record drawings after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (such as Foundations, Utilities, or Structural Steel as appropriate for the project). Transfer the changes from the approved working as-built markup drawings to the original electronic CAD drawing files. Modify the as-built CAD drawing files to correctly show the features of the project as-built by bringing the working CAD drawing set into agreement with approved working as-built markup drawings, and adding such additional drawings as may be necessary. Refer to ERDC/ITL SR-23-1. Jointly review the working as-built markup drawings with printouts from working as-built CAD drawing PDF files for accuracy and completeness. Monthly review of working as-built CAD drawing PDF file printouts must cover all sheets revised since the previous review. These PDF drawing files are part of the permanent records of this project. Any drawings damaged or lost must be satisfactorily replaced at no expense to the Government.

Drawing revisions (include within change order price the cost to change working and final record drawings to reflect revisions) and compliance with the following procedures.

a. Follow directions in the revision for posting descriptive changes.

b. The revision delta size must be 5/16 inch unless the area where the delta is to be placed is crowded. Use a smaller size delta for crowded areas.

c. Place a revision delta at the location of each deletion.

d. For new details or sections which are added to a drawing, place a revision delta by the detail or section title.

e. For minor changes, place a revision delta by the area changed on the drawing (each location).

f. For major changes to a drawing, place a revision delta by the title of the affected plan, section, or detail at each location.

g. For changes to schedules or drawings, place a revision delta either by the schedule heading or by the change in the schedule.

3.3.1 Final Record Drawing Package

Submit the final record PDF and CAD drawings package for the entire project within 20 days of substantial completion of all phases of work. Submit one set of ANSI D size PDF and CAD files, two sets of ANSI D size prints and one set of the approved working record drawings. The package must be complete in all details and identical in form and function to the contract drawing files supplied by the Government.

3.4 FINAL APPROVED SHOP DRAWINGS

Submit final approved project shop drawings 30 days after transfer of the completed facility.

3.5 AS-BUILT RECORD OF EQUIPMENT AND MATERIALS

Furnish one copy of preliminary record of equipment and materials used on the project 15 days prior to final inspection. This preliminary submittal will be reviewed and returned 2 days after final inspection with Government comments. Submit Two sets of final record of equipment and materials 10 days after final inspection. Key the designations to the related area depicted on the contract drawings. List the following data:

RECORD OF DESIGNATED EQUIPMENT AND MATERIALS DATA				
Description	Specification Section	Manufacturer and Catalog, Model, and Serial Number	Composition and Size	Where Used

3.6 OPERATION AND MAINTENANCE MANUALS

Provide project operation and maintenance manuals as specified in Section 01 78 23 OPERATION AND MAINTENANCE DATA.Provide one electronic copies of the Operation and Maintenance Manual files and two hard copy of the Operation and Maintenance Manuals. Submit to the Contracting Officer for approval 30 calendar days prior to final inspection and acceptance of the facility by the Contracting Officer. Update and resubmit files for final approval at final acceptance of the facility by the Contracting Officer.

The Contractor shall be responsible for the preparation, coordination, execution and submittal of all Equipment Operating, Maintenance, and Repair manuals (O & M Manuals), including spare parts lists **(with the names and PHONE NUMBERS of local suppliers)**, special tools, inventories of equipment manuals, and maintenance instructions, and shall conduct all training for operating and service personnel. Operation and maintenance manuals shall cover all system installations provided in this Contract and shall be in sufficient detail to facilitate normal maintenance and troubleshooting by persons with minimum experience with the installed equipment.

3.6.1 Submittal Requirements

All of the above listed items required in the technical specifications shall be fully developed and submitted to the Contracting Officer not less than 120 calendar days prior to the scheduled final acceptance inspection date and prior to scheduling training for operating and service personnel. The Contractor shall coordinate the content of each instruction period required in the technical specifications with the Contracting Officer's Representative prior to the actual start of the training period.

3.6.1.1 Field Training

Field Training is a requirement for substantial completion. The Contractor shall conduct a training course for the operating staff for each particular system. The training is to be conducted during hours of normal working time and shall start after the system is functionally complete. The field instructions shall cover all of the items contained in the Equipment Operating, Maintenance and Repair Manuals. The training will include both classroom and "hands-on" training. The Contractor shall submit a lesson plan outlining the information to be discussed during training periods. This lesson plan will be submitted 90 days before contract completion and approved before the field training occurs. Training shall be recorded on video DVD and shall be furnished to the Government within ten (10) days following training. The taping shall include the entire session(s). The original video(s) or DVD's shall be labeled and turned over to the Contracting Officer. The video cameras and DVD's utilized by the Contractor shall be of a quality to enable clear and understandable playbacks of the recorded events. Training shall be documented by the Contractor and a list of attendees shall be furnished to the Government.

3.6.1.2 Draft O & M Manuals

On those systems where complete and comprehensive operation and maintenance manuals cannot be fully developed until the system(s) is (are) checked, tested, and/or balanced, and the checking, testing, and/or balancing has not been done when submittals are required, a proposed draft of those system manual(s) shall be submitted. The covers of draft O & M Manuals shall be labeled "DRAFT" in large (not less than font size 24), legible, printed letters. Submit fully developed O & M Manuals for approval after the systems have been checked, tested, and/or balanced but prior to the scheduled final acceptance inspection date.

3.6.1.3 Commencement of Warranty of Construction

Failure to submit all specified O & M manuals, spare parts listings, spare parts, special tools, inventories of installed property, and training video in a timely manner will be considered as delaying substantial completion of the work. Commencement of warranty under the Contract Clause WARRANTY OF CONSTRUCTION will not occur until all these items are delivered and approved by the Contracting Officer, but not earlier than the date of final acceptance of the work by the Government. When the O & M Manuals with drafts are approved they will not constitute a reason for delaying the start of the warranty period.

3.6.2 Government Possession of Work

The Government may take possession of any completed or partially completed

work as provided for under Contract Clause entitled "USE AND POSSESSION PRIOR TO COMPLETION." If the installed equipment and/or systems thereto, have not been accepted by the Government due to the Contractor's failure to submit the above specified items, the Contractor shall operate and maintain such plant or system at no additional cost to the Government until such time that the specified items have been received, approved and any subsequent testing, check-out and/or training has been completed.

3.6.3 Payment for O&M Manuals

If there is no cost-loaded schedule activity for O&M manuals, the Government will withhold the amount of $20,000, or 1% of the present construction value up to $200,000, whichever is the greater. No payment will be made until submittal and approval of all O&M manuals are complete.

3.6.4 Preparation And Submission Of Operation And Maintenance Manuals

This paragraph establishes general requirements for the preparation and submission of equipment operating, maintenance, and repair manuals as called for in the various sections of the specifications. Specific instruction(s) relating to a particular system or piece of equipment shall be incorporated into the manuals in accordance with the applicable technical specification. See Section 01 78 23 OPERATION AND MAINTENANCE DATA for additional information concerning the Operation and Maintenance data packages required by the technical sections.

3.6.4.1 General Requirements

Furnish one permanent electronic copy of the final Equipment Operating, Maintenance, and Repair Manuals on CD-ROM disk.Documents on the CD-ROM disk drive shall be in portable document format (.pdf); all printed and graphic documents, drawings, and illustrations shall be legible and bookmarked.

3.6.4.2 Equipment Operating, Maintenance, and Repair Manuals

a. General

Provide separate manuals for each utility system as defined hereinafter. Provide the number of copies of the manuals specified specified above or in the applicable technical section. Include in the manuals, in separate sections, the following information for each item of equipment. These requirements may be supplemented by additional requirements specified in the technical sections:

(1) Performance sheets and graphs showing capacity data, efficiencies, electrical characteristics, pressure drops, and flow rates. Marked-up catalogs or catalog pages do not satisfy this requirement. Performance information shall be presented as concisely as possible and contain only data pertaining to equipment actually installed.

(2) Catalog cuts showing application information.

(3) Installation information showing minimum acceptable requirements.

(4) Operation and maintenance requirements. Include adequate illustrative material to identify and locate operating controls, indicating devices and locations of areas or items requiring maintenance.

(a) Describe, in detail, starting and stopping procedures for components, adjustments required to obtain optimum equipment performance, and corrective actions for malfunctions.

(b) Describe in the maintenance instructions the nature and frequency of routine maintenance and procedures to be followed. Indicate any special tools, materials, and test equipment that may be required.

(5) Repair information including diagrams and schematics, guidance for diagnosing problems, and detailed instructions for making repairs. Provide troubleshooting information that includes a statement of the indication or symptom of trouble and the sequential instructions necessary. Include test hookups to determine the cause, special tools and test equipment, and methods for returning the equipment to operating conditions. Information may be in chart form or in tabular format with appropriate headings.

(6) Parts lists with names and addresses of closest parts supply agencies, the current unit prices, and the sources of supply. Include spare parts data for each different item of materials and equipment specified.

(7) Names and addresses of local manufacturers representatives.

b. Facility Heating Systems

Provide information for the following equipment: Boilers, water treatment, chemical feed pumps and tanks, converters, heat exchangers, pumps, unit heaters, fin-tube radiation, air handling units (both heating only and heating and cooling), and valves (associated with heating systems).

c. Air-Conditioning Systems

Provide information on chillers, packaged air-conditioning equipment, towers, water treatment, chemical feed pumps and tanks, air-cooled condensers, pumps, compressors, air handling units, and valves (associated with air-conditioning systems).

d. Temperature Control and HVAC Distribution Systems

(1) Provide the information described for the following equipment:

Valves, fans, air handling units, pumps, boilers, converters, and heat exchangers, chillers, water cooled condensers, cooling towers, and fin-tube radiation.

(2) Provide all information described for the following equipment:

Control air compressors, control components (sensors, controllers, adapters, and actuators), and flow measuring equipment.

e. Central Heating Plants

Provide the information described for the following equipment: Boilers, converters, heat exchangers, pumps, fans, steam traps, pollution control

equipment, chemical feed equipment, control systems, fuel handling equipment, de-aerators, tanks (flash, expansion, return water, etc.), water softeners, and valves.

f. District Heating Distribution Systems

Provide the information described for the following equipment: Valves, fans, pumps, converters and heat exchangers, steam traps, tanks (expansion, flash, etc.) and piping systems.

g. Exterior Electrical Systems

Information shall be provided on the following equipment: Power transformers, relays, reclosers, breakers, and capacitor bank controls.

h. Interior Electrical Systems

Information shall be provided on the following equipment: Relays, motor control centers, switchgear, solid state circuit breakers, motor controller, and EPS lighting systems, control systems (wire diagrams and troubleshooting flow chart), and special grounding systems.

i. Energy Management and Control System

The maintenance manual shall include descriptions of maintenance for all equipment, including inspection, periodic preventative maintenance, fault diagnosis, and repair or replacement of defective components.

j. Domestic Water Systems

The identified information shall be provided on the following equipment: Tanks, unit process equipment, pumps, motors, control and monitoring instrumentation, laboratory test equipment, chemical feeders, valves, switching gear, and automatic controls.

k. Wastewater Treatment Systems

The identified information shall be provided on the following equipment: Tanks, unit process equipment, pumps, motors, control and monitoring instrumentation, laboratory test equipment, chemical feeders, valves, scrapers, skimmers, comminutors, blowers, switching gear, and automatic controls.

l. Fire Protection Systems

Information shall be provided on the following equipment: Alarm valves, manual valves, regulators, foam and gas storage tanks, piping materials, sprinkler heads, nozzles, pumps, and pump drivers.

m. Fire Detection Systems

The maintenance manual shall include description of maintenance for all equipment, including inspection, periodic preventive maintenance, fault diagnosis, and repair or replacement of defective components.

n. Plumbing Systems

Information shall be provided on the following equipment: Water heaters, valves, pressure regulators, backflow preventors, piping materials, and

plumbing fixtures.

o. Liquid Fuels Systems

Information shall be provided on the following equipment: Tanks, automatic valves, manual valves, filter separators, pumps, mechanical loading arms, nozzles, meters, electronic controls, electrical switch gear, and fluidic controls.

p. Cathodic Protection Systems

Information shall be provided on the following material and equipment: Rectifiers, meters, anodes, anode backfill, anode lead wire, insulation material and wire size, automatic controls (if any), rheostats, switches, fuses and circuit breakers, type and size of rectifying elements, type of oil in oil-immersed rectifiers, and rating of shunts.

q. Generator Installations

Information shall be provided on the following equipment: Generator sets, automatic transfer panels, governors, exciters, regulators, starting systems, switchgear, and protective devices.

r. Miscellaneous Systems

Information shall be provided on the following: Communication and ADP systems, security and intrusion alarm, elevators, material handling, active solar, photovoltaic, and other similar type special systems not otherwise specified.

3.6.5 RED ZONE MEETING

Approximately 60 days before the anticipated final inspection and acceptance of the facility by the Contracting Officer, or at 80% construction progress completion, whichever occurs first, the Contractor's Supervisor and Quality Control Manager and the Government's project delivery team will conduct what is known as the Red Zone Meeting to discuss the close-out process, to schedule the events and review responsibilities for actions necessary to produce a timely physical, as well as fiscal, project close-out. The Red Zone meeting derives its name from the football term used to describe the team effort to move the ball the last 20 yards into the end zone. The close-out of a construction project sometimes can be equally as hard and most definitely requires the whole team's efforts. The ACO will chair the meeting. Exhibit One is a generic meeting checklist.

3.7 CLEANUP

Leave premises "broom clean." 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. 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..

3.8 EXHIBIT 1

SAMPLE

Red Zone Meeting Checklist
Date:_____

Contract No.:_____
Description / Location:_____
Contractor: _____
Contracting Officer: _____

Action	**Completion**	**Milestone**
Inspections		
Fire		
Safety		
Pre-final		
Mechanical Test & Balance		
Commissioning		
Landscaping Complete		
Beneficial Occupancy Date (BOD)		
Furniture Installation		
Comm Installation		
As-Built Contract Drawings		
Provide all O&M manuals, tools, shop drawings, spare parts, etc. provided to customer		
Provide Warranty documents to Customer		
Contract completion		
Final Inspection		
User move-in		
DD Form 1354, Transfer of Real Property completed & signed		
Ribbon cutting		
DD Form 2626 - Final CPARS		
Final Payment Completed		
Release of Claims (see Exhibit 2)		
Return of Unobligated Funds		
Move Project from CIP to General Ledger		
Financial completion		

3.9 3.3 EXHIBIT 2

FINAL PAYMENT RELEASE

The undersigned as the Contractor under Contract No. W9126G-__-_-____ dated _____ between the United States of America and said Contractor, for _____ located at in accordance with paragraph (____) of Contract Clause _____, PAYMENTS TO CONTRACTOR, of said Contract, hereby releases the United States, its officers, agents, and employees from any and all claims relating to or arising by virtue of said Contract, or any modification or change thereto, except with respect to those claims, if any, listed below:

(Identify claim or if none, write in "none.")

Executed this ____ day of _____ 20__

(Contractor's name in CAPS)

By _____

Title_____

-- End of Section --

SECTION 01 78 23

OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE)

ASHRAE GUIDELINE 1.4	(2019) Preparing Systems Manuals for Facilities

ASTM INTERNATIONAL (ASTM)

ASTM E1971	(2005; R 2011) Standard Guide for Stewardship for the Cleaning of Commercial and Institutional Buildings
ASTM E2166	(2016; R 2023) Standard Practice for Organizing and Managing Building Data

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-10 Operation and Maintenance Data

Training Plan; G,

Training Outline; G,

Training Content; G,

Operation And Maintenance Manual, Progress Submittal; G,

Operation And Maintenance Manual, Prefinal Submittal; G,

Operation And Maintenance Manual, Final Submittal; G,

SD-11 Closeout Submittals

Training Video Recording; G,

Validation of Training Completion; G,

Training Plan; G,

Record Drawings And Utility Systems; G,

1.3 MEETINGS

To assure that Operation and Maintenance Manual and Facility Data Workbook requirements are being met through the duration of the project, organize the following meetings and discuss the subsequent topics:

1.3.1 Pre-Construction Meeting

At a minimum, discuss the following:

a. The requirement for Operation and Maintenance Manuals and Facility Data deliverables under this contract including coordination meetings

b. Processes and method of gathering Facility Data information during construction

c. Primary roles and responsibilities associated with the development and delivery of the Operation and Maintenance Manuals and Facility Data deliverables, and

d. Identify and agree upon a date and attendance list for the meetings described below:

1.3.2 Operation and Maintenance Manual and Facility Data Workbook Coordination Meeting

Facilitate a meeting after the Pre-Construction Meeting prior to the submission of the Operation and Maintenance Manual Progress Submittal. Meeting attendance must include the Contractor's Operation and Maintenance Manual and Facility Data Workbook Preparer, Quality Control Manager, the Commissioning Authority (CxA), the Government's Design Manager (DM), Contracting Officer's Representative, and Government's facility data reviewer. Include any Mechanical, Electrical, and Fire Protection Sub-Contractors.

The purpose of this meeting is to reach a mutual understanding of the scope of work concerning the contract requirements for Operation and Maintenance Manual and coordinate the efforts necessary by both the Government and Contractor to ensure an accurate collection, preparation and timely Government review of Operation and Maintenance Manual.

1.3.3 Submittal Coordination Meeting

Facilitate a meeting following submission and Government review of each design or progress submittal of the Operation and Maintenance Manual and Facility Data Workbook.

a. Include personnel from the Coordination meeting and any additional personnel identified.

b. The purpose of this meeting is to demonstrate ongoing compliance with the requirements identified in this specification. Discuss Government review comments and unresolved items preventing completion and Government approval of the Operation and Maintenance Manuals and Facility Data Workbook (FDW).

c. The applicable deliverables, along with Government remarks associated with review of these submittals serve as the primary guide and agenda for this meeting.

1.4 OPERATION AND MAINTENANCE MANUAL MEDIA

Assemble Operation and Maintenance Manual into an electronically bookmarked file using the most current version of Adobe Acrobat or similar software capable of producing PDF file format. Provide compact disks (CD) or data digital versatile disk (DVD) as appropriate, so that each one contains operation, maintenance and record files, project record documents, and training videos. Include a complete bookmarked operation and maintenance directory.

1.4.1 CD or DVD Label and Disk Holder or Case

Provide the following information on the disk label and disk holder or case:

a. Building Number

b. Project Title

c. Activity and Location

d. Construction Contract Number

e. Prepared For: (Contracting Agency)

f. Prepared By: (Name, title, phone number and email address)

g. Include the disk content on the disk label

h. Date

i. Virus scanning program used

1.4.2 O&M Manual Tabbed Hard Copy

Provide a hard copy of the O&M manual upon completion of the project. Provide tabs for each section and subsection for ease of navigation by the user.

1.5 O&M MANUAL CONTENT

Organize the bookmarked Operation and Maintenance Manual into the following Parts in accordance with ASHRAE GUIDELINE 1.4, and as modified and detailed below. Word template for O&M Manual is available at: https://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/ufgs-01-78-23.

1.5.1 Part 1: Executive Summary

Provide a summary of the information found in the O&M manual including the purpose of the manual and a description of the manual's organization.

1.5.2 Part 2: Facility Design and Construction

1.5.2.1 General Facility and Systems Description

Provide an overview of the intent for design and use of the facility. Provide a PDF of the Record Drawings prepared in accordance with 01 78 00 CLOSEOUT SUBMITTALS and bookmarked using the sheet title and sheet number. Include uncluttered 11 by 17 inches floor plans with room numbers, type or function of space, and overall facility dimensions on the floor plans. Do not include items such as construction instructions, references, or frame numbers.

Detail the overall dimensions of the facility, number of floors, foundation type, expected number of occupants, and facility Category Code list and generally describe all the facility systems and any special building features (for example, HVAC Controls, Sprinkler Systems, Cranes, Elevators, and Generators). Include photographs marked up and labeled to show key operating components and the overall facility appearance.

1.5.2.2 Basis of Design

Provide a copy of the contract Basis of Design.

1.5.2.3 Contract Documents, RFP, Amendments, and Modifications

Provide the contract construction documents complete, to include specifications, drawings, Request for Proposal, amendments, and modifications.

1.5.2.4 Room Inventory of Real Property and Finishes

Provide a list of installed equipment furnished under this contract. Include all information usually listed on manufacturer's name plate. Include, as applicable, the following information for each piece of equipment installed: description of item, all dimensions, location by room number, 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. Real property includes, but is not limited to, floor coverings, wall surfaces, ceiling surfaces, windows, roofing, HVAC filters, plumbing fixtures, and lighting fixtures. Submit the final list 30 days after transfer of the completed facility.

Include spatial data defining actual net square footage and data of each room. Also include the room finish schedule including room names and numbers. Include schedules in the construction drawings in the room inventory. Add a column to each schedule to record what was provided by the contractor during construction. Provide a PDF of room inventory. Key the designations to the related area depicted on the contract drawings. List the following data:

RECORD OF DESIGNATED EQUIPMENT AND MATERIALS DATA				
Description	Specification Section	Manufacturer and Catalog, Model, and Serial Number	Composition and Size	Where Used

1.5.3 Part 3: Facilities, Systems, and Assemblies Information

1.5.3.1 Organization

Bookmark information in this section using the current version of ASTM E2166 Uniformat II, UFGS numbers, and document type as outlined in the example below. Bookmark/tab each item to the third level for easy navigation of the manual.

Example as shown in Table below:

PARTS AND SUBPART NUMBERING
3.1 B20 EXTERIOR CLOSURE (System)
3.1.1 B2030 EXTERIOR DOORS (Subsystem)
3.1.1.1 B2030110 GLAZED DOORS (Component)
3.1.1.1.1 Applicable specifications List in UFGS Format
3.1.1.1.2 Manufacturer's Operations and Maintenance Data
3.1.1.1.3 Approved Submittal
3.1.1.1.4 Coordination/Shop Drawings
3.1.1.1.5 Sequence of Operation for Operating Equipment
3.1.1.1.6 Testing Equipment Information and Performance Data
3.1.1.1.7 Routine Maintenance Requirements
3.1.1.1.8 Repair Procedures
3.1.1.1.9 Emergency Procedures & Locations of Applicable Controls
3.1.1.1.10 Warranties
3.1.1.1.11 Record Drawings and Utility Systems
3.1.1.1.12 Contractor / Supplies Listing and Contact Information

1.5.3.2 Related Specifications

Reference each specification related to the subsystem in this section and locate the actual specification section in Part 2 of the O&M Manual. List

specifications in table format as shown in the below example.

UFGS Number	Specification Title	Page Spec Begins in Part 2

1.5.3.3 Manufacturer's Operations and Maintenance Data

Provide a copy of all manufacturer specifications and cutsheets. Provide text-searchable, high-quality document files from the manufacturer's online or electronic documentation. Color documents are preferred. Provide documents specific to the product(s) installed under this Contract. Provide identification and coverage for the parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Provide Uniformat II Level 3 identification for D20, D30, D40 installed equipment. When possible, do not submit document files containing multiple product catalogs from the same manufacturer, or product data from multiple manufacturers in the same files. Provide documents directly from the manufacturer whenever possible. Do not provide scanned copies of hardcopy documents. Provide identification and coverage for the parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing must show the index, reference, or key number that will cross-reference the illustrated part to the listed part. Group the parts shown in the listings by components, assemblies, and subassemblies in accordance with the manufacturer's standard practice. Parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as typically shown in a master part catalog.

1.5.3.4 Approved Submittals and Certificates

Provide a copy of all submittals documented with the required approval as applicable for each UFGS specification listed in the table outlined in applicable specifications. Include copies of SD-07 Certificates submittals documented with the required approval, SD-08 Manufacturer's Instructions submittals documented with the required approval, and SD-10 Operation and Maintenance Data submittals documents with the required approval.

1.5.3.5 Approved Coordination/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.

1.5.4 Sequence of Operation for Operating Equipment

Provide record one-line diagrams for each floor, delineating mechanical equipment location within the building. Provide specific instructions, procedures, and illustrations for the following phases of operation for the installed model and features of each system:

1.5.4.1 Safety Precautions and Hazards

List personnel hazards and equipment or product safety precautions for operating conditions. List all residual hazards identified in the Activity Hazard Analysis provided under Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS. Provide recommended safeguards for each identified hazard. Specify if any certifications or licenses are required to operate the equipment.

1.5.4.2 Operator Prestart

Provide procedures required to install, set up, and prepare each system for use.

1.5.4.3 Startup, Shutdown, and Post-Shutdown Procedures

Provide narrative description for Startup, Shutdown and Post-shutdown operating procedures including the control sequence for each procedure.

1.5.4.4 Normal Operations

Provide Control Diagrams with data to explain operation and control of systems and specific equipment. Provide narrative description of Normal Operating Procedures.

1.5.4.5 Emergency Operations

Provide Emergency Procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Provide Emergency Shutdown Instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance and procedures for emergency operation of utility systems including required valve positions, valve locations and zones or portions of systems controlled.

1.5.4.6 Operator Service Requirements

Provide instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and recording gauge readings.

1.5.4.7 Environmental Conditions

Provide a list of Environmental Conditions (temperature, humidity, and other relevant data) that are best suited for the operation of each product, component, or system. Describe conditions under which the item equipment should not be allowed to run.

1.5.4.8 Operating Log

Provide forms, sample logs, and instructions for maintaining necessary

operating records.

1.5.4.9 Additional Requirements for Equipment Control Systems

Provide Data Package 5 and the following for all control systems:

a. Provide a narrative description on how to perform and apply functions, features, modes, and other operations, including unoccupied operation, seasonal changeover, manual operation, and alarms. Include detailed technical manual for programming and customizing control loops and algorithms.

b. Submit complete controls equipment schedules, full as-built sequence of operations, wiring and logic diagrams, Input/Output Tables, equipment schedules, copies of checkout tests and calibrations performed by the Contractor (not Cx tests), and all associates information.

c. Full points list. Provide a listing of rooms with the following information for each room:

(1) Floor

(2) Room number

(3) Room name

(4) Air handler unit ID

(5) Reference drawing number

(6) Air terminal unit tag ID

(7) Heating or cooling valve tag ID

(8) Minimum cfm

(9) Maximum cfm

d. Full print out of all schedules and set points after testing and acceptance of the system.

e. Full as-built print out of software program.

f. Marking of system sensors and thermostats on the as-built floor plan and mechanical drawings with their control system designations.

1.5.4.10 Testing Equipment Information and Performance Data

Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components. Provide final set points.

Include completed prefunctional checklists, functional performance test forms, and monitoring reports. Include recommended schedule for retesting and blank test forms. Provide final set points.

1.5.5 Routine Maintenance Requirements

1.5.5.1 Preventive Maintenance Plan, Schedule, and Procedures

Provide manufacturer's schedule for routine preventive maintenance, inspections, condition monitoring (predictive tests) and adjustments required to ensure proper and economical operation and to minimize repairs. Provide instructions stating when the systems should be retested. Provide manufacturer's projection of preventive maintenance work-hours on a daily, weekly, monthly, and annual basis including requirements by type of activity. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation.

a. Define the anticipated time required to perform each test (work-hours), test apparatus, number of personnel identified by responsibility, and a testing validation procedure permitting the record operation capability requirements within the schedule. Provide a remarks column for the testing validation procedure referencing operating limits of time, pressure, temperature, volume, voltage, current, acceleration, velocity, alignment, calibration, adjustments, cleaning, or special system notes. Delineate procedures for preventive maintenance, inspection, adjustment, lubrication, and cleaning necessary to minimize repairs.

b. Repair requirements must inform operators how to check out, troubleshoot, repair, and replace components of the system. Include electrical and mechanical schematics and diagrams and diagnostic techniques necessary to enable operation and troubleshooting of the system after acceptance.

1.5.5.2 Lubrication Data

Include the following preventive maintenance lubrication data, in addition to instructions for lubrication required under paragraph OPERATOR SERVICE REQUIREMENTS:

a. A table showing recommended lubricants for specific temperature ranges and applications.

b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities. Provide procedural instructions for Oil Sampling for all equipment.

c. A Lubrication Schedule showing service interval frequency.

1.5.6 Repair Procedures

Provide instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards. Provide manufacturer's recommended procedures and instructions for correcting problems and making repairs for the installed model and features of each system. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials. Specify if any certifications or licenses are required to repair the equipment.

1.5.6.1 Troubleshooting Guides and Diagnostic Techniques

Provide step-by-step procedures to promptly isolate the cause of typical

malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.

1.5.6.2 Wiring Diagrams and Control Diagrams

Provide point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering.

1.5.6.3 Removal and Replacement Instructions

Provide step-by-step procedures and a list of required specialty tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings, and adjustments required. Use a combination of text and illustrations.

1.5.6.4 Repair Work-Hours

Provide manufacturer's projection of repair work-hours including requirements by type of craft. Identify, and tabulate separately, repair that requires the equipment manufacturer to complete or to participate.

1.5.6.5 Warranty Information

List and explain the various warranties and clearly identify the servicing and technical precautions prescribed by the manufacturers or contract documents in order to keep warranties in force. Identify if replacement of a subassembly, attachment or accessory requires the entire assembly to be replaced. Include warranty information for primary components of the system. Provide copies of warranties required by Section 01 78 00 CLOSEOUT SUBMITTALS.

1.5.6.6 Extended Warranty Information

List all warranties for products, equipment, components, and sub-components whose duration exceeds one year. For each warranty listed, indicate the applicable specification section, duration, start date, end date, and the point of contact for warranty fulfillment. Also, list or reference the specific operation and maintenance procedures that must be performed to keep the warranty valid. Provide copies of warranties required by Section 01 78 00 CLOSEOUT SUBMITTALS.

1.5.6.7 Record Drawings and Utility Systems

The record drawings are the final compilation of actual conditions reflected in the as-built drawings. Provide record drawings as outlined in 01 78 00 CLOSEOUT SUBMITTALS.

Using Record Source Drawings, show and document details of the actual installation of the utility systems, annotate and highlight the Operation and Maintenance information. Provide the following drawings at a large enough scale to differentiate designated isolation units from surrounding valves and switches.

1.5.6.8 Personnel Training Requirements

Provide information available from the manufacturers that is needed for use in training designated personnel to properly operate and maintain the equipment and systems.

1.5.6.9 Contractor / Supplier Listing and Contact Information

Provide a list that includes the name, address, telephone number, email and website of the General Contractor and each Subcontractor who installed the product or equipment, or system. For each item, also provide the name address and telephone number of the manufacturer's representative and service organization that can provide replacements most convenient to the project site. Provide the name, address, and telephone number of the product, equipment, and system manufacturers.

1.5.7 Part 4: Facility Operations

1.5.7.1 Completed Facility Operating Plan

Provide a plan that documents those procedures for the operation of systems and assemblies in the facility. The systems that should be included in the Operating Plan include, but are not limited to:

a. Electrical systems and equipment

b. Mechanical systems and equipment

c. Fire Protection systems and equipment

d. Control Systems and equipment

e. Architectural and Structural systems, fixtures, structures, and equipment

f. Vertical transportation such as elevators and escalators

1.5.7.2 Testing Equipment and Special Tool Information

Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components. Provide final set points.

1.5.7.3 Testing and Performance Data

Include completed prefunctional checklists, functional performance test forms, and monitoring reports. Include recommended schedule for retesting and blank test forms. Provide final set points.

1.5.7.4 Approved Field Test Reports and Manufacturer's Field Reports

Compile and provide approved Field Test Reports (SD-06) and Manufacturer's Field Reports (SD-09) submittals.

1.5.7.5 Maintenance Plans, Procedures, Checklists, Records, and Spare Parts Inventory

1.5.7.5.1 Maintenance Schedules

Include recommended maintenance schedules for systems and equipment.

1.5.7.5.2 Ongoing Commissioning Operational and Maintenance Record Keeping

Include ongoing commissioning and optimization procedures and documentation to monitor and improve the performance of facility systems.

1.5.7.5.3 Janitorial and Cleaning Plans and Procedures

Include a copy of facility cleaning and janitorial plan with procedures and intended chemicals and equipment.

Provide environmentally friendly cleaning recommendations in accordance with ASTM E1971.

1.5.7.6 Utility Record Drawings

1.5.7.6.1 Utility Schematic Diagrams

Provide a one-line schematic diagram for each utility system such as power, water, wastewater, and gas/fuel. Schematic diagram must show from the point where the utility line is connected to the mainline up to the 5-foot connection point to the facility. Indicate location or area designation for route of transmission or distribution lines; locations of duct banks, manholes/handholes or poles; isolation units such as valves and switches; and utility facilities such as pump stations, lift stations, and substations.

1.5.7.6.2 Enlarged Connection and Cutoff Plans

Provide enlarged floor plans and provide information between the 5-foot utilities connection point and where utilities connect to facility distribution. Enlarge floor plans/elevations of the rooms where the utility enters the building and indicate on these plans the locations of the main interiors and exterior connection and cutoff points for the utilities. Also enlarge floor plans/elevations of the rooms where equipment is located. Include enough information to enable someone unfamiliar with the facility to locate the connection and cutoff points. Indicate designations such as room number, panel number, circuit breaker, or valve number of each utility and equipment connection and cutoff point, and what that connection and cutoff point controls.

1.5.7.6.2.1 Description of Utility Metering and Monitoring Systems

Provide in narrative format a description of the utility metering and monitoring systems. Include locations, function, and related systems.

1.5.7.6.2.2 Procedures for Tracking Utility Use and Reporting

Procedures for usage reporting and tracking in support of establishing and monitoring utility budgets and costs, and in developing annual energy reports.

1.5.7.6.2.3 One-Line Diagrams and Meter Location of System

Provide one-line diagrams and design drawings that highlight meter locations on the site.

1.5.7.6.3 Spare Parts and Supply Lists

Provide lists of spare parts and supplies required for repair to ensure continued service or operation without unreasonable delays. Special consideration is required for facilities at remote locations. List spare parts and supplies that have a long lead-time to obtain.

1.5.8 Part 5: Training

Provide a copy of training plans used for each type of equipment along with training materials used, arranged in specification sequence. Provide a copy of training records, sign-in sheets, and agendas. Include training and documentation on the updating and continued use of the O&M Manual.

1.5.9 Part 6: Cx Project Report and TAB Report

Provide the final Cx Plan and complete Cx reports with evaluation and testing forms and records for each building system. Include relevant commissioned system assemblies test reports including installers checklists of assemblies. Provide all Cx Progress Reports, issues and resolutions logs with resolution or status of each item, and a list of any open items and seasonal or additional testing required.

1.5.10 Part 7: Regulatory Requirements

Provide information describing regulatory and policies compliance requirements or provide a reference to where it is stored.

1.5.11 Part 8: Permits

Provide information requiring frequently asked questions and associated answers or provide a reference to where it is stored.

1.5.12 Part 9: Operations and Maintenance Manual Approval

Provide a signed document stating that the project O&M Manual has been reviewed and confirming agreement with the approach it presents. Include contact information for the signer for coordination of any future changes.

1.6 SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES

Provide the O&M data packages specified in individual technical sections , or if not specified in the individual technical sections, in accordance with the package usage definition.. O&M Data Packages are one of the components of the O&M Manual. The information required in each type of data package follows:

Package Usage Definition: Use Data Package 1 for architectural items requiring simple but specific maintenance and replacement; for example, acoustical ceiling, floor tile or carpeting system.

1.6.1 Package Quality

Documents must be fully legible. Operation and Maintenance data must be

consistent with the manufacturer's standard brochures, schematics, printed instructions, general operating procedures, and safety precautions.

1.6.2 Data Package 1

a. Safety precautions and hazards

b. Cleaning recommendations

c. Maintenance and repair procedures

d. Warranty information

e. Extended warranty information

f. Contractor information

g. Spare parts and supply list

1.6.3 Data Package 2

Package Usage Definition: Use Data Package 2 for an item that is less simple than required for Data Package 1; for example, an item having a motor and some sequence of operation such as a refrigerated drinking fountain.

a. Safety precautions and hazards

b. Normal operations

c. Environmental conditions

d. Lubrication data

e. Preventive maintenance plan, schedule, and procedures

f. Cleaning recommendations

g. Maintenance and repair procedures

h. Removal and replacement instructions

i. Spare parts and supply list

j. Parts identification

k. Warranty information

l. Extended warranty information

m. Contractor information

1.6.4 Data Package 3

Package Usage Definition: Use Data Package 3 for a complex piece of equipment, having a specific troubleshooting sequence, but one which does not require an operator on watch; for example, HVAC temperature controls.

a. Safety precautions and hazards

b. Operator prestart

c. Startup, shutdown, and post-shutdown procedures

d. Normal operations

e. Emergency operations

f. Environmental conditions

g. Operating log

h. Lubrication data

i. Preventive maintenance plan, schedule, and procedures

j. Cleaning recommendations

k. Troubleshooting guides and diagnostic techniques

l. Wiring diagrams and control diagrams

m. Maintenance and repair procedures

n. Removal and replacement instructions

o. Spare parts and supply list

p. Product submittal data

q. O&M submittal data

r. Parts identification

s. Warranty information

t. Extended warranty information

u. Testing equipment and special tool information

v. Testing and performance data

w. Contractor information

x. Field test reports

1.6.5 Data Package 4

Package Usage Definition: Use Data Package 4 for an extremely complex piece of equipment, having an extensive sequence of operation, a complex troubleshooting sequence and one requiring frequent operator attention; at least for start-up and shut-down. Examples of this case would be small boilers and small diesel generator sets.

a. Safety precautions and hazards

b. Operator prestart

c. Startup, shutdown, and post-shutdown procedures

d. Normal operations

e. Emergency operations

f. Operator service requirements

g. Environmental conditions

h. Operating log

i. Lubrication data

j. Preventive maintenance plan, schedule, and procedures

k. Cleaning recommendations

l. Troubleshooting guides and diagnostic techniques

m. Wiring diagrams and control diagrams

n. Repair procedures

o. Removal and replacement instructions

p. Spare parts and supply list

q. Repair work-hours

r. Product submittal data

s. O&M submittal data

t. Parts identification

u. Warranty information

v. Extended warranty information

w. Personnel training requirements

x. Testing equipment and special tool information

y. Testing and performance data

z. Contractor information

aa. Field test reports

1.6.6 Data Package 5

Package Usage Definition: Use Data Package 5 for electrical equipment, components, or systems on which, wiring and control diagrams are needed for operation, maintenance, or repair. Examples of this case are 400 Hz frequency converters, annunciator panels, and cathodic protection systems.

a. Safety precautions and hazards

b. Operator prestart

c. Start-up, shutdown, and post-shutdown procedures

d. Normal operations

e. Environmental conditions

f. Preventive maintenance plan, schedule, and procedures

g. Troubleshooting guides and diagnostic techniques

h. Wiring and control diagrams

i. Maintenance and repair procedures

j. Removal and replacement instructions

k. Spare parts and supply list

l. Product submittal data

m. Manufacturer's instructions

n. O&M submittal data

o. Parts identification

p. Testing equipment and special tool information

q. Warranty information

r. Extended warranty information

s. Testing and performance data

t. Contractor information

u. Field test reports

1.6.7 Changes to Submittals

Provide manufacturer-originated changes or revisions to submitted data if a component of an item is so affected subsequent to acceptance of the O&M Data. Submit changes, additions, or revisions required by the Contracting Officer for final acceptance of submitted data within 30 calendar days of the notification of this change requirement.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 TRAINING

Prior to acceptance of the facility by the Contracting Officer, provide comprehensive training for the systems and equipment specified in the technical specifications. The training must be targeted for the building maintenance personnel, and applicable building occupants. Instructors must be well-versed in the particular systems that they are presenting. Address aspects of the Operation and Maintenance Manual submitted in accordance with Section 01 78 00 CLOSEOUT SUBMITTALS. Training must include classroom or field lectures based on the system operating requirements. The location of classroom training requires approval by the Contracting Officer.

3.1.1 Training Plan

Submit a written training plan to the Contracting Officer for approval at least 60 calendar days prior to the scheduled training. Training plan must be approved by the Quality Control Manager (QC) prior to forwarding to the Contracting Officer. Also, coordinate the training schedule with the Contracting Officer and QC. Include within the plan the following elements:

a. Equipment included in training

b. Intended audience

c. Location of training

d. Dates of training

e. Objectives

f. Outline of the information to be presented and subjects covered including description

g. Start and finish times and duration of training on each subject

h. Methods (e.g. classroom lecture, video, site walk-through, actual operational demonstrations, written handouts)

i. Instructor names and instructor qualifications for each subject

j. List of texts and other materials to be furnished by the Contractor that are required to support training

k. Description of proposed software to be used for video recording of training sessions.

3.1.2 Training Content

The core of this training must be based on manufacturer's recommendations and the operation and maintenance information. The QC is responsible for overseeing and approving the content and adequacy of the training. Spend 95 percent of the instruction time during the presentation on the OPERATION AND MAINTENANCE DATA. Include the following for each system training presentation:

a. Start-up, normal operation, shutdown, unoccupied operation, seasonal changeover, manual operation, controls set-up and programming, troubleshooting, and alarms.

b. Relevant health and safety issues.

c. Discussion of how the feature or system is environmentally responsive. Advise adjustments and optimizing methods for energy conservation.

d. Design intent.

e. Use of O&M Manual Files.

f. Review of control drawings and schematics.

g. Interactions with other systems.

h. Special maintenance and replacement sources.

i. Tenant interaction issues.

3.1.3 Training Outline

Provide the Operation and Maintenance Manual Files (Bookmarked PDF) and a written course outline listing the major and minor topics to be discussed by the instructor on each day of the course to each trainee in the course. Provide the course outline 14 calendar days prior to the training.

3.1.4 Training Video Recording

Record classroom training session(s) on video. Provide to the Contracting Officer two copies of the training session(s) in DVD video recording format. Capture within the recording, in video and audio, the instructors' training presentations including question and answer periods with the attendees. The recording camera(s) must be attended by a person during the recording sessions to assure proper size of exhibits and projections during the recording are visible and readable when viewed as training.

3.1.5 Unresolved Questions from Attendees

If, at the end of the training course, there are questions from attendees that remain unresolved, the instructor must send the answers, in writing, to the Contracting Officer for transmittal to the attendees, and the training video must be modified to include the appropriate clarifications.

3.1.6 Validation of Training Completion

Ensure that each attendee at each training session signs a class roster daily to confirm Government participation in the training. At the completion of training, submit a signed validation letter that includes a sample record of training for reporting what systems were included in the training, who provided the training, when and where the training was performed, and copies of the signed class rosters. Provide two copies of the validation to the Contracting Officer, and one copy to the Operation and Maintenance Manual Preparer for inclusion into the Manual's documentation.

3.1.7 Quality Control Coordination

Coordinate this training with the QC in accordance with Section 01 45 00 QUALITY CONTROL.

3.2 SUBMITTAL SCHEDULING

3.2.1 Operation and Maintenance Manual, Progress Submittal

Submit the Progress submittal when construction is approximately 50 percent complete, to the Contracting Officer for approval. Provide Operation and Maintenance Manual Files (Bookmarked PDF). Include the elements and portions of system construction completed up to this point. The purpose of this submittal is to verify progress is in accordance with contract requirements as discussed during the Operation and Maintenance Manual Coordination Meeting.

3.2.2 Operation and Maintenance Manual, Prefinal Submittal

Submit the 100 percent submittal of the Operation and Maintenance Prefinal Submittal to the Contracting Officer for approval within 60 calendar days of the before the anticipated final inspection and acceptance of the facility by the Contracting Officer. This submittal must provide a complete, working document that can be used to operate and maintain the facility. Any portion of the submittal that is incomplete or inaccurate requires the entire submittal to be returned for correction. Any discrepancies discovered during the Government's review of Operation and Maintenance Progress submittal must be corrected prior to the Prefinal submission. The Prefinal Submittal must include Operation and Maintenance Manual Files (Bookmarked PDF).

3.2.3 Operation and Maintenance Manual, Final Submittal

Submit completed Operation and Maintenance Manual Files (Bookmarked PDF). The Final submittal is due at the anticipated final inspection and acceptance of the facility by the Contracting Officer. Any discrepancies discovered during the Government's review of the Prefinal submittal, including the Field Verification, must be corrected prior to the Final submission.

-- End of Section --

SECTION 02 41 00

DEMOLITION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ASSP A10.6	(2006) Safety & Health Program Requirements for Demolition Operations - American National Standard for Construction and Demolition Operations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

U.S. DEFENSE LOGISTICS AGENCY (DLA)

DLA 4145.25	(Jun 2000; Reaffirmed Oct 2010) Storage and Handling of Liquefied and Gaseous Compressed Gases and Their Full and Empty Cylinders; https://www.dla.mil/Portals/104/Documents/Dispositions/ddsr/docs/cylinderjointpub.pdf

U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 4000.25-1-M	(2006) MILSTRIP - Military Standard Requisitioning and Issue Procedures
MIL-STD-129	(2014; Rev R; Change 1 2018; Change 2 2019; Change 3 2023) Military Marking for Shipment and Storage

U.S. FEDERAL AVIATION ADMINISTRATION (FAA)

FAA AC 70/7460-1	(2016; Rev L; Change 2) Obstruction Marking and Lighting

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 61	National Emission Standards for Hazardous Air Pollutants
49 CFR 173.301	Shipment of Compressed Gases in Cylinders and Spherical Pressure Vessels

1.2 PROJECT DESCRIPTION

1.2.1 Definitions

1.2.1.1 Critical Root Zone (CRZ)

The critical root zone is the area around and under a tree where the majority of its roots are located. The CRZ is usually measured as a circle with a radius that's 1.5- foot for every inch of the tree's diameter at breast height (DBH), and a depth of 24 inches.

1.2.1.2 Demolition

Demolition is the process of tearing apart and removing any feature of a facility together with any related handling and disposal operations.

1.2.1.3 Deconstruction

Deconstruction is the process of taking apart a facility with the primary goal of preserving the value of all useful building materials.

1.2.1.4 Demolition Plan

Demolition Plan is the planned steps and processes for managing demolition activities and identifying the required sequencing activities and disposal mechanisms.

1.2.1.5 Deconstruction Plan

Deconstruction Plan is the planned steps and processes for dismantling all or portions of a structure or assembly, to include managing sequencing activities, storage, re-installation activities, salvage and disposal mechanisms.

1.2.2 Demolition/Deconstruction Plan

Prepare a Demolition Plan and submit proposed demolition, and removal procedures for approval before work is started. Include in the plan procedures for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, a detailed description of methods and equipment to be used for each operation and of the sequence of operations. Coordinate with Waste Management Plan in accordance with Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL. Provide procedures for safe conduct of the work in accordance with EM 385-1-1. Plan must be approved by Contracting Officer prior to work beginning.

1.2.3 General Requirements

Do not begin demolition or deconstruction until authorization is received from the Contracting Officer. Remove rubbish and debris from the project site; do not allow accumulations inside or outside the building. The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Remove rubbish and debris from Government property daily, unless otherwise directed. Store materials that cannot be removed daily in areas specified by the Contracting Officer.

In the interest of occupational safety and health, perform the work in accordance with EM 385-1-1, Section 17, Demolition, and other applicable Sections.

1.3 ITEMS TO REMAIN IN PLACE

Comply with FAR 52.236-9 to protect existing vegetation, structures, equipment, utilities, and improvements. Coordinate the work of this section with all other work indicated. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract. Do not overload structural elements. Provide new supports and reinforcement for existing construction weakened by demolition, deconstruction, or removal work. Repairs, reinforcement, or structural replacement require approval by the Contracting Officer prior to performing such work.

1.3.1 Existing Construction Limits and Protection

Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction. Provide temporary shoring and bracing for support of building components to prevent settlement or other movement. Provide protective measures to control accumulation and migration of dust and dirt in all work areas. Remove dust, dirt, and debris from work areas daily.

1.3.2 Weather Protection

For portions of the building to remain, protect building interior and materials and equipment from the weather at all times. Where removal of existing roofing is necessary to accomplish work, have materials and workmen ready to provide adequate and temporary covering of exposed areas.

1.3.3 Utility Service

Maintain existing utilities indicated to stay in service and protect against damage during demolition and deconstruction operations. Prior to start of work, utilities serving each area of alteration or removal will be shut off by the utility provider and disconnected and sealed by the Contractor the utility provider will disconnect and seal utilities serving each area of alteration or removal upon written request from the Contractor.

1.3.4 Facilities

Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, must remain standing without additional bracing, shoring, or lateral support until demolished or deconstructed, unless directed otherwise by the Contracting Officer. Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract.

1.4 BURNING

The use of burning at the project site for the disposal of refuse and

debris will not be permitted. Where burning is permitted, adhere to federal, state, and local regulations.

1.5 AVAILABILITY OF WORK AREAS

Areas in which the work is to be accomplished will be available at contract award.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Demolition Plan; G, CO

Existing Conditions

SD-07 Certificates

Notification; G, CO

SD-11 Closeout Submittals

1.7 QUALITY ASSURANCE

Submit timely notification of demolition and renovation projects to Federal, State, regional, and local authorities in accordance with 40 CFR 61, Subpart M. Notify the Regional Office of the United States Environmental Protection Agency (USEPA) and the Contracting Officer in writing 10 working days prior to the commencement of work in accordance with 40 CFR 61, Subpart M. Comply with federal, state, and local hauling and disposal regulations. In addition to the requirements of the "Contract Clauses," conform to the safety requirements contained in ASSP A10.6. Comply with the Environmental Protection Agency requirements specified. Use of explosives will not be permitted.

1.7.1 Dust and Debris Control

Prevent the spread of dust and debris to occupied portions of the building and on airfield pavements and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, or pollution. Sweep pavements as often as necessary to control the spread of debris that may result in foreign object damage potential to aircraft.

1.8 PROTECTION

1.8.1 Traffic Control Signs

a. Where pedestrian, driver and aircraft safety is endangered in the area of removal work, use traffic barricades with flashing lights. Anchor barricades in a manner to prevent displacement by wind, jet or prop blast. Notify the Contracting Officer prior to beginning such work.

Provide a minimum of 2 FAA type L-810 steady burning red obstruction lights on temporary structures (including cranes) over 100 feet, but less than 200 ft, above ground level. The use of LED based obstruction lights are not permitted. For temporary structures (including cranes) over 200 ft above ground level provide obstruction lighting in accordance with FAA AC 70/7460-1. Perform light construction and installation in compliance with FAA AC 70/7460-1. Lights must be operational during periods of reduced visibility, darkness, and as directed by the Contracting Officer. Maintain the temporary services during the period of construction and remove only after permanent services have been installed and tested and are in operation.

1.8.2 Protection of Personnel

Before, during and after the demolition work continuously evaluate the condition of the site specific features and structure being demolished and take immediate action to protect all personnel working in and around the project site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

1.9 FOREIGN OBJECT DAMAGE (FOD)

Aircraft and aircraft engines are subject to FOD from debris and waste material lying on airfield pavements. Remove all such materials that may appear on operational aircraft pavements due to the Contractor's operations. If necessary, the Contracting Officer may require the Contractor to install a temporary barricade at the Contractor's expense to control the spread of FOD potential debris. Provide a barricade consisting of a fence covered with a fabric designed to stop the spread of debris. Anchor the fence and fabric to prevent displacement by winds or jet/prop blasts. Remove barricade when no longer required.

1.10 RELOCATIONS

Perform the removal and reinstallation of relocated items as indicated with workmen skilled in the trades involved. Repair or replace items to be relocated which are damaged by the Contractor with new undamaged items as approved by the Contracting Officer.

1.11 EXISTING CONDITIONS

Before beginning any demolition or deconstruction work, survey the site and examine the drawings and specifications to determine the extent of the work. Record existing conditions in the presence of the Contracting Officer or the Contracting Officer's Representative showing the condition of structures and other facilities adjacent to areas of alteration or removal. Photographs or electronic images with a minimum resolution of 3072 x 2304 pixels, capable of a print resolution of 300 dpi, will be acceptable as a record of existing conditions. Include in the record the elevation of the top of foundation walls, finish floor elevations, possible conflicting electrical conduits, plumbing lines, alarms systems, the location and extent of existing cracks and other damage and description of surface conditions that exist prior to starting work. It is the Contractor's responsibility to verify and document all required

outages which will be required during the course of work, and to note these outages on the record document. Submit survey results to the Contracting Officer or the Contracting Officer's Representative.

PART 2 PRODUCTS

2.1 FILL MATERIAL

a. Comply with excavating, backfilling, and compacting procedures for soils used as backfill material to fill basements, voids, depressions or excavations resulting from demolition or deconstruction of structures.

PART 3 EXECUTION

3.1 EXISTING FACILITIES TO BE REMOVED

Inspect and evaluate existing structures onsite for reuse. Disassemble existing construction scheduled to be removed for reuse. Dismantled and removed materials are to be separated, set aside, and prepared as specified, and stored or delivered to a collection point for reuse, remanufacture, recycling, or other disposal, as specified. Designate materials for reuse onsite whenever possible.

3.1.1 Structures

a. Remove existing structures indicated to be removed to top of foundation walls. Break up basement slabs to permit drainage. Remove sidewalks, curbs, gutters and street light bases as indicated.

b. Demolish structures in a systematic manner from the top of the structure to the ground. Complete demolition work above each tier or floor before the supporting members on the lower level are disturbed. Demolish concrete and masonry walls in small sections. Remove structural framing members and lower to ground by means of derricks, platforms hoists, or other suitable methods as approved by the Contracting Officer.

c. Locate demolition and deconstruction equipment throughout the structure and remove materials so as to not impose excessive loads to supporting walls, floors, or framing.

3.1.2 Utilities and Related Equipment

3.1.2.1 General Requirements

Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by the Contracting Officer. Do not interrupt existing utilities serving facilities occupied and used by the Government except when approved in writing and then only after temporary utility services have been approved and provided. Do not begin demolition or deconstruction work until all utility disconnections have been made. Shut off and cap utilities for future use, as indicated.

3.1.2.2 Disconnecting Existing Utilities

Remove existing utilities, as indicated and terminate in a manner conforming to the nationally recognized code covering the specific utility and approved by the Contracting Officer. When utility lines are

encountered but are not indicated on the drawings, notify the Contracting Officer prior to further work in that area. Remove meters and related equipment and deliver to a location in accordance with instructions of the Contracting Officer.

3.1.3 Chain Link Fencing

Remove chain link fencing, gates and other related salvaged items scheduled for removal and transport to designated areas. Remove gates as whole units. Cut chain link fabric to 25 foot lengths and store in rolls off the ground.

3.1.4 Paving and Slabs

Move, grind and store pavement and slabs designated to be recycled and utilized in this project as directed by the Contracting Officer. Remove pavement and slabs not to be used in this project from the installation at Contractor's expense.

3.1.5 Masonry

Sawcut and remove masonry so as to prevent damage to surfaces to remain and to facilitate the installation of new work. Where new masonry adjoins existing, abut or tie the new work into the existing construction as specified for the new work. Provide square, straight edges and corners where existing masonry adjoins new work and other locations. Masonry removed in pieces must be crushed.

3.1.6 Concrete

Saw concrete along straight lines to a depth of a minimum 2 inch. Make each cut in walls perpendicular to the face and in alignment with the cut in the opposite face. Break out the remainder of the concrete provided that the broken area is concealed in the finished work, and the remaining concrete is sound. At locations where the broken face cannot be concealed, grind smooth or saw cut entirely through the concrete.

3.1.7 Structural Steel

Dismantle structural steel at field connections and in a manner that will prevent bending or damage. Salvage for recycle structural steel, steel joists, girders, angles, plates, columns and shapes. Flame-cutting torches are permitted when other methods of dismantling are not practical. Transport steel joists and girders as whole units and not dismantled. Transport structural steel shapes to a designated area as directed by the Contracting Officer, stacked according to size, type of member and length, and stored off the ground, protected from the weather.

3.1.8 Miscellaneous Metal

Salvage shop-fabricated items such as access doors and frames, steel gratings, metal ladders, wire mesh partitions, metal railings, metal windows and similar items as whole units. Salvage light-gage and cold-formed metal framing, such as steel studs, steel trusses, metal gutters, roofing and siding, metal toilet partitions, toilet accessories and similar items. Scrap metal is the Contractor's property. Recycle scrap metal as part of demolition and deconstruction operations. Provide separate containers to collect scrap metal and transport to a scrap metal collection or recycling facility, in accordance with the Waste Management

Plan.

3.1.9 Airfield Lighting

Remove existing airfield lighting as indicated and terminate in a manner satisfactory to the Contracting Officer. Remove edge lights, associated transformers as indicated and deliver to a location on the station in accordance with instructions of the Contracting Officer.

3.1.10 Patching

Where removals leave holes and damaged surfaces exposed in the finished work, patch and repair these holes and damaged surfaces to match adjacent finished surfaces, using on-site materials when available. Where new work is to be applied to existing surfaces, perform removals and patching in a manner to produce surfaces suitable for receiving new work. Make finished surfaces of patched area flush with the adjacent existing surface and match the existing adjacent surface as closely as possible to texture and finish. Provide patching as specified and indicated, and include the following:

a. Concrete and Masonry: Completely fill holes and depressions, caused by previous physical damage or left as a result of removals in existing masonry walls to remain, with an approved masonry patching material, applied in accordance with the manufacturer's printed instructions.

b. Where existing partitions have been removed leaving damaged or missing resilient tile flooring, patch to match the existing floor tile.

c. Patch acoustic lay-in ceiling where partitions have been removed. Make the transition between the different ceiling heights by continuing the higher ceiling level over to the first runner on the lower ceiling and closing the vertical opening with a painted sheet metal strip.

3.1.11 Cylinders and Canisters

Remove all fire suppression system cylinders and canisters and dispose of in accordance with the paragraph entitled "Disposal of Ozone Depleting Substance (ODS)."

3.1.12 Locksets on Swinging Doors

Remove all locksets from all swinging doors indicated to be removed and disposed of. Deliver the locksets and related items to a designated location for receipt by the Contracting Officer after removal.

3.1.13 Electrical Equipment and Fixtures

Salvage motors, motor controllers, and operating and control equipment that are attached to the driven equipment. Salvage wiring systems and components. Box loose items and tag for identification. Disconnect primary, secondary, control, communication, and signal circuits at the point of attachment to their distribution system.

3.1.13.1 Fixtures

Remove and salvage electrical fixtures. Salvage unprotected glassware from the fixture and salvage separately. Salvage incandescent, mercury-vapor, and fluorescent lamps and fluorescent ballasts manufactured

prior to 1978, boxed and tagged for identification, and protected from breakage.

3.1.13.2 Electrical Devices

Remove and salvage switches, switchgear, transformers, conductors including wire and nonmetallic sheathed and flexible armored cable, regulators, meters, instruments, plates, circuit breakers, panelboards, outlet boxes, and similar items. Box and tag these items for identification according to type and size.

3.1.13.3 Wiring Ducts or Troughs

Remove and salvage wiring ducts or troughs. Dismantle plug-in ducts and wiring troughs into unit lengths. Remove plug-in or disconnecting devices from the busway and store separately.

3.1.13.4 Conduit and Miscellaneous Items

Salvage conduit except where embedded in concrete or masonry. Consider corroded, bent, or damaged conduit as scrap metal. Sort straight and undamaged lengths of conduit according to size and type. Classify supports, knobs, tubes, cleats, and straps as debris to be removed and disposed.

3.1.14 Elevators and Hoists

Remove elevators, hoists, and similar conveying equipment and salvage as whole units, to the most practical extent. Remove and prepare items for salvage without damage to any of the various parts. Salvage and store rails for structural steel with the equipment as an integral part of the unit.

3.2 CONCURRENT EARTH-MOVING OPERATIONS

Do not begin excavation, filling, and other earth-moving operations that are sequential to demolition or deconstruction work in areas occupied by structures to be demolished or deconstructed until all demolition and deconstruction in the area has been completed and debris removed. Fill holes, open basements and other hazardous openings.

3.3 DISPOSITION OF MATERIAL

3.3.1 Title to Materials

Except for salvaged items specified in related Sections, and for materials or equipment scheduled for salvage, all materials and equipment removed and not reused or salvaged, become the property of the Contractor and must be removed from Government property. Materials approved for storage by the Contracting Officer must be removed before completion of the contract. Title to materials resulting from demolition and deconstruction, and materials and equipment to be removed, is vested in the Contractor upon approval by the Contracting Officer. The Government will not be responsible for the condition or loss of, or damage to, such property after contract award. Showing for sale or selling materials and equipment on site is prohibited.

3.3.2 Reuse of Materials and Equipment

Remove and store materials and equipment listed in the Demolition Plan to be reused or relocated to prevent damage, and reinstall as the work progresses. Coordinate the re-use of materials and equipment with the re-use requirements in accordance with Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL. Capture re-use of materials in the diversion calculations for the project.

3.3.3 Salvaged Materials and Equipment

Remove materials and equipment that are listed in the Demolition Plan to be removed by the Contractor and that are to remain the property of the Government, and deliver to a storage site.

a. Salvage items and material to the maximum extent possible.

b. Store all materials salvaged for the Contractor as approved by the Contracting Officer and remove from Government property before completion of the contract. Coordinate the salvaged materials with tracking requirements in accordance with Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL. Capture salvaged materials in the diversion calculations for the project.

3.3.4 Transportation Guidance

Ship all ODS containers in accordance with MIL-STD-129, DLA 4145.25 (also referenced one of the following: Army Regulation 700-68, Naval Supply Instruction 4440.128C, Marine Corps Order 10330.2C, and Air Force Regulation 67-12), 49 CFR 173.301, and DOD 4000.25-1-M.

3.3.5 Unsalvageable and Non-Recyclable Material

Dispose of unsalvageable and non-recyclable noncombustible material in the disposal area. Dispose of unsalvageable and non-recyclable combustible material off the site.

3.4 CLEANUP

Remove debris and rubbish from project site and similar excavations. Remove and transport the debris in a manner that prevents spillage on streets or adjacent areas. Apply local regulations regarding hauling and disposal.

3.5 DISPOSAL OF REMOVED MATERIALS

3.5.1 Regulation of Removed Materials

Dispose of debris, rubbish, scrap, and other nonsalvageable materials resulting from removal operations with all applicable federal, state and local regulations as contractually specified in the Waste Management Plan . Storage of removed materials on the project site is prohibited.

3.5.2 Burning on Government Property

Burning of materials removed from demolished and deconstructed structures will not be permitted on Government property.

3.5.3 Removal to Spoil Areas on Government Property

Transport noncombustible materials removed from demolition and deconstruction structures to designated spoil areas on Government property.

3.5.4 Removal from Government Property

Transport waste materials removed from demolished and deconstructed structures, except waste soil, from Government property for legal disposal. Dispose of waste soil per Section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS.

3.6 REUSE OF SALVAGED ITEMS

Recondition salvaged materials and equipment designated for reuse before installation. Replace items damaged during removal and salvage operations or restore them as necessary to usable condition.

-- End of Section --

SECTION 03 30 53

MISCELLANEOUS CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SUMMARY

Perform all work in accordance with ACI 318.

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 CONCRETE INSTITUTE (ACI)

ACI 117	(2010; R 2015) Specifications for Tolerances for Concrete Construction and Materials and Commentary
ACI 301	(2020) Specifications for Structural Concrete
ACI 304R	(2000; R 2009) Guide for Measuring, Mixing, Transporting, and Placing Concrete
ACI 305R	(2020) Guide to Hot Weather Concreting
ACI 306R	(2016) Guide to Cold Weather Concreting
ACI 318	(2019; R 2022) Building Code Requirements for Structural Concrete (ACI 318-19) and Commentary (ACI 318R-19)
ACI 347R	(2014; Errata 1 2017) Guide to Formwork for Concrete
ACI SP-66	(2004) ACI Detailing Manual

ASTM INTERNATIONAL (ASTM)

ASTM A615/A615M	(2024) Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
ASTM A1064/A1064M	(2024) Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete
ASTM C31/C31M	(2025b) Standard Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C33/C33M	(2024a) Standard Specification for Concrete Aggregates

ASTM C39/C39M	(2024) Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
ASTM C94/C94M	(2025) Standard Specification for Ready-Mixed Concrete
ASTM C143/C143M	(2020) Standard Test Method for Slump of Hydraulic-Cement Concrete
ASTM C150/C150M	(2024) Standard Specification for Portland Cement
ASTM C172/C172M	(2017) Standard Practice for Sampling Freshly Mixed Concrete
ASTM C173/C173M	(2024a) Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C231/C231M	(2024) Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C260/C260M	(2024) Standard Specification for Air-Entraining Admixtures for Concrete
ASTM C309	(2019) Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C494/C494M	(2024) Standard Specification for Chemical Admixtures for Concrete
ASTM C595/C595M	(2025) Standard Specification for Blended Hydraulic Cements
ASTM C618	(2025a) Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
ASTM C685/C685M	(2025) Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing
ASTM C920	(2018; R 2024) Standard Specification for Elastomeric Joint Sealants
ASTM C989/C989M	(2025) Standard Specification for Slag Cement for Use in Concrete and Mortars
ASTM C1064/C1064M	(2023) Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM C1157/C1157M	(2025) Standard Performance Specification for Hydraulic Cement

ASTM C1260	(2023) Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C1567	(2025) Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)
ASTM C1602/C1602M	(2022) Standard Specification for Mixing Water Used in Production of Hydraulic Cement Concrete
ASTM D75/D75M	(2019) Standard Practice for Sampling Aggregates
ASTM D98	(2015) Calcium Chloride
ASTM D1752	(2018) Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction
ASTM E96/E96M	(2024a) Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials
ASTM E1643	(2018a) Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs
ASTM E1745	(2017; R 2023) Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 247	Comprehensive Procurement Guideline for Products Containing Recovered Materials

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Installation Drawings; G

SD-03 Product Data

Accelerating Admixture

Water-Reducing or Retarding Admixture

Curing Materials

Expansion Joint Filler Strips, Premolded

Joint Sealants - Field Molded Sealants

Batching and Mixing Equipment

Conveying and Placing Concrete

Formwork

Mix Design Data; G

Ready-Mix Concrete

Curing Compound

SD-06 Test Reports

Aggregates

Concrete Mixture Proportions; G

Compressive Strength Testing; G

Slump; G

Air Content

Water

SD-07 Certificates

Cementitious Materials

Pozzolan

Aggregates

Delivery Tickets

SD-08 Manufacturer's Instructions

Curing Compound

1.4 QUALITY ASSURANCE

Indicate specific locations of Concrete Placement Forms Steel Reinforcement Accessories Expansion Joints Construction Joints Contraction Joints Control Joints on installation drawings and include, but not be limited to, square feet of concrete placements, thicknesses and widths, plan dimensions, and arrangement of cast-in-place concrete section.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

The Government retains the option to sample and test aggregates and concrete to determine compliance with the specifications. Provide facilities and labor as may be necessary to assist the Government in procurement of representative test samples. Obtain samples of aggregates at the point of batching in accordance with ASTM D75/D75M. Sample concrete in accordance with ASTM C172/C172M. Determine slump and air content in accordance with ASTM C143/C143M and ASTM C231/C231M, respectively, when cylinders are molded. Prepare, cure, and transport compression test specimens in accordance with ASTM C31/C31M. Test compression test specimens in accordance with ASTM C39/C39M. Take samples for strength tests not less than once each shift in which concrete is produced. Provide a minimum of four 6 x 12 inch or six 4 x 8 inch specimens from each sample; two 6 x 12 inch or three 4 x 8 inch to be tested at 28 days (90 days if pozzolan or slag cement is used) for acceptance. Two 6 x 12 inch or three 4 x 8 inch will be tested at 7 days for information.

2.1.1 Strength

Acceptance test results are the average strengths of two 6 x 12 inch or three 4 x 8 inch specimens tested at 28 days (90 days if pozzolan or slag cement is used). The strength of the concrete is considered satisfactory so long as the average of all three consecutive acceptance test results equal or exceed the specified compressive strength, f'c, and no individual acceptance test result falls below f'c by more than 500 psi.

2.1.2 Construction Tolerances

Apply a Class "C" finish to all surfaces except those specified to receive a Class "D" finish. Apply a Class "D" finish to all post-construction surfaces which will be permanently concealed. Surface requirements for the classes of finish required are as specified in ACI 117.

2.1.3 Concrete Mixture Proportions

Concrete mixture proportions are the responsibility of the Contractor. Mixture proportions must include the dry weights of cementitious material(s); the nominal maximum size of the coarse aggregate; the specific gravities, absorptions, and saturated surface-dry weights of fine and coarse aggregates; the quantities, types, and names of admixtures; and quantity of water per yard of concrete. Provide materials included in the mixture proportions of the same type and from the same source as will be used on the project. The specified compressive strength f'c is 4,000 psi at 28 days (90 days if pozzolan is used). The maximum nominal size coarse aggregate is 3/4 inch, in accordance with ACI 304R. The air content must be between 4.5 and 7.5 percent with a slump between 2 and 5 inches. The maximum water-cementitious material ratio is 0.45. Submit the applicable test reports and mixture proportions that will produce concrete of the quality required, ten days prior to placement of concrete.

2.2 MATERIALS

Submit manufacturer's literature from suppliers which demonstrates compliance with applicable specifications for the specified materials.

2.2.1 Cementitious Materials

Submit Manufacturer's certificates of compliance, accompanied by mill test reports, attesting that the concrete materials meet the requirements of the specifications in accordance with the Special Clause "CERTIFICATES OF COMPLIANCE". Also, certificates for all material conforming to EPA's Comprehensive Procurement Guidelines (CPG), in accordance with 40 CFR 247.

2.2.1.1 Portland Cement

ASTM C150/C150M, Type II, with tri-calcium aluminates (C3A) content less than 10 percent and a maximum cement-alkali content of 0.80 percent Na2Oe (sodium oxide) equivalent.

2.2.1.2 Blended Hydraulic Cement

Provide blended cement conforming to ASTM C595/C595M and ASTM C1157/C1157M, Type IP, IL or IS, including the optional requirement for mortar expansion and consist of a mixture of ASTM C150/C150M Type I, or Type II cement and a complementary cementing material. The slag added to the Type IS blend must be ASTM C989/C989M ground granulated blast-furnace slag. The pozzolan added to the Type IP blend must be ASTM C618 Class F, interground with the cement clinker. Provide the manufacturer's written statement that the amount of pozzolan in the finished cement will not vary more than plus or minus 5 mass percent of the finished cement from lot-to-lot or within a lot. Do not change the percentage and type of mineral admixture used in the blend from that submitted for the aggregate evaluation and mixture proportioning.

2.2.1.3 Pozzolan

Provide pozzolan that conforms to ASTM C618, Class F, including requirements of Tables 1A and 2A.

2.2.1.4 Slag Cement

Slag Cement must conform to ASTM C989/C989M, Grade 100 or Grade 120.

2.2.2 Aggregates

For fine and coarse aggregates meet the quality and grading requirements of ASTM C33/C33M and test and evaluate for alkali-aggregate reactivity in accordance with ASTM C1260. Perform evaluation of fine and coarse aggregates separately and in combination, matching the proposed mix design proportioning. All results of the separate and combination testing must have a measured expansion less than 0.08 percent at 28 days after casting. If the test data indicates an expansion of 0.08 percent or greater, reject the aggregate(s) or perform additional testing using ASTM C1260 and ASTM C1567. Perform the additional testing using ASTM C1260 and ASTM C1567 using the low alkali portland cement in combination with ground granulated blast furnace (GGBF) slag, or Class F fly ash. Use GGBF slag in the range of 40 to 50 percent of the total cementitious material by mass. Use Class F fly ash in the range of 25 to 40 percent of the total cementitious material by mass. Submit certificates of compliance and test reports for aggregates showing the material(s) meets the quality and grading requirements of the specifications under which it is furnished.

2.2.3 Admixtures

Provide admixtures, when required or approved, in compliance with the appropriate specification listed. Retest chemical admixtures that have been in storage at the project site, for longer than 6 months or that have been subjected to freezing, at the expense of the Contractor at the request of the Contracting Officer and will be rejected if test results are not satisfactory.

2.2.3.1 Air-Entraining Admixture

Provide air-entraining admixture that meets the requirements of ASTM C260/C260M.

2.2.3.2 Accelerating Admixture

Provide calcium chloride meeting the requirements of ASTM D98. Other accelerators must meet the requirements of ASTM C494/C494M, Type C or E.

2.2.3.3 Water-Reducing or Retarding Admixture

Provide water-reducing or retarding admixture meeting the requirements of ASTM C494/C494M, Type A, B, or D.

2.2.4 Water

Mixing and curing water in compliance with the requirements of ASTM C1602/C1602M; potable, and free of injurious amounts of oil, acid, salt, or alkali. Submit test report showing water complies with ASTM C1602/C1602M.

2.2.5 Reinforcing Steel

Provide reinforcing bars conforming to the requirements of ASTM A615/A615M, Grade 60, deformed. Provide welded steel wire reinforcement conforming to the requirements of ASTM A1064/A1064M. Detail reinforcement not indicated in accordance with ACI 301 and ACI SP-66. Provide mechanical reinforcing bar connectors in accordance with ACI 301 and provide 125 percent minimum yield strength of the reinforcement bar.

2.2.6 Expansion Joint Filler Strips, Premolded

Expansion joint filler strips, premolded of sponge rubber conforming to ASTM D1752, Type I.

2.2.7 Joint Sealants - Field Molded Sealants

Conform to ASTM C920, Type M, Grade NS, Class 25, use NT for vertical joints and Type M, Grade P, Class 25, use T for horizontal joints. Provide polyethylene tape, coated paper, metal foil, or similar type bond breaker materials. The backup material needs to be compressible, nonshrink, nonreactive with the sealant, and a nonabsorptive material such as extruded butyl or polychloroprene foam rubber. Immediately prior to installation of field-molded sealants, clean the joint of all debris and further cleaned using water, chemical solvents, or other means as recommended by the sealant manufacturer or directed.

2.2.8 Formwork

Design and engineer the formwork as well as its construction in accordance with ACI 301 Section 2 and 5 and ACI 347R. Fabricate of wood, steel, or other approved material. Submit formwork design prior to the first concrete placement.

2.2.9 Form Coatings

Provide form coating in accordance with ACI 301.

2.2.10 Vapor Retarder

ASTM E1745 Class A polyethylene sheeting, minimum 10 mil thickness or other equivalent material with a maximum permeance rating of 0.04 perms per ASTM E96/E96M.

Consider plastic vapor retarders and adhesives with a high recycled content, low toxicity low VOC (Volatile Organic Compounds) levels.

2.2.11 Curing Materials

Provide curing materials in accordance with ACI 301, Section 5.

2.3 READY-MIX CONCRETE

Provide ready-mix concrete with mix design data conforming to ACI 301 Part 4. Submit delivery tickets in accordance with ASTM C94/C94M for each ready-mix concrete delivery, include the following additional information:

a. Type and brand cement

b. Cement content in 94-pound bags per cubic yard of concrete

c. Maximum size of aggregate

d. Amount and brand name of admixture

e. Total water content expressed by water cementitious material ratio

2.4 ACCESSORIES

2.4.1 Curing Compound

Provide curing compound conforming to ASTM C309. Submit manufactures instructions for placing curing compound.

PART 3 EXECUTION

3.1 PREPARATION

Prepare construction joints to expose coarse aggregate. The surface must be clean, damp, and free of laitance. Construct ramps and walkways, as necessary, to allow safe and expeditious access for concrete and workmen. Remove snow, ice, standing or flowing water, loose particles, debris, and foreign matter. Satisfactorily compact earth foundations. Make spare vibrators available. Placement cannot begin until the entire preparation has been accepted by the Government.

3.1.1 Embedded Items

Secure reinforcement in place after joints, anchors, and other embedded items have been positioned. Arrange internal ties so that when the forms are removed the metal part of the tie is not less than 2 inches from concrete surfaces permanently exposed to view or exposed to water on the finished structures. Prepare embedded items so they are be free of oil and other foreign matters such as loose coatings or rust, paint, and scale. The embedding of wood in concrete is permitted only when specifically authorized or directed. Provide all equipment needed to place, consolidate, protect, and cure the concrete at the placement site and in good operating condition.

3.1.2 Formwork Installation

Forms must be properly aligned, adequately supported, and mortar-tight. Provide smooth form surfaces, free from irregularities, dents, sags, or holes when used for permanently exposed faces. Chamfer all exposed joints and edges, unless otherwise indicated.

3.1.3 Vapor Retarder Installation

Install in accordance with ASTM E1643. Apply vapor retarder over gravel fill. Lap edges not less than 12 inches. Seal all joints with pressure-sensitive adhesive not less than 2 inches wide. Protect the vapor barrier at all times to prevent injury or displacement prior to and during concrete placement.

3.1.4 Production of Concrete

3.1.4.1 Ready-Mixed Concrete

Provide ready-mixed concrete conforming to ASTM C94/C94M except as otherwise specified.

3.1.4.2 Concrete Made by Volumetric Batching and Continuous Mixing

Conform to ASTM C685/C685M.

3.1.4.3 Batching and Mixing Equipment

The option of using an on-site batching and mixing facility is available. The facility must provide sufficient batching and mixing equipment capacity to prevent cold joints. Submit the method of measuring materials, batching operation, and mixer for review, and manufacturer's data for batching and mixing equipment demonstrating compliance with the applicable specifications. Provide an Onsite Plant conforming to the requirements of either ASTM C94/C94M or ASTM C685/C685M.

3.2 CONVEYING AND PLACING CONCRETE

Convey and place concrete in accordance with ACI 301, Section 5.

3.2.1 Cold-Weather Requirements

Place concrete in cold weather in accordance with ACI 306R

3.2.2 Hot-Weather Requirements

Place concrete in hot weather in accordance with ACI 305R

3.3 FINISHING

3.3.1 Temperature Requirement

Do not finish or repair concrete when either the concrete or the ambient temperature is below 50 degrees F.

3.3.2 Finishing Formed Surfaces

Remove all fins and loose materials, and surface defects including filling of tie holes. Repair all honeycomb areas and other defects. Remove all unsound concrete from areas to be repaired. Ream or chip surface defects greater than 1/2 inch in diameter and holes left by removal of tie rods in all surfaces not to receive additional concrete and fill with dry-pack mortar. Brush-coat the prepared area with an approved epoxy resin or latex bonding compound or with a neat cement grout after dampening and filling with mortar or concrete. Use a blend of portland cement and white cement in mortar or concrete for repairs to all surfaces permanently exposed to view so that the final color when cured is the same as adjacent concrete.

3.3.3 Finishing Unformed Surfaces

Finish unformed surfaces in accordance with ACI 301, Section 5.

FINISH	LOCATION
Float	Bottom of trench drain
Trowel	Hangar floor slabs
Broom or Belt	N/A

3.3.3.1 Expansion and Contraction Joints

Make expansion and contraction joints in accordance with the details shown or as otherwise specified. Provide 1/2 inch thick transverse expansion joints where new work abuts an existing concrete.

3.4 CURING AND PROTECTION

Cure and protect in accordance with ACI 301, Section 5.

3.5 FORM WORK

Provide form work in accordance with ACI 301, Section 2 and Section 5.

3.5.1 Removal of Forms

Remove forms in accordance with ACI 301, Section 2.

3.6 STEEL REINFORCING

Reinforcement must be free from loose, flaky rust and scale, and free from

oil, grease, or other coating which might destroy or reduce the reinforcement's bond with the concrete.

3.6.1 Fabrication

Shop fabricate steel reinforcement in accordance with ACI 318 and ACI SP-66. Provide shop details and bending in accordance with ACI 318 and ACI SP-66.

3.6.2 Splicing

Perform splices in accordance with ACI 318 and ACI SP-66.

3.6.3 Supports

Secure reinforcement in place by the use of metal or concrete supports, spacers, or ties.

3.7 EMBEDDED ITEMS

Before placing concrete, take care to determine that all embedded items are firmly and securely fastened in place. Provide embedded items free of oil and other foreign matter, such as loose coatings of rust, paint and scale. Embedding of wood in concrete is permitted only when specifically authorized or directed.

3.8 TESTING AND INSPECTING

Report the results of all tests and inspections conducted at the project site informally at the end of each shift. Submit written reports weekly. Deliver within three days after the end of each weekly reporting period. See Section 01 45 00 QUALITY CONTROL.

3.8.1 Field Testing Technicians

The individuals who sample and test concrete must have demonstrated a knowledge and ability to perform the necessary test procedures equivalent to the ACI minimum guidelines for certification of Concrete Field Testing Technicians, Grade I.

3.8.2 Preparations for Placing

Inspect foundation or construction joints, forms, and embedded items in sufficient time prior to each concrete placement to certify that it is ready to receive concrete.

3.8.3 Sampling and Testing

a. Obtain samples and test concrete for quality control during placement. Sample fresh concrete for testing in accordance with ASTM C172/C172M. Make six test cylinders.

b. Test concrete for compressive strength at 7 and 28 days for each design mix and for every 100 cubic yards of concrete. Test two cylinders at 7 days; two cylinders at 28 days; and hold two cylinders in reserve. Conform test specimens to ASTM C31/C31M. Perform compressive strength testing conforming to ASTM C39/C39M.

c. Test slump at the site of discharge for each design mix in accordance with ASTM C143/C143M. Check slump once during each shift that

concrete is produced.

d. Test air content for air-entrained concrete in accordance with ASTM C231/C231M. Test concrete using lightweight or extremely porous aggregates in accordance with ASTM C173/C173M. Check air content at least once during each shift that concrete is placed.

e. Determine temperature of concrete at time of placement in accordance with ASTM C1064/C1064M. Check concrete temperature at least once during each shift that concrete is placed.

3.8.4 Action Required

3.8.4.1 Placing

Do not begin placement until the availability of an adequate number of acceptable vibrators, which are in working order and have competent operators, has been verified. Discontinue placing if any lift is inadequately consolidated.

3.8.4.2 Air Content

Whenever an air content test result is outside the specification limits, adjust the dosage of the air-entrainment admixture prior to delivery of concrete to forms.

3.8.4.3 Slump

Whenever a slump test result is outside the specification limits, adjust the batch weights of water and fine aggregate prior to delivery of concrete to the forms. Make the adjustments so that the water-cementitious material ratio does not exceed that specified in the submitted concrete mixture proportion and the required concrete strength is still met.

-- End of Section --

SECTION 05 05 23.16

STRUCTURAL WELDING

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 360	(2016) Specification for Structural Steel Buildings

AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)

ANSI/ASNT CP-189	(2020) ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

AMERICAN WELDING SOCIETY (AWS)

AWS A2.4	(2012) Standard Symbols for Welding, Brazing and Nondestructive Examination
AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel
AWS D1.3/D1.3M	(2025) Structural Welding Code - Sheet Steel
AWS D1.4/D1.4M	(2018; Amd 1 2020) Structural Welding Code - Reinforcing Steel
AWS D14.4/D14.4M	(2012) Specification for Welded Joints for Machinery and Equipment
AWS QC1	(2016) Specification for AWS Certification of Welding Inspectors
AWS Z49.1	(2021) Safety in Welding, Cutting and Allied Processes

ASTM INTERNATIONAL (ASTM)

ASTM E165/E165M	(2023) Standard Practice for Liquid Penetrant Examination for General Industry
ASTM E709	(2021) Standard Guide for Magnetic Particle Testing

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for

information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Welding Quality Assurance Plan; G

SD-03 Product Data

Welding Procedure Qualifications; G

Welder, Welding Operator, and Tacker Qualification

Previous Qualifications

Pre-Qualified Procedures; G

Welding Electrodes and Rods

SD-06 Test Reports

Nondestructive Testing

Weld Inspection Log

SD-07 Certificates

Certified Welding Procedure Specifications (WPS)

Certified Procedure Qualification Records (PQR)

Certified Welder Performance Qualifications (WPQ)

Certified Welding Inspector

Nondestructive Testing Personnel

1.3 QUALITY ASSURANCE

Except for pre-qualified (in accordance with AWS D1.1/D1.1M) and previously qualified procedures, each Contractor performing welding must record in detail and qualify the welding procedure specification for any welding procedure followed in the fabrication of weldments. Conform welding procedure qualifications to AWS D1.1/D1.1M and to the specifications in this section. Submit for approval copies of the welding procedure specification and the procedure qualification records for each type of welding being performed. Submission of the welder, welding operator, or tacker qualification test records is also required. Approval of any procedure, however, does not relieve the Contractor of the sole responsibility for producing a finished structure meeting all the specified requirements. Submit this information on the forms in Annex M of AWS D1.1/D1.1M. Individually identify and clearly reference on the detail drawings and erection drawings all welding procedure specifications, or suitably key them to the contract drawings. In case of conflict between this specification and AWS D1.1/D1.1M, this specification governs.

1.3.1 General Requirements

Fabricate work in an AISC Certified Fabrication Plant, Category BU. Erect work by an AISC Certified Erector, Category CSE.

a. For Structural Projects, provide documentation of the following:

(1) Component Thickness 1/8 inch and greater: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D1.1/D1.1M.

(2) Component Thickness Less than 1/8 inch: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D1.3/D1.3M.

(3) Reinforcing Steel: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D1.4/D1.4M.

b. For other applications, provide documentation of the following:

(1) Submit two copies of the Certified Welding Procedure Specifications (WPS), and Certified Procedure Qualification Records (PQR) to the Contracting Officer for approval.

(2) Submit two copies of the Certified Welder Performance Qualifications (WPQ)and to the Contracting Officer for approval within fifteen calendar days prior to any employee welding on the project material.

(3) Machinery: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D14.4/D14.4M.

1.3.2 Previous Qualifications

Welding procedures previously qualified by test in accordance with AWS D1.1/D1.1M, may be accepted for this contract without re-qualification, upon receipt of the test results, if the following conditions are met:

a. Testing was performed by an approved testing laboratory, technical consultant, or the Contractor's approved quality control organization.

b. The qualified welding procedure conforms to the requirements of this specification and is applicable to welding conditions encountered under this contract.

c. The welder, welding operator, and tacker qualification tests conform to the requirements of this specification and are applicable to welding conditions encountered under this contract.

1.3.3 Pre-qualified Procedures

Welding procedures which are considered pre-qualified as specified in AWS D1.1/D1.1M will be accepted without further qualification. Submit for approval a listing or an annotated drawing to indicate the joints not pre-qualified. Procedure qualification is mandatory for these joints.

1.3.4 Welder, Welding Operator, and Tacker Qualification

Each welder, welding operator, and tacker assigned to work on this

contract must be qualified in accordance with the applicable requirements of AWS D1.1/D1.1M and as specified in this section. Welders, welding operators, and tackers who make acceptable procedure qualification test welds will be considered qualified for the welding procedure used within the applicable essential variables for welder qualification.

1.3.4.1 Previous Personnel Qualifications

At the discretion of the Contracting Officer, welders, welding operators, and tackers qualified by test within the previous 6 months may be accepted for this contract without re-qualification if all the following conditions are met:

a. Copies of the welding procedure specifications, the procedure qualification test records, and the welder, welding operator, and tacker qualification test records are submitted and approved in accordance with the specified requirements for detail drawings.

b. Testing was performed by an approved testing laboratory, technical consultant, or the Contractor's approved quality control organization.

c. The welder, welding operator, and tacker qualification tests conform to the requirements of this specification and are applicable to welding conditions encountered under this contract.

1.3.4.2 Certificates

Before assigning any welder, welding operator, or tacker to work under this contract, submit the names and certification that each individual is qualified as specified. State in the certification the type of welding and positions for which the welder, welding operator, or tacker is qualified, the code and procedure under which the individual is qualified, the date qualified, and the name of the firm and person certifying the qualification tests. Keep the certification current, on file, and furnish 3 copies.

1.3.4.3 Renewal of Qualification

Re-qualification of a welder or welding operator is required under any of the following conditions:

a. It has been more than 6 months since the welder or welding operator has used the specific welding process for which he is qualified.

b. There is specific reason to question the welder or welding operator's ability to make welds that meet the requirements of these specifications.

c. The welder or welding operator was qualified by an employer other than those firms performing work under this contract, and a qualification test has not been taken within the past 12 months. Submit as evidence of conformance all records showing periods of employment, name of employer where welder, or welding operator, was last employed, and the process for which qualified.

d. A tacker who passes the qualification test is considered eligible to perform tack welding indefinitely in the positions and with the processes for which he/she is qualified, unless there is some specific reason to question the tacker's ability or there has been a gap

greater than 6 months since he/she last used the process. In such a case, the tacker is required to pass the prescribed tack welding test.

1.3.5 Inspector Qualification

Submit certificates indicating that certified welding inspectors meet the requirements of AWS QC1. Submit qualifications for nondestructive testing personnel in accordance with the requirements of ANSI/ASNT CP-189 for Levels I or II in the applicable nondestructive testing method. Level I inspectors must have direct supervision of a Level II inspector.

1.3.6 Symbols and Safety

Use symbols in accordance with AWS A2.4, unless otherwise indicated. Follow safe welding practices and safety precautions during welding in conformance with AWS Z49.1.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

Conform the design of welded connections to AISC 360, unless otherwise indicated or specified. Material with welds will not be accepted unless the welding is specified or indicated on the drawings or otherwise approved. Perform welding as specified in this section, except where additional requirements are shown on the drawings or are specified in other sections. Do not commence welding until welding procedures, inspectors, nondestructive testing personnel, welders, welding operators, and tackers have been qualified and the submittals approved by the Contracting Officer. Perform all testing at or near the work site. Maintain records of the test results obtained in welding procedure, welder, welding operator, and tacker performance qualifications.

2.1.1 Pre-erection Conference

Hold a pre-erection conference prior to the start of the field welding, to bring all affected parties together and to gain a naturally clear understanding of the project and the Welding Procedure Specifications (WPS) (submitted for all welding, including welding done using pre-qualified procedures). Mandatory attendance is required by all Contractor's welding production and inspection personnel and appropriate Government personnel. Include as items for discussion: responsibilities of various parties; welding procedures and processes to be followed; welding sequence (both within a joint and joint sequence within the building); inspection requirements and procedures, both visual and nondestructive testing; welding schedule; and other items deemed necessary by the attendees.

2.2 WELDING EQUIPMENT AND MATERIALS

Provide all welding equipment, welding electrodes and rods, welding wire, and fluxes capable of producing satisfactory welds when used by a qualified welder or welding operator. Provide welding equipment and materials that comply with the applicable requirements of AWS D1.1/D1.1M. Submit product data on welding electrodes and rods.

PART 3 EXECUTION

3.1 WELDING OPERATIONS

3.1.1 Requirements

Conform workmanship and techniques for welded construction to the requirements of AWS D1.1/D1.1M and AISC 360. When AWS D1.1/D1.1M and the AISC 360 specification conflict, the requirements of AWS D1.1/D1.1M govern.

3.1.2 Identification

Identify all welds in one of the following ways:

a. Submit written records to indicate the location of welds made by each welder, welding operator, or tacker.

b. Identify all work performed by each welder, welding operator, or tacker with an assigned number, letter, or symbol to identify welds made by that individual. The Contracting Officer may require welders, welding operators, and tackers to apply their symbol next to the weld by means of rubber stamp, felt-tipped marker with waterproof ink, or other methods that do not cause an indentation in the metal. Place the identification mark for seam welds adjacent to the weld at 3 foot intervals. Identification with die stamps or electric etchers is not allowed.

3.2 QUALITY CONTROL

Perform testing using an approved inspection or testing laboratory or technical consultant; or if approved, the Contractor's inspection and testing personnel may be used instead of the commercial inspection or testing laboratory or technical consultant. A Certified Welding Inspector must perform visual inspection on 100 percent of all welds. Document this inspection in the Visual Weld Inspection Log. Test 50% of CJP welds using ultrasonic testing per Table 6.2 or 6.3 of AWS D1.1/D1.1M. Randomly test 50% of all PJP and fillet welds or as indicated by magnetic particle or dye penetrant testing. Verify the welds conform to paragraph STANDARDS OF ACCEPTANCE. Conform procedures and techniques for inspection with applicable requirements of AWS D1.1/D1.1M, ASTM E165/E165M, and ASTM E709. Submit a Welding Quality Assurance Plan and records of tests and inspections.

3.3 STANDARDS OF ACCEPTANCE

Conform dimensional tolerances for welded construction, details of welds, and quality of welds with the applicable requirements of AWS D1.1/D1.1M and the contract drawings. Submit all records of nondestructive testing.

3.3.1 Nondestructive Testing

The welding is subject to inspection and tests in the mill, shop, and field. Inspection and tests in the mill or shop do not relieve the Contractor of the responsibility to furnish weldments of satisfactory quality. When materials or workmanship do not conform to the specification requirements, the Government reserves the right to reject material or workmanship or both at any time before final acceptance of the structure containing the weldment. Any indication of a defect is regarded as a defect, unless re-evaluation by nondestructive methods or by surface

conditioning shows that no unacceptable defect is present. Submit all records of nondestructive testing in accordance with paragraph STANDARDS OF ACCEPTANCE.

3.3.2 Destructive Tests

Make all repairs when metallographic specimens are removed from any part of a structure. Employ only qualified welders or welding operators, and use the proper joints and welding procedures, including peening or heat treatment if required, to develop the full strength of the members and joints cut and to relieve residual stress.

3.4 GOVERNMENT INSPECTION AND TESTING

In addition to the inspection and tests performed by the Contractor for quality control, the Government will perform inspection and testing for acceptance to the extent determined by the Contracting Officer. The work may be performed by the Government's own forces or under a separate contract for inspection and testing. The Government reserves the right to perform supplemental nondestructive and destructive tests to determine compliance with paragraph STANDARDS OF ACCEPTANCE.

3.5 CORRECTIONS AND REPAIRS

If inspection or testing indicates defects in the weld joints, repair defective welds using a qualified welder or welding operator as applicable. Conduct corrections in accordance with the requirements of AWS D1.1/D1.1M and the specifications. Repair all defects in accordance with the approved procedures. Repair defects discovered between passes before additional weld material is deposited. Wherever a defect is removed and repair by welding is not required, blend the affected area into the surrounding surface to eliminate sharp notches, crevices, or corners. After a defect is thought to have been removed, and before re-welding, examine the area by suitable methods to ensure that the defect has been eliminated. Repaired welds must meet the inspection requirements for the original welds.

-- End of Section --

SECTION 05 12 00

STRUCTURAL STEEL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 207	(2016; R 2017) Certification Standard for Steel Fabrication and Erection, and Manufacturing of Metal Components
AISC 325	(2017) Steel Construction Manual
AISC 326	(2009) Detailing for Steel Construction
AISC 360	(2016) Specification for Structural Steel Buildings
AISC 420	(2010) Certification Standard for Shop Application of Complex Protective Coating Systems
ANSI/AISC 303	(2022) Code of Standard Practice for Structural Steel Buildings and Bridges

AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)

ANSI/ASNT CP-189	(2020) ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME B46.1	(2020) Surface Texture, Surface Roughness, Waviness and Lay

AMERICAN WELDING SOCIETY (AWS)

AWS A2.4	(2012) Standard Symbols for Welding, Brazing and Nondestructive Examination
AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel
AWS QC1	(2016) Specification for AWS Certification of Welding Inspectors

ASTM INTERNATIONAL (ASTM)

ASTM A6/A6M	(2024b) Standard Specification for General Requirements for Rolled Structural Steel

	Bars, Plates, Shapes, and Sheet Piling
ASTM A36/A36M	(2019) Standard Specification for Carbon Structural Steel
ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A123/A123M	(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A307	(2023) Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength
ASTM A500/A500M	(2023) Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM A563	(2021; E 2022a) Standard Specification for Carbon and Alloy Steel Nuts
ASTM A780/A780M	(2020) Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
ASTM A992/A992M	(2022) Standard Specification for Structural Steel Shapes
ASTM B695	(2021) Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
ASTM C827/C827M	(2023) Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures
ASTM C1107/C1107M	(2020) Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)
ASTM F436/F436M	(2024) Standard Specification for Hardened Steel Washers Inch and Metric Dimensions
ASTM F844	(2019; R 2024) Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use
ASTM F959/F959M	(2017a; R 2023) Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series
ASTM F1136/F1136M	(2011) Standard Specification for Zinc/Aluminum Corrosion Protective Coatings for Fasteners

ASTM F1554	(2020) Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength
ASTM F2329/F2329M	(2015; R 2023) Standard Specification for Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners
ASTM F2833	(2011; R 2017) Standard Specification for Corrosion Protective Fastener Coatings with Zinc Rich Base Coat and Aluminum Organic/Inorganic Type
ASTM F3125/F3125M	(2019) Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength

SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC PA 1	(2024) Shop, Field, and Maintenance Coating of Metals
SSPC Paint 20	(2019) Zinc-Rich Primers (Type I, Inorganic, and Type II, Organic)
SSPC Paint 29	(2002; E 2004) Zinc Dust Sacrificial Primer, Performance-Based
SSPC SP 3	(2024) Power Tool Cleaning
SSPC SP 6/NACE No.3	(2007) Commercial Blast Cleaning

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 3-301-01	(2023; with Change 6, 2026) Structural Engineering

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR Part 1926, Subpart R	Steel Erection

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Erection and Erection Bracing Drawings; G

SD-02 Shop Drawings

Fabrication Drawings Including Details of Connections; G

SD-03 Product Data

Shop Primer

Welding Electrodes and Rods

Direct Tension Indicator Washers

Non-Shrink Grout

Tension Control Bolts

Recycled Content for Structural Steel; S

Recycled Content for Structural Steel Tubing; S

Recycled Content for Steel Pipe; S

SD-05 Design Data

Shoring and Temporary Bracing; G

SD-06 Test Reports

Bolts, Nuts, and Washers

Weld Inspection Reports

Direct Tension Indicator Washer Inspection Reports

Bolt Testing Reports

SD-07 Certificates

Steel

Bolts, Nuts, and Washers

Galvanizing

AISC Structural Steel Fabricator Quality Certification

AISC Structural Steel Erector Quality Certification

Welding Procedures and Qualifications

Welding Electrodes and Rods

Certified Welding Inspector

NDT Technician

Welding Procedure Specifications (WPS)

1.3 AISC QUALITY CERTIFICATION

Work must be fabricated by an AISC Certified Structural Steel Fabricator, in accordance with AISC 207, Category BU. Submit AISC Structural Steel Fabricator quality certification.

Work must be erected by an AISC Structural Steel Certified Erector, in accordance with AISC 207, Category CSE. Submit AISC Structural Steel erector quality certification.

1.4 QUALITY ASSURANCE

1.4.1 Preconstruction Submittals

1.4.1.1 Erection and Erection Bracing Drawings

Submit for record purposes. Indicate the sequence of erection, temporary shoring and bracing. The erection drawings must conform to ANSI/AISC 303. Erection drawings must be reviewed, stamped and sealed by a registered professional engineer.

1.4.2 Fabrication Drawing Requirements

Submit fabrication drawings for approval prior to fabrication. Prepare in accordance with ANSI/AISC 303, AISC 326 and AISC 325. Fabrication drawings must not be reproductions of contract drawings. Include complete information for the fabrication and erection of the structure's components, including the location, type, and size of bolts, welds, member sizes and lengths, connection details, blocks, copes, and cuts. Use AWS A2.4 standard welding symbols. Shoring and temporary bracing must be designed and sealed by a registered professional engineer and submitted for record purposes, with calculations, as part of the drawings. Clearly highlight any deviations from the details shown on the contract drawings highlighted on the fabrication drawings. Explain the reasons for any deviations from the contract drawings.

1.4.3 Certifications

1.4.3.1 Welding Procedures and Qualifications

Prior to welding, submit certification for each welder stating the type of welding and positions qualified for, the code and procedure qualified under, date qualified, and the firm and individual certifying the qualification tests. If the qualification date of the welder or welding operator is more than 6 months old, the welding operator's qualification certificate must be accompanied by a current certificate by the welder attesting to the fact that he has been engaged in welding since the date of certification, with no break in welding service greater than 6 months.

Conform to all requirements specified in AWS D1.1/D1.1M.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

Provide the structural steel system, including shop primer, complete and ready for use. Provide structural steel systems including design, materials, installation, workmanship, fabrication, assembly, erection, inspection, quality control, and testing in accordance with ANSI/AISC 303,

AISC 360, and UFC 3-301-01 except as modified in this contract.

2.2 STEEL

2.2.1 Structural Steel

Wide flange and WT shapes, ASTM A992/A992M. Angles, Channels and Plates, ASTM A36/A36M. Provide structural steel containing a minimum of 80 percent recycled content. Submit data identifying percentage of recycled content for structural steel.

2.2.2 Structural Steel Tubing

ASTM A500/A500M, Grade C. Provide structural steel tubing containing a minimum of 90 percent recycled content. Submit data identifying percentage of recycled content for structural steel tubing.

2.2.3 Steel Pipe

ASTM A53/A53M, Type E or S, Grade B, weight class STD (Standard) or as indicated. Provide steel pipe containing a minimum of 50 percent recycled content. Submit data identifying percentage of recycled content for steel pipe.

2.3 BOLTS, NUTS, AND WASHERS

Submit the certified manufacturer's mill reports which clearly show the applicable ASTM mechanical and chemical requirements together with the actual test results for the supplied fasteners.

2.3.1 Common Grade Bolts

2.3.1.1 Bolts

ASTM A307, Grade A, plain finish. The bolt heads and the nuts of the supplied fasteners must be marked with the manufacturer's identification mark, the strength grade and type specified by ASTM specifications.

2.3.1.2 Nuts

ASTM A563, Grade A, heavy hex style.

2.3.1.3 Washers

ASTM F844.

2.3.2 High-Strength Bolts

High strength bolts and nuts must be shipped together in the same shipping container. Fasteners indicated to be galvanized shall be tested by the supplier to show that the galvanized nut with the supplied lubricant provided may be rotated from the snug tight condition well in excess of the rotation required for pretentioned installation without stripping. The supplier shall supply nuts that have been lubricated and tested with the supplied bolts.

2.3.2.1 Bolts

ASTM F3125/F3125M, Grade A325M A325, Type 1 Heavy Hex Head Style, plain

finish.

2.3.2.2 Nuts

ASTM A563, Grade and Style as specified in the applicable ASTM bolt standard.

2.3.2.3 Direct Tension Indicator Washers

ASTM F959/F959M. Submit product data for direct tension indicator washers.

2.3.2.4 Washers

ASTM F436/F436M, plain carbon steel.

2.3.3 Tension Control Bolts

ASTM F3125/F3125M, Grade F1852, Type 1, twistoff style assemblies consisting of steel structural bolts with splined ends, heavy-hex carbon steel nuts, and hardened carbon steel washers. Submit product data for tension control bolts.

2.3.4 Foundation Anchorage

2.3.4.1 Anchor Rods

ASTM F1554 Gr 55, Class 1A.

2.3.4.2 Anchor Nuts

ASTM A563, Grade A, hex style.

2.3.4.3 Anchor Washers

ASTM F844.

2.3.4.4 Anchor Plate Washers

ASTM A36/A36M.

2.4 STRUCTURAL STEEL ACCESSORIES

2.4.1 Welding Electrodes and Rods

AWS D1.1/D1.1M. Submit product data for welding electrodes and rods.

2.4.2 Non-Shrink Grout

ASTM C1107/C1107M, with no ASTM C827/C827M shrinkage. Grout must be nonmetallic. Submit product data for non-shrink grout.

2.5 GALVANIZING

ASTM F2329/F2329M, ASTM F1136/F1136M, ASTM F2833 or ASTM B695 for threaded parts or ASTM A123/A123M for structural steel members, as applicable, unless specified otherwise galvanize after fabrication where practicable.

2.6 FABRICATION

Fabrication must be in accordance with the applicable provisions of AISC 325. Fabrication and assembly must be done in the shop to the greatest extent possible. Punch, subpunch and ream, or drill bolt holes perpendicular to the surface of the member.

Compression joints depending on contact bearing must have a surface roughness not in excess of 500 micro inch as determined by ASME B46.1, and ends must be square within the tolerances for milled ends specified in ASTM A6/A6M.

Shop splices of members between field splices will be permitted only where indicated on the Contract Drawings. Splices not indicated require the approval of the Contracting Officer.

2.6.1 Markings

Prior to erection, identify members by a painted erection mark. Connecting parts assembled in the shop for reaming holes in field connections must be match marked with scratch and notch marks. Do not locate erection markings on areas to be welded. Do not locate match markings in areas that will decrease member strength or cause stress concentrations. Affix embossed tags to hot-dipped galvanized members.

2.6.2 Shop Primer

SSPC Paint 20 or SSPC Paint 29, (zinc rich primer). Shop prime structural steel, except as modified herein, in accordance with SSPC PA 1. Do not prime steel surfaces embedded in concrete, galvanized surfaces, or surfaces within 0.5 inch of the toe of the welds prior to welding (except surfaces on which metal decking and shear studs are to be welded). If flash rusting occurs, re-clean the surface prior to application of primer. Apply primer in accordance with endorsement "SPE-P1" of AISC 420 or approved equal NACE or SSPC certification to a minimum dry film thickness of2.0 mil. Submit shop primer product data.

Prime slip critical surfaces with a Class B coating in accordance with AISC 325. Submit test report for Class B coating.

Prior to assembly, prime surfaces which will be concealed or inaccessible after assembly. Do not apply primer in foggy or rainy weather; when the ambient temperature is below 45 degrees F or over 95 degrees F; or when the primer may be exposed to temperatures below 40 degrees F within 48 hours after application, unless approved otherwise by the Contracting Officer. Repair damaged primed surfaces with an additional coat of primer.

2.6.2.1 Cleaning

SSPC SP 6/NACE No.3, except steel exposed in spaces above ceilings, attic spaces, furred spaces, and chases that will be hidden to view in finished construction may be cleaned to SSPC SP 3 when recommended by the shop primer manufacturer. Maintain steel surfaces free from rust, dirt, oil, grease, and other contaminants through final assembly.

2.7 DRAINAGE HOLES

Drill adequate drainage holes to eliminate water traps. Hole diameter must be 1/2 inch and location indicated on the detail drawings. Hole size

and locations must not affect the structural integrity.

PART 3 EXECUTION

3.1 ERECTION

a. Erection of structural steel, except as indicated in item b. below, must be in accordance with the applicable provisions of AISC 325, ANSI/AISC 303 and 29 CFR Part 1926, Subpart R.

After final positioning of steel members, provide full bearing under base plates and bearing plates using nonshrink grout. Place nonshrink grout in accordance with the manufacturer's instructions.

3.1.1 STORAGE

Store the material out of contact with the ground in such manner and location as to minimize deterioration.

3.2 CONNECTIONS

Except as modified in this section, design connections indicated in accordance with AISC 360. Build connections into existing work. Do not tighten anchor bolts set in concrete with impact torque wrenches. Holes must not be cut or enlarged by burning. Bolts, nuts, and washers must be clean of dirt and rust, and lubricated immediately prior to installation.

3.2.1 Common Grade Bolts

Tighten ASTM A307 bolts to a "snug tight" fit. "Snug tight" is the tightness that exists when plies in a joint are in firm contact. If firm contact of joint plies cannot be obtained with a few impacts of an impact wrench, or the full effort of a man using a spud wrench, contact the Contracting Officer for further instructions.

3.2.2 High-Strength Bolts

Provide direct tension indicator washers in all ASTM F3125/F3125M, Grade A325 and Grade A490 bolted connections. Bolts must be installed in connection holes and initially brought to a snug tight fit. After the initial tightening procedure, fully tension bolts, progressing from the most rigid part of a connection to the free edges.

Fastener components shall be protected from dirt and moisture in closed containers at the site of the installation. Fastener components that are not incorporated into the work shall be returned to protected storage at the end of the work shift.

3.2.2.1 Installation of Direct Tension Indicator Washers (DTIW)

Where possible, install the DTIW under the bolt head and tighten the nut. If the DTIW is installed adjacent to the turned element, provide a flat washer between the DTIW and nut when the nut is turned for tightening, and between the DTIW and bolt head when the bolt head is turned for tightening. In addition to the LIW, provide flat washers under both the bolt head and nut when ASTM F3125/F3125M, Grade A490 bolts are used.

3.2.3 Tension Control Bolts

Bolts must be installed in connection holes and initially brought to a snug tight fit. After the initial tightening procedure, fully tension bolts, progressing from the most rigid part of a connection to the free edges.

3.3 GAS CUTTING

Use of gas-cutting torch in the field for correcting fabrication errors is not permitted on any major member in the structural framing. Use of a gas cutting torch will be permitted on minor members not under stress only after approval has been obtained from the Contracting Officer.

3.4 WELDING

Welding must be in accordance with AWS D1.1/D1.1M. Provide AWS D1.1/D1.1M qualified welders, welding operators, and tackers.

Develop and submit the Welding Procedure Specifications (WPS) for all welding, including welding done using prequalified procedures. Submit for approval all WPS, whether prequalified or qualified by testing.

3.4.1 Removal of Temporary Welds, Run-Off Plates, and Backing Strips

Remove only from finished areas. Remove backing strips from bottom flange of moment connections, backgouge the root pass to sound weld metal and reinforce with a 5/16 inch fillet weld minimum.

3.5 SHOP PRIMER REPAIR

Repair shop primer in accordance with the paint manufacturer's recommendation for surfaces damaged by handling, transporting, cutting, welding, or bolting.

3.5.1 Field Priming

Field prime steel exposed to the weather, or located in building areas without HVAC for control of relative humidity. After erection, the field bolt heads and nuts, field welds, and any abrasions in the shop coat must be cleaned and primed with paint of the same quality as that used for the shop coat.

3.6 GALVANIZING REPAIR

Repair damage to galvanized coatings using ASTM A780/A780M zinc rich paint for galvanizing damaged by handling, transporting, cutting, welding, or bolting. Do not heat surfaces to which repair paint has been applied.

3.7 FIELD QUALITY CONTROL

Perform field tests, and provide labor, equipment, and incidentals required for testing. Notify the Contracting Officer in writing of defective welds, bolts, nuts, and washers within 7 working days of the date of the inspection.

3.7.1 Welds

3.7.1.1 Visual Inspection

AWS D1.1/D1.1M. Furnish the services of AWS-certified welding inspectors for fabrication and erection inspection and testing and verification inspections. A Certified Welding Inspector must perform visual inspection on 100 percent of all welds. Document this inspection in the Visual Weld Inspection Log. Submit certificates indicating that certified welding inspectors meet the requirements of AWS QC1.

Inspect proper preparation, size, gaging location, and acceptability of all welds; identification marking; operation and current characteristics of welding sets in use.

3.7.1.2 Nondestructive Testing

Nondestructive testing must be in accordance with AWS D1.1/D1.1M. Ultrasonic testing must be performed in accordance with Table 8.2 or 8.3 of AWS D1.1/D1.1M. Test locations must be as indicated. All personnel performing NDT must be certified in accordance with ANSI/ASNT CP-189 in the method of testing being performed. Submit certificates showing compliance with ANSI/ASNT CP-189 for all NDT technicians. If more than 20 percent of welds made by a welder contain defects identified by testing, then all groove welds made by that welder must be tested by ultrasonic testing, and all fillet welds made by that welder must be inspected by magnetic particle testing (MT) or dye penetrant testing (PT) as approved by the Contracting Officer. When groove welds made by an individual welder are required to be tested, magnetic particle or dye penetrant testing may be used only in areas inaccessible to ultrasonic testing. Retest all repaired areas. Submit weld inspection reports.

Testing frequency: Provide the following types and number of tests:

Test Type	Number of Tests
Ultrasonic	50 percent of CJP Welds
Magnetic Particle	50 percent of PJP and Fillet Welds
Dye Penetrant	50 percent of PJP and Fillet Welds

3.7.2 Direct Tension Indicator Washers

3.7.2.1 Direct Tension Indicator Washer Compression

Test direct tension indicator washers in place to verify that they have been compressed sufficiently to provide the 0.015 inch gap, as required by ASTM F959/F959M. Submit direct tension indicator washer inspection reports.

3.7.3 High-Strength Bolts

3.7.3.1 Testing Bolt, Nut, and Washer Assemblies

Test a minimum of 3 bolt, nut, and washer assemblies from each mill certificate batch in a tension measuring device at the job site prior to the beginning of bolting start-up. Demonstrate that the bolts and nuts, when used together, can develop tension not less than the provisions specified in AISC 360, depending on bolt size and grade. The bolt tension

must be developed by tightening the nut. A representative of the manufacturer or supplier must be present to ensure that the fasteners are properly used, and to demonstrate that the fastener assemblies supplied satisfy the specified requirements. Submit bolt testing reports.

3.7.3.2 Inspection

Inspection procedures must be in accordance with AISC 360. Confirm and report to the Contracting Officer that the materials meet the project specification and that they are properly stored. Confirm that the faying surfaces have been properly prepared before the connections are assembled. Observe the specified job site testing and calibration, and confirm that the procedure to be used provides the required tension. Monitor the work to ensure the testing procedures are routinely followed on joints that are specified to be fully tensioned.

Inspect calibration of torque wrenches for high-strength bolts.

3.7.3.3 Testing

The Government has the option to perform nondestructive tests on 5 percent of the installed bolts to verify compliance with pre-load bolt tension requirements. Provide the required access for the Government to perform the tests. The nondestructive testing will be done in-place using an ultrasonic measuring device or any other device capable of determining in-place pre-load bolt tension. The test locations must be selected by the Contracting Officer. If more than 10 percent of the bolts tested contain defects identified by testing, then all bolts used from the batch from which the tested bolts were taken, must be tested at the Contractor's expense. Retest new bolts after installation at the Contractor's expense.

-- End of Section --

SECTION 05 50 13

MISCELLANEOUS METAL FABRICATIONS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN CONCRETE INSTITUTE (ACI)

ACI 318	(2019; R 2022) Building Code Requirements for Structural Concrete (ACI 318-19) and Commentary (ACI 318R-19)

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

ANSI/AISC 303	(2022) Code of Standard Practice for Structural Steel Buildings and Bridges

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME B18.2.1	(2012; R 2021) Square, Hex, Heavy Hex, and Askew Head Bolts and Hex, Heavy Hex, Hex Flange, Lobed Head, and Lag Screws (Inch Series)
ASME B18.2.2	(2022) Nuts for General Applications: Machine Screw Nuts, and Hex, Square, Hex Flange, and Coupling Nuts (Inch Series)
ASME B18.6.2	(2020) Square Head Set Screws and Slotted Headless Set Screws (Inch Series)
ASME B18.6.3	(2024) Machine Screws, Tapping Screws, and Metallic Drive Screws (Inch Series)
ASME B18.21.1	(2009; R 2016) Washers: Helical Spring-Lock, Tooth Lock, and Plain Washers (Inch Series)
ASME B18.21.2M	(1999; R 2014) Lock Washers (Metric Series)
ASME B18.22M	(1981; R 2017) Metric Plain Washers

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ASSP A10.3	(2020) Safety Requirements for Powder-Actuated Fastening Systems American National Standard for Construction and Demolition Operations

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel
AWS D1.2/D1.2M	(2014; Errata 1 2014; Errata 2 2020) Structural Welding Code - Aluminum

ASTM INTERNATIONAL (ASTM)

ASTM A36/A36M	(2019) Standard Specification for Carbon Structural Steel
ASTM A47/A47M	(1999; R 2022; E 2022) Standard Specification for Ferritic Malleable Iron Castings
ASTM A48/A48M	(2022) Standard Specification for Gray Iron Castings
ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A123/A123M	(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A153/A153M	(2023) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A307	(2023) Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength
ASTM A467/A467M	(2020) Standard Specification for Machine Coil Chain
ASTM A500/A500M	(2023) Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A780/A780M	(2020) Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
ASTM A924/A924M	(2022a) Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM C1513	(2024) Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections

ASTM D1187/D1187M	(1997; R 2018) Standard Specification for Asphalt-Base Emulsions for Use as Protective Coatings for Metal
ASTM E488/E488M	(2022) Standard Test Methods for Strength of Anchors in Concrete Elements
ASTM F1554	(2020) Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength

MASTER PAINTERS INSTITUTE (MPI)

MPI 79	(2016) Primer, Alkyd, Anti-Corrosive for Metal

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM MBG 531	(2017) Metal Bar Grating Manual
NAAMM MBG 532	(2019) Heavy Duty Metal Bar Grating Manual

SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC PA 1	(2024) Shop, Field, and Maintenance Coating of Metals
SSPC SP 3	(2024) Power Tool Cleaning
SSPC SP 6/NACE No.3	(2007) Commercial Blast Cleaning

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Floor Gratings, Installation Drawings; G

Bollards/Pipe Guards; G

Embedded Angles and Plates, Installation Drawings; G

SD-03 Product Data

Floor Gratings; G

Recycled Content; S

SD-07 Certificates

Certificates of Compliance; G

Certified Mill Test Reports for Chemistry and Mechanical Properties; G

1.3 QUALIFICATION OF WELDERS

Qualify procedures and personnel according to the following:

a. AWS D1.1/D1.1M Structural Welding Code - Steel.

b. AWS D1.2/D1.2M Structural Welding Code - Aluminum.

1.4 DELIVERY, STORAGE, AND PROTECTION

Protect from corrosion, deformation, and other types of damage. Store items in an enclosed area free from contact with soil and weather. Remove and replace damaged items with new items.

1.5 MISCELLANEOUS REQUIREMENTS

1.5.1 Fabrication Drawings

Submit fabrication drawings showing layout(s), connections to structural system, and anchoring details as specified in ANSI/AISC 303.

1.5.2 Installation Drawings

Submit templates, erection, and installation drawings indicating thickness, type, grade, class of metal, and dimensions. Show construction details, reinforcement, anchorage, and installation in relation to the building construction.

PART 2 PRODUCTS

2.1 MATERIALS

Provide exposed fastenings of compatible materials (avoid contact of dissimilar metals). Coordinate color and finish with the material to which fastenings are applied. Submit the manufacturer's certified mill reports which clearly show the applicable ASTM mechanical and chemical requirements together with the actual test results for the supplied materials.

2.1.1 Structural Carbon Steel

Provide in accordance with ASTM A36/A36M.

2.1.2 Structural Tubing

Provide in accordance with ASTM A500/A500M.

2.1.3 Steel Pipe

Provide in accordance with ASTM A53/A53M, Type E or S, Grade B.

2.1.4 Fittings for Steel Pipe

Provide standard malleable iron fittings in accordance with ASTM A47/A47M.

2.1.5 Gratings

a. Provide gray cast iron in accordance with ASTM A48/A48M, Class 40.

b. Provide metal plank grating, non-slip requirement, steel in accordance with ASTM A653/A653M, Z275 G90.

c. Provide metal bar type grating in accordance with NAAMM MBG 531 and NAAMM MBG 532.

2.1.6 Anchor Bolts

Provide in accordance with ASTM F1554. Where exposed, provide anchor bolts of the same material, color, and finish as the metal to which they are applied.

2.1.6.1 Adhesive Anchors

Provide 5/8in. diameter adhesive anchors. Minimum concrete embedment of 8 in. Design values listed are as tested in accordance with ASTM E488/E488M.

a. Provide minimum ultimate pullout value of 5,000 lb. Calculate pullout capacity according to ACI 318.

b. Provide minimum ultimate shear value of 5,000 lb. Calculate shear capacity according to ACI 318.

2.1.6.2 Lag Screws and Bolts

Provide in accordance with ASME B18.2.1, type and grade best suited for the purpose.

2.1.6.3 Toggle Bolts

Provide in accordance with ASME B18.2.1.

2.1.6.4 Bolts, Nuts, Studs and Rivets

Provide in accordance with ASME B18.2.2 or ASTM A307.

2.1.6.5 Powder Actuated Fasteners

Follow safety provisions in accordance with ASSP A10.3.

2.1.6.6 Screws

Provide in accordance with ASME B18.2.1, ASME B18.6.2, ASME B18.6.3 and ASTM C1513.

2.1.6.7 Washers

Provide plain washers in accordance with ASME B18.22M, ASME B18.21.1. Provide beveled washers for American Standard beams and channels, square or rectangular, tapered in thickness, and smooth. Provide lock washers in

accordance with ASME B18.21.2M, ASME B18.21.1.

2.2 FABRICATION FINISHES

2.2.1 Galvanizing

Hot-dip galvanize items specified to be zinc-coated, after fabrication where practicable. Provide galvanizing in accordance with ASTM A123/A123M, ASTM A153/A153M, ASTM A653/A653M, or ASTM A924/A924M, Z275 G90.

2.2.2 Galvanize

Anchor bolts, grating fasteners, washers, and parts or devices necessary for proper installation, unless indicated otherwise.

2.2.3 Repair of Zinc-Coated Surfaces

Repair damaged surfaces with galvanizing repair method and paint in accordance with ASTM A780/A780M or by application of stick or thick paste material specifically designed for repair of galvanizing, as approved by Contracting Officer. Clean areas to be repaired and remove slag from welds. Heat, with a torch, surfaces to which stick or paste material will be applied. Heat to a temperature sufficient to melt the metals in the stick or paste. Spread molten material uniformly over surfaces to be coated and wipe off excess material.

2.2.4 Shop Cleaning and Painting

2.2.4.1 Surface Preparation

Blast clean surfaces in accordance with SSPC SP 6/NACE No.3. Surfaces that will be exposed in spaces above ceiling or in attic spaces, crawl spaces, furred spaces, and chases may be cleaned in accordance with SSPC SP 3 in lieu of being blast cleaned. Wash cleaned surfaces which become contaminated with rust, dirt, oil, grease, or other contaminants with solvents until thoroughly clean. Steel to be embedded in concrete must be free of dirt and grease prior to embed. Do not paint or galvanize bearing surfaces, including contact surfaces within slip critical joints. Shop coat these surfaces with rust prevention.

2.2.4.2 Pretreatment, Priming and Painting

Apply pre-treatment, primer, and paint in accordance with manufacturer's printed instructions.

2.2.5 Nonferrous Metal Surfaces

Protect by plating, anodic, or organic coatings.

2.3 FLOOR GRATINGS AND ROOF WALKWAYS

Design steel grating in accordance with NAAMM MBG 531 and NAAMM MBG 532 for bar type gratings, or in accordance with manufacturer's charts for plank grating. Galvanize steel floor gratings.

a. Design floor gratings to support a stress live load of 40 pounds per square foot for the spans indicated, with maximum deflection of L/240.

b. In accordance with NAAMM MBG 531, NAAMM MBG 532, band edges of grating

with bars of the same size as the bearing bars. Weld banding in accordance with the manufacturer's standard for trim. Design tops of bearing bars, cross or intermediate bars to be in the same plane and to match grating finish.

c. NAAMM MBG 531, NAAMM MBG 532, band ends of gratings with bars of the same or greater thickness than the metal used for grating. Weld banding bars to bearing bars or channels at least every fourth bar or channel and in every corner. Tack weld intervening bars or channels. Band diagonal or round cuts by welding bars of the same or greater thickness as the grating and in accordance with the manufacturer's standard for trim.

d. Anchor gratings to structural members with bolts, toggle bolts, or expansion shields and bolts.

e. Provide slip resistant surface finishes.

2.4 BOLLARDS/PIPE GUARDS

Provide 12 and 6 inch galvanized weight steel pipe in accordance with ASTM A53/A53M. Anchor posts in concrete as indicated and fill solidly with concrete.

2.5 MISCELLANEOUS PLATES AND SHAPES

Submit installation drawings for and provide items that do not form a part of the structural steel framework, such as miscellaneous mountings and frames.

Provide angles and plates in accordance with ASTM A36/A36M, for embedment as indicated. Hot dip galvanize embedded items exposed to the elements in accordance with ASTM A123/A123M unless noted otherwise.

2.6 SAFETY CHAINS

Construct safety chains of galvanized steel, straight link type, minimum 3/16 inch diameter, with a minimum of twelve links per one foot, and snap hooks on each end. Test safety chain in accordance with ASTM A467/A467M, Class CS. Provide boat type snap hooks. Provide galvanized 3/8 inch bolt with 3/4 inch eye diameter for attachment of chain, anchored as indicated. Supply two chains, 4 inches longer than the anchorage spacing, for each guarded area.

PART 3 EXECUTION

3.1 GENERAL INSTALLATION REQUIREMENTS

Install items at locations indicated in accordance with manufacturer's instructions. Verify all field dimensions prior to fabrication. Include materials and parts necessary to complete each assembly, whether indicated or not. Miss-alignment and miss-sizing of holes for fasteners is cause for rejection. Conceal fastenings where practicable. Joints exposed to weather must be watertight.

3.2 WORKMANSHIP

Provide miscellaneous metalwork that is true and accurate in shape, size, and profile. Make angles and lines continuous and straight. Make curves

consistent, smooth and unfaceted. Provide continuous welding along the entire area of contact except where tack welding is permitted. Do not tack weld exposed connections. Unless otherwise indicated and approved, provide a smooth finish on exposed surfaces. Provide countersunk rivets where exposed. Provide coped and mitered corner joints aligned flush and without gaps. Do not weld, cut or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are bolted or screwed field connections.

3.3 ANCHORAGE, FASTENINGS, AND CONNECTIONS

Provide anchorage as necessary, whether indicated or not, for fastening miscellaneous metal items securely in place. Include slotted inserts, expansion shields, powder-driven fasteners, toggle bolts (when approved for concrete), through bolts for masonry, headed shear studs, machine and carriage bolts for steel, through bolts, lag bolts, and screws for wood. Do not use wood plugs. Provide non-ferrous attachments for non-ferrous metal. Provide exposed fastenings of compatible materials (avoid contact of dissimilar metals), that generally match in color and finish the surfaces to which they are applied. Conceal fastenings where practicable. Provide all fasteners flush with the surfaces they fasten, unless indicated otherwise.

3.4 BUILT-IN WORK

Where necessary and not otherwise indicated, form built-in metal work for anchorage with concrete or masonry. Provide built-in metal work in ample time for securing in place as the work progresses.

3.5 WELDING

Perform welding, welding inspection, and corrective welding in accordance with AWS D1.1/D1.1M. Use continuous welds on all exposed connections. Grind visible welds smooth in the finished installation. Provide welded headed shear studs in accordance with AWS D1.1/D1.1M, Clause 7, except as otherwise specified. Provide in accordance with the safety requirements of EM 385-1-1.

3.6 DISSIMILAR METALS

Where dissimilar metals are in contact, protect surfaces with a coating in accordance with MPI 79 to prevent galvanic or corrosive action. Where aluminum is in contact with concrete, plaster, mortar, masonry, wood, or absorptive materials subject to wetting, protect in accordance with ASTM D1187/D1187M, asphalt-base emulsion. Clean surfaces with metal shavings from installation at the end of each work day.

3.7 PREPARATION

3.7.1 Material Coatings and Surfaces

Remove rust preventive coating just prior to field erection, using a remover approved by the metal manufacturer. Surfaces, when assembled, must be free of rust, grease, dirt and other foreign matter.

3.7.2 Environmental Conditions

Do not clean or paint surfaces when damp or exposed to foggy or rainy weather, when metallic surface temperature is less than minus 5 degrees F

above the dew point of the surrounding air, or when surface temperature is below 45 degrees F or over 95 degrees F, unless approved by the Contracting Officer. Metal surfaces to be painted must be dry for a minimum of 48 hours prior to the application of primer or paint.

3.8 INSTALLATION OF BOLLARDS/PIPE GUARDS

Set bollards/pipe guards vertically in concrete piers. Fill hollow cores with concrete having a compressive strength of 3000 psi.

3.9 MOUNTING OF SAFETY CHAINS

Provide safety chains where indicated. Mount the top chain 3 feet 6 inches above the floor and mount the lower chain 2 feet above the floor.

3.10 REPAIRS

a. Touchup Painting:

(1) Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with same material as used for shop painting to comply with SSPC PA 1 for touching up shop-painted surfaces.

b. Galvanized Surfaces:

(1) Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

-- End of Section --

SECTION 05 51 33

METAL LADDERS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN LADDER INSTITUTE (ALI)

ALI A14.3	(2008; R 2018) Ladders - Fixed - Safety Requirements

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ASSP Z359.16	(2016) Safety Requirements for Climbing Ladder Fall Arrest Systems

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel

ASTM INTERNATIONAL (ASTM)

ASTM A36/A36M	(2019) Standard Specification for Carbon Structural Steel
ASTM A47/A47M	(1999; R 2022; E 2022) Standard Specification for Ferritic Malleable Iron Castings
ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A123/A123M	(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A153/A153M	(2023) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A500/A500M	(2023) Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM A780/A780M	(2020) Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
ASTM A924/A924M	(2022a) Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM D1187/D1187M	(1997; R 2018) Standard Specification for Asphalt-Base Emulsions for Use as Protective Coatings for Metal

MASTER PAINTERS INSTITUTE (MPI)

MPI 79	(2016) Primer, Alkyd, Anti-Corrosive for Metal

SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC SP 3	(2024) Power Tool Cleaning
SSPC SP 6/NACE No.3	(2007) Commercial Blast Cleaning

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.23	(Nov 2016) Ladders
29 CFR 1910.28	(Nov 2016) Duty to Have Fall Protection and Falling Object Protection
29 CFR 1910.29	(Nov 2016) Fall Protection System and Falling Object Protection - Criteria and Practices

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Ladders, Installation Drawings

SD-03 Product Data

Ladders

Ladder Safety Devices (Climbing Ladder Fall Arrest Systems)

SD-07 Certificates

Fabricator Certification for Ladder Assembly

1.3 CERTIFICATES

Provide fabricator certification for ladder assembly stating that the ladder and associated components have been fabricated according to the requirements of 29 CFR 1910.23.

1.4 QUALIFICATION OF WELDERS

Qualify welders in accordance with AWS D1.1/D1.1M. Use procedures, materials, and equipment of the type required for the work.

1.5 DELIVERY, STORAGE, AND PROTECTION

Protect from corrosion, deformation, and other types of damage. Store items in an enclosed area free from contact with soil and weather. Remove and replace damaged items with new items.

PART 2 PRODUCTS

2.1 SUSTAINABILITY REQUIREMENTS AND REPORTING

2.1.1 Recycled Content of Products

Provide products with post-consumer recycled content plus one-half of pre-consumer recycled content to the greatest extent possible, but not less than 10 percent

2.2 MATERIALS

2.2.1 Structural Carbon Steel

ASTM A36/A36M.

2.2.2 Structural Tubing

ASTM A500/A500M.

2.2.3 Steel Pipe

ASTM A53/A53M, Type E or S, Grade B.

2.2.4 Fittings for Steel Pipe

Standard malleable iron fittings ASTM A47/A47M.

2.3 FABRICATION FINISHES

2.3.1 Galvanizing

Hot-dip galvanize items specified to be zinc-coated, after fabrication where practicable. Galvanizing: ASTM A123/A123M, ASTM A153/A153M, ASTM A653/A653M or ASTM A924/A924M, G90, as applicable.

2.3.2 Galvanize

Anchor bolts, washers, and parts or devices necessary for proper installation, unless indicated otherwise.

2.3.3 Repair of Zinc-Coated Surfaces

Repair damaged surfaces with galvanizing repair method and paint conforming to ASTM A780/A780M or by application of stick or thick paste material specifically designed for repair of galvanizing, as approved by Contracting Officer. Clean areas to be repaired and remove slag from welds. Heat surfaces to which stick or paste material is applied, with a torch to a temperature sufficient to melt the metallics in stick or paste; spread molten material uniformly over surfaces to be coated and wipe off excess material.

2.3.4 Shop Cleaning and Painting

2.3.4.1 Surface Preparation

Blast clean surfaces in accordance with SSPC SP 6/NACE No.3. Surfaces that will be exposed in spaces above ceiling or in attic spaces, crawl spaces, furred spaces, and chases may be cleaned in accordance with SSPC SP 3 in lieu of being blast cleaned. Wash cleaned surfaces which become contaminated with rust, dirt, oil, grease, or other contaminants with solvents until thoroughly clean.

2.3.4.2 Pretreatment, Priming and Painting

Apply pretreatment, primer, and paint in accordance with manufacturer's printed instructions. On surfaces concealed in the finished construction or not accessible for finish painting, apply an additional prime coat to a minimum dry film thickness of 1.0 mil. Tint additional prime coat with a small amount of tinting pigment.

2.3.5 Nonferrous Metal Surfaces

Protect by plating, anodic, or organic coatings.

2.4 LADDERS

Fabricate vertical ladders conforming to 29 CFR 1910.23 and Section 5 of ALI A14.3. Design assembly, including rung connections and methods of attachment, to support a live load of 300 pounds per rung, or 1000 pounds point load, or 100 pounds per square foot load applied downward. Ladders requiring a "Safety Device" must have stringers and rungs that meet the minimum strength requirements of the Safety Device anchor points dynamic loading. Ladder rungs, step and cleats must be spaced not less than 10 inches and not more than 16 inches wide (measured before installation of ladder safety system), spaced no more than 14 inches apart, plug welded or shouldered and headed into stringers. Install ladders so that the maximum perpendicular distance from the centerline of the steps or rungs, or grab bars, or both, to the nearest permanent object in the back of the ladder or to the finished wall surface will not be less than 7 inches, except for the elevator pit ladders, which have a minimum perpendicular distance of 4.5 inches. Provide heavy clip angles riveted or bolted to the stringer and drilled for not less than two 1/2 inch diameter expansion bolts as indicated. Provide intermediate clip angles not over 48 inches on centers. The top rung of the ladder must be level with the top of the access level, parapet or landing served by the ladder except for hatches or wells. Extend the side rails of through or side step ladders 42 inches above the access level. Provide ladder access protective swing gates at the top of access/egress level. The drawings must indicate ladder locations and details of critical dimensions and materials.

2.4.1 Phasing out of Ladder Cages and Wells (29 CFR 1910.28, Nov 2016)

Conform to 29 CFR 1910.28 (Nov 2016).

Each newly installed fixed ladder over 20 feet in length must be equipped with a personal fall arrest system or climbing ladder fall arrest system (ladder safety device), cages and wells can still be utilized, but will not qualify as fall protection. When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or climbing ladder fall arrest system (ladder safety device) must be installed in at least that section of the fixed ladder, cage, or well where the replacement is located. The minimum strength requirements of the safety device anchor points dynamic loading must be coordinated with existing rungs and stringers to confirm they have capacity. On and after November 18, 2036, all fixed ladders must only be equipped with a personal fall arrest system or a ladder safety device (climbing ladder Fall Arrest System).

2.4.2 Ladder Safety Devices (Climbing Ladder Fall Arrest Systems)

Conform to 29 CFR 1910.29, Section 7 of ALI A14.3 and ASSP Z359.16. Install ladder safety devices on ladders over 20 feet long or more. The ladder safety systems must meet the design requirement of the ladders which they serve. The ladder safety system must be capable of sustaining a minimum static load of four personnel that may be attached to the fall safety device and climb the ladder at one time. The ladder must have ladder members or anchor points that meet the minimum loading requirements as defined by the safety device and the ladder must be designed to handle the dynamic load being applied in the event of a fall Each ladder safety system must allow the worker to climb up and down using both hands and does not require the employee continuously, hold, push, or pull any part of the system while climbing. The connection between the carrier or lifeline and the point of attachment to the body harness does not exceed 9 inches. The ladder safety system consists of a rigid or flexible carrier. Mountings for the rigid carries are attached at each end of the carrier, with intermediate mountings spaced as necessary, along the entire length of the carrier. Mountings for flexible carrier are attached at each end of the carrier and cable guides for flexible carriers are installed at least 25 feet apart but not more than 40 feet apart along the entire length of the carrier. The design and installation of mountings and cable guides does not reduce the design strength of the ladder.

PART 3 EXECUTION

3.1 GENERAL INSTALLATION REQUIREMENTS

Install items at locations indicated, according to manufacturer's instructions. Verify all measurements and take all field measurements necessary before fabrication. Provide exposed fastenings of compatible materials, generally matching in color and finish, and harmonize with the material to which fastenings are applied. Include materials and parts necessary to complete each item, even though such work is not definitely shown or specified. Poor matching of holes for fasteners will be cause for rejection. Conceal fastenings where practicable. Thickness of metal and details of assembly and supports must provide strength and stiffness. Formed joints exposed to the weather to exclude water. Items listed below require additional procedures.

3.2 WORKMANSHIP

Metalwork must be well formed to shape and size, with sharp lines and angles and true curves. Drilling and punching must produce clean true lines and surfaces. Continuously weld along the entire area of contact. Do not tack weld exposed connections of work in place. Grind exposed welds smooth. Provide smooth finish on exposed surfaces of work in place, unless otherwise approved. Where tight fits are required, mill joints. Cope or miter corner joints, well formed, and in true alignment. Install in accordance with manufacturer's installation instructions and approved drawings, cuts, and details.

3.3 ANCHORAGE, FASTENINGS, AND CONNECTIONS

Provide anchorage where necessary for fastening metal items securely in place. Include for anchorage not otherwise specified or indicated slotted inserts, expansion anchors, and powder-actuated fasteners, when approved for concrete; toggle bolts and through bolts for masonry; machine bolts, carriage bolts and powder-actuated threaded studs for steel; through bolts, lag bolts, and screws for wood. Do not use wood plugs in any material. Provide non-ferrous attachments for non-ferrous metal. Make exposed fastenings of compatible materials, generally matching in color and finish, to which fastenings are applied. Conceal fastenings where practicable.

3.4 WELDING

Perform welding, welding inspection, and corrective welding, in accordance with AWS D1.1/D1.1M. Use continuous welds on all exposed connections. Grind visible welds smooth in the finished installation.

3.5 FINISHES

3.5.1 Dissimilar Materials

Where dissimilar metals are in contact, protect surfaces with a coat conforming to MPI 79 to prevent galvanic or corrosive action. Where aluminum is in contact with concrete, plaster, mortar, masonry, wood, or absorptive materials subject to wetting, protect with ASTM D1187/D1187M, asphalt-base emulsion.

3.6 LADDERS

Secure to the adjacent construction with the clip angles attached to the stringer. Install intermediate clip angles not over 48 inches on center. Install brackets as required for securing of ladders welded or bolted to structural steel or built into the masonry or concrete. Ends of ladders must not rest upon floor.

-- End of Section --

SECTION 05 52 00

METAL RAILINGS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 325	(2017) Steel Construction Manual
AISC 326	(2009) Detailing for Steel Construction

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7-22	(2022; Supp 1 2023; Supp 2 2023; Supp 3 2025) Minimum Design Loads and Associated Criteria for Buildings and Other Structures

AMERICAN WELDING SOCIETY (AWS)

AWS A2.4	(2012) Standard Symbols for Welding, Brazing and Nondestructive Examination
AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel

ASTM INTERNATIONAL (ASTM)

ASTM A36/A36M	(2019) Standard Specification for Carbon Structural Steel
ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A108	(2024) Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished
ASTM A153/A153M	(2023) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A283/A283M	(2024) Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates
ASTM A467/A467M	(2020) Standard Specification for Machine Coil Chain
ASTM A500/A500M	(2023) Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and

	Shapes
ASTM A512	(2006; R 2012) Standard Specification for Cold-Drawn Buttweld Carbon Steel Mechanical Tubing
ASTM A575	(2020) Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM AMP 521	(2001; R 2012) Pipe Railing Systems Manual

1.2 ADMINISTRATIVE REQUIREMENTS

1.2.1 Preinstallation Meetings

Within 60 days of contract award, submit fabrication drawings to the Contracting Officer for the following items:

a. Iron and steel hardware

b. Steel shapes, plates, bars and strips

c. Steel railings and handrails

d. Anchorage and fastening systems

Submit manufacturer's catalog data, including two copies of manufacturers specifications, load tables, dimension diagrams, and anchor details for the following items:

a. Structural-steel plates, shapes, and bars

b. Structural-steel tubing

c. Cold-finished steel bars

d. Hot-rolled carbon steel bars

e. Cold-drawn steel tubing

f. Protective coating

g. Steel railings and handrails

h. Anchorage and fastening systems

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Fabrication Drawings; G

Iron and Steel Hardware; G

Steel Shapes, Plates, Bars and Strips; G

SD-03 Product Data

Protective Coating; G

Steel Railings and Handrails; G

Anchorage and Fastening Systems; G

SD-06 Test Reports

Welding Inspections; G

Mill Test Reports; G

SD-07 Certificates

Welder Qualification; G

SD-08 Manufacturer's Instructions

Installation Instructions

1.4 QUALITY CONTROL

1.4.1 Welding Procedures

Section 05 05 23.16 STRUCTURAL WELDING applies to work specified in this section.

Submit results of welding inspections testing in accordance with AWS D1.1/D1.1M by an approved testing laboratory at the Contractor's expense. Provide laboratory welding inspection results to Contracting Officer.

1.4.2 Welder Qualification

Submit certified welder qualification by tests in accordance with AWS D1.1/D1.1M, or under an equivalent approved qualification test. In addition, perform tests on test pieces in positions and with clearances equivalent to those actually encountered. If a test weld fails to meet requirements, conduct an immediate retest of two test welds and ensure that each test weld passes. Failure in the immediate retest will require that the welder be retested after further practice or training and make a complete set of test welds.

1.5 QUALITY ASSURANCE

1.5.1 Fabrication Drawing Requirements

Submit fabrication drawings for approval prior to fabrication. Prepare in accordance with AISC 325, AISC 326, ASCE 7-22, and State of TX Building Code. Fabrication drawings will not be reproductions of contract drawings. Include complete information for the fabrication and erection of the

structure's components, including the location, type, and size of bolts, welds, member sizes and lengths, connection details, blocks, copes, and cuts. Use AWS A2.4 standard welding symbols. Clearly highlight any deviations from the details shown on the contract drawings highlighted on the fabrication drawings. Explain the reasons for any deviations from the contract drawings.

PART 2 PRODUCTS

2.1 FABRICATION

Preassemble items in the shop to the greatest extent possible. Disassemble units only to the extent necessary for shipping and handling. Clearly mark units for reassembly and coordinated installation.

For the fabrication of work exposed to view, use only materials that are smooth and free of surface blemishes, including pitting, seam marks, roller marks, rolled trade names, and roughness. Remove blemishes by grinding, or by welding and grinding, before cleaning, treating, and applying surface finishes, including zinc coatings.

Provide railing and handrail detail plans and elevations at not less than 1 inch to 1 foot. Provide details of sections and connections at not less than 3 inches to 1 foot. Also detail setting drawings, diagrams, templates for installation of anchorages, including concrete inserts, anchor bolts, and miscellaneous metal items having integral anchors.

Use materials of size and thicknesses indicated or, if not indicated, of the size and thickness necessary to produce adequate strength and durability in the finished product for its intended use. Work the materials to the dimensions indicated on approved detail drawings, using proven details of fabrication and support. Use the type of materials indicated or specified for the various components of work.

Form exposed work true to line and level, with accurate angles and surfaces and straight sharp edges. Ensure that all exposed edges are eased to a radius of approximately 1/32 inch. Bend metal corners to the smallest radius possible without causing grain separation or otherwise impairing the work.

Weld corners and seams continuously and in accordance with the recommendations of AWS D1.1/D1.1M. Grind exposed welds smooth and flush to match and blend with adjoining surfaces.

Form the exposed connections with hairline joints that are flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of the type indicated or, if not indicated, use countersunk Phillips flathead screws or bolts.

Provide anchorage of the type indicated and coordinated with the supporting structure. Fabricate anchoring devices and space as indicated and as required to provide adequate support for the intended use of the work.

Use hot-rolled steel bars for work fabricated from bar stock unless work is indicated or specified to be fabricated from cold-finished or cold-rolled stock.

2.1.1 Steel Handrails

Fabricate joint posts, rail, and corners by one of the following methods:

a. Flush-type rail fittings of commercial standard, welded and ground smooth, with railing splice locks secured with 3/8 inch hexagonal-recessed-head setscrews.

b. Mitered and welded joints made by fitting post to top rail and intermediate rail to post, mitering corners, groove-welding joints, and grinding smooth. Butt railing splices and reinforce them by a tight-fitting interior sleeve not less than 6 inches long.

c. Railings may be bent at corners in lieu of jointing, provided that bends are made in suitable jigs and the pipe is not crushed.

2.1.2 Protective Coating

Shop-prime the steelwork as indicated in accordance with Section 09 90 00 PAINTS AND COATINGS except the following:

a. Steel surfaces encased in concrete

b. Steel surfaces for welding

c. High-strength bolt-connected contact surfaces

2.2 COMPONENTS

2.2.1 Structural Steel Plates, Shapes and Bars

Provide structural-size shapes and plates, except plates to be bent or cold-formed, conforming to ASTM A36/A36M, unless otherwise noted.

Provide steel plates, to be bent or cold-formed, conforming to ASTM A283/A283M, Grade C.

Provide steel bars and bar-size shapes conforming to ASTM A36/A36M, unless otherwise noted.

2.2.2 Structural-Steel Tubing

Provide structural-steel tubing, hot-formed, welded or seamless, conforming to ASTM A500/A500M, Grade B, unless otherwise noted.

2.2.3 Hot-Rolled Carbon Steel Bars

Provide bars and bar-size shapes conforming to ASTM A575, grade as selected by the fabricator.

2.2.4 Cold-Finished Steel Bars

Provide cold-finished steel bars conforming to ASTM A108, grade as selected by the fabricator.

2.2.5 Cold-Drawn Steel Tubing

Provide tubing conforming to ASTM A512, sunk-drawn, butt-welded, cold-finished, and stress-relieved.

2.2.6 Steel Pipe

Provide pipe conforming to ASTM A53/A53M, type as selected, Grade B; primed finish, unless galvanizing is required; standard weight (Schedule 40).

2.2.7 Fasteners

Provide galvanized zinc-coated fasteners in accordance with ASTM A153/A153M used for exterior applications or where built into exterior walls or floor systems. Select fasteners for the type, grade, and class required for the installation of steel stair items.

2.2.8 Steel Railings And Handrails

Design handrails to resist a concentrated load of 200 lb in any direction at any point of the top of the rail or 50 lb per foot applied horizontally to the top of the rail, whichever is more severe. NAAMM AMP 521, provide the same size rail and post. Provide pipe collars of the same material and finish as the handrail and posts.

2.2.8.1 Steel Handrails

Provide steel handrails, including inserts in concrete, steel pipe conforming to ASTM A53/A53M or structural tubing conforming to ASTM A500/A500M, Grade A or B of equivalent strength. Provide steel railings of 2 inch nominal size, hot-dip galvanized.

Provide kickplates between railing posts where indicated, and consisting of 3/16 inch steel flat bars not less than 4 inches high. Secure kickplates as indicated.

2.2.9 Safety Chains

Provide safety chains of galvanized steel, straight-link type, 3/16 inch diameter, with at least 12 links per foot, and with snap hooks on each end. Test safety chain in accordance with ASTM A467/A467M, Class CS. Provide snap hooks of boat type. Provide galvanized 3/8 inch bolt with 3/4 inch eye diameter for attachment of chain, anchored as indicated. Supply two chains, 4 inches longer than the anchorage spacing, for each guarded area. Locate safety chain where indicated. Mount the top chain 3 feet 6 inches above the floor and mount the lower chain 2 feet above the floor.

2.3 Mill Test Reports

Provide mill test reports for structural steel plates, shapes, and bars structural steel tubinghot-rolled carbon steel barscold-drawn steel tubing. Mill test report will include but is not limited to material heat number, material grade, edition year and type of specification met, material dimension, mechanical properties, chemical analysis, heat treatment (if applicable), and certified inspector signature.

PART 3 EXECUTION

3.1 PREPARATION

Adjust railings and handrails before securing in place in order to ensure

proper matching at butting joints and correct alignment throughout their length. Space posts not more than 6 feet on center. Plumb posts in each direction. Secure posts and rail ends to building construction as follows:

a. Anchor posts to steel as indicated.

b. Anchor rail ends to steel with oval or round steel flanges welded to tail ends and bolted or welded to the structural-steel members.

Install toe boards and brackets where indicated. Make splices, where required, at expansion joints. Install removable sections as indicated.

3.2 INSTALLATION

Submit manufacturer's installation instructions for the following products to be used in the fabrication of steel:

a. Structural-steel plates, shapes, and bars

b. Structural-steel tubing

c. Cold-finished steel bars

d. Hot-rolled carbon steel bars

e. Cold-drawn steel tubing

f. Protective coating

g. Steel railings

h. Anchorage and fastening systems

Provide complete, detailed fabrication and installation drawings for all iron and steel hardware, and for all steel shapes, plates, bars, and strips used in accordance with the design specifications cited in this section.

3.2.1 Steel Handrail

Install handrail as indicated.

3.2.2 Touchup Painting

Immediately after installation, clean field welds, bolted connections, abraded areas of the shop paint, and exposed areas painted with the paint used for shop painting. Apply paint by brush or spray to provide a minimum dry-film thickness of 2 mils.

3.3 FIELD QUALITY CONTROL

3.3.1 Field Welding

Ensure that procedures of manual shielded metal arc welding, appearance and quality of welds made, and methods used in correcting welding work comply with AWS D1.1/D1.1M.

-- End of Section --

SECTION 07 21 16

MINERAL FIBER BLANKET INSULATION

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 C665	(2024) Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing
ASTM C930	(2019; R 2025) Standard Classification of Potential Health and Safety Concerns Associated with Thermal Insulation Materials and Accessories
ASTM D5359	(1998; R 2021) Standard Specification for Glass Cullet Recovered from Waste for Use in Manufacture of Glass Fiber
ASTM E84	(2024) Standard Test Method for Surface Burning Characteristics of Building Materials
ASTM E136	(2024c) Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750 Degrees C

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

CDPH SECTION 01350	(2017; Version 1.2) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers

GREEN SEAL (GS)

GS-36	(2013) Adhesives for Commercial Use

SCIENTIFIC CERTIFICATION SYSTEMS (SCS)

SCS	SCS Global Services (SCS) Indoor Advantage

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

SCAQMD Rule 1168	(2022) Adhesive and Sealant Applications

U.S. DEPARTMENT OF ENERGY (DOE)

Energy Star	Energy Star Energy Efficiency Labeling System (FEMP)

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.134	Respiratory Protection

UL SOLUTIONS (UL)

UL 2818	(2022) GREENGUARD Certification Program For Chemical Emissions For Building Materials, Finishes And Furnishings

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Blanket Insulation; G, AE

Recycled Content for Insulation Materials; S

Energy Star Label for Insulation Materials; S

Accessories

SD-07 Certificates

Indoor Air Quality for Insulation Materials; S

Indoor Air Quality for Adhesives; S

SD-08 Manufacturer's Instructions

Insulation

1.3 CERTIFICATIONS

Submit required indoor air quality certifications and validations in one submittal package.

1.3.1 Insulation Products

Provide product certified to meet indoor air quality requirements by UL 2818(Greenguard) Gold, SCS Global Services Indoor Advantage Gold or provide certification by other third-party programs. Provide current product certification from certification body.

1.3.2 Adhesives and Sealants

Provide products certified to meet indoor air quality requirements by

UL 2818 (Greenguard) Gold, SCS Global Services Indoor Advantage Gold or provide certification or validation by other third-party programs that products meet the requirements of this Section. Provide current product certification documentation from certification body. When product does not have certification, provide validation that product meets the indoor air quality product requirements cited herein.

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Delivery

Deliver materials to site in original sealed wrapping bearing manufacturer's name and brand designation, specification number, type, grade, R-value, and class. Store and handle to protect from damage. Do not allow insulation materials to become wet, soiled, crushed, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storing, and protecting of materials before and during installation.

1.4.2 Storage

Inspect materials delivered to the site for damage; unload and store out of weather in manufacturer's original packaging. Store only in dry locations, not subject to open flames or sparks, and easily accessible for inspection and handling.

1.5 SAFETY PRECAUTIONS

1.5.1 Respirators

Provide installers with dust/mist respirators, training in their use, and protective clothing, all approved by National Institute for Occupational Safety and Health (NIOSH)/Mine Safety and Health Administration (MSHA) in accordance with 29 CFR 1910.134.

1.5.2 Other Safety Concerns

Consider other safety concerns and measures as outlined in ASTM C930.

PART 2 PRODUCTS

2.1 BLANKET INSULATION

ASTM C665, Type II, blankets with non-reflecting coverings ; Class A, membrane-faced surface with a flame spread of 25 or less, except a flame spread rating of 25 or less and a smoke developed rating of 150 or less when tested in accordance with ASTM E84.

Provide insulation with R-Value as indicated on drawings

2.1.1 Recycled Materials

Provide insulation materials containing the following minimum percentage of recycled material content by weight:

a. Fiberglass: 20 percent glass cullet complying with ASTM D5359

b. Mineral wool: 75 percent recovered materials content

Provide data identifying percentage of recycled content for insulation materials.

2.1.2 Energy Star

Provide insulation materials that are Energy Star labeled. Provide data identifying Energy Star label for insulation materials.

2.1.3 Prohibited Materials

Do not provide asbestos-containing materials.

2.1.4 Reduced Volatile Organic Compounds (VOC) for Insulation Materials

Provide certification of indoor air quality for insulation materials.

2.2 BLOCKING

Wood, metal, unfaced mineral fiber blankets in accordance with ASTM C665, Type I, or other approved materials. Use only non-combustible materials meeting the requirements of ASTM E136 for blocking around chimneys and heat producing devices.

2.3 ACCESSORIES

2.3.1 Adhesive

As recommended by the insulation manufacturer. Provide non-aerosol adhesive products used on the interior of the building (defined as inside of the weatherproofing system) that meet either emissions requirements of CDPH SECTION 01350 (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of SCAQMD Rule 1168. Provide aerosol adhesives used on the interior of the building that meet either emissions requirements of CDPH SECTION 01350 (use the office or classroom requirements, regardless of space type) or VOC content requirements of GS-36. Provide certification or validation of indoor air quality for adhesives.

2.3.2 Mechanical Fasteners

Corrosion resistant fasteners as recommended by the insulation manufacturer.

2.3.3 Wire Mesh

Corrosion resistant and as recommended by the insulation manufacturer.

PART 3 EXECUTION

3.1 EXISTING CONDITIONS

Before installing insulation, ensure that surfaces that will be in contact with the insulation are dry and free of projections which could cause voids, compressed insulation, or punctured vapor retarders. If moisture or other conditions are found that do not allow the workmanlike installation of the insulation, do not proceed but notify Contracting Officer of such conditions.

3.2 INSTALLATION

3.2.1 Insulation

Install and handle insulation in accordance with manufacturer's instructions. Keep material dry and free of extraneous materials. Any materials that show visual evidence of biological growth due to presence of moisture must not be installed on the building project. Ensure personal protective clothing and respiratory equipment is used as required. Observe safe work practices.

3.2.1.1 Electrical wiring

Do not install insulation in a manner that would sandwich electrical conductors, that are not installed in conduit, between two layers of insulation.

3.2.1.2 Continuity of Insulation

Install blanket insulation to butt tightly against adjoining blankets and to studs, rafters, joists, sill plates, headers and any obstructions. Provide continuity and integrity of insulation at corners, wall to ceiling joints, roof, and floor. Avoid creating thermal bridges.

3.2.1.3 Installation at Bridging and Cross Bracing

Insulate at bridging and cross bracing by splitting blanket vertically at center and packing one half into each opening. Butt insulation at bridging and cross bracing; fill in bridged area with loose or scrap insulation.

3.2.1.4 Sizing of Blankets

Provide only full width blankets when insulating between trusses, joists, or studs. Size width of blankets for a snug fit where trusses, joists or studs are irregularly spaced.

3.2.1.5 Installation of Sill Sealer

Size sill sealer insulation and place insulation over top of masonry or concrete perimeter walls or concrete perimeter floor slab on grade. Fasten sill plate over insulation.

-- End of Section --

SECTION 07 27 10

BUILDING AIR BARRIER SYSTEM

PART 1 GENERAL

1.1 SUMMARY

This Section specifies the construction and quality control of the installation of an air barrier system. Construct the air barrier system indicated, taking responsibility for the means, methods, and workmanship of the installation of the air barrier system. The air barrier must be contiguous and connected across all surfaces of the enclosed air barrier envelope indicated. The maximum leakage requirements of individual air barrier components and materials are specified in the other specification sections covering these items.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referenced within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D4541	(2022) Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
ASTM E96/E96M	(2024a) Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials
ASTM E2178	(2021a) Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials
ASTM E2357	(2018) Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 285	(2023) Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components

1.3 DEFINITIONS

The following terms as they apply to this section:

1.3.1 Air Barrier Accessory

Products designated to maintain air tightness between air barrier

materials, air barrier assemblies and air barrier components, to fasten them to the structure of the building, or both (e.g., sealants, tapes, backer rods, transition membranes, fasteners, strapping, primers).

1.3.2 Air Barrier Assembly

The combination of air barrier materials and air barrier accessories that are designated and designed within the environmental separator to act as a continuous barrier to the movement of air through the environmental separator.

1.3.3 Air Barrier Component

Pre-manufactured elements such as windows, doors, dampers and service elements that are installed in the environmental separator.

1.3.4 Air Barrier Envelope

The combination of air barrier assemblies and air barrier components, connected by air barrier accessories that are designed to provide a continuous barrier to the movement of air through an environmental separator. There may be more than one air barrier envelope in a single building. Also known as Air Barrier System.

1.3.5 Air Barrier Material

A building material that is designed, tested or produced to provide the primary resistance to airflow through an air barrier assembly of a building enclosure.

1.3.6 Air Barrier System

Same as AIR BARRIER ENVELOPE.

1.3.7 Air Leakage Rate

The rate of airflow (CFM) driven through a unit surface area (sq.ft.) of an assembly or system by a unit static pressure difference (Pa) across the assembly. (example: 0.25 CFM/sq.ft. @ 75 Pa)

1.3.8 Air Leakage

The total airflow (CFM) driven through the air barrier system by a unit static pressure difference (Pa) across the air barrier envelope. (example: 6500 CFM @ 75 Pa)

1.3.9 Air Permeance

The tested rate of airflow (CFM) through a unit area (sq.ft.) of a material driven by unit static pressure difference (Pa) across the material (example:0.004 CFM/sq.ft. @ 75 Pa) as established by ASTM E2178.

1.3.10 Environmental Separator

The parts of a building that separate the controlled interior environment from the uncontrolled exterior environment, or that separate spaces within a building that have dissimilar environments. Also known as the Control Layer.

1.3.11 Vapor Permeance

Vapor permeance is separated into three classes based on the water vapor permeance of a material as tested via ASTM E96/E96M

Class I Vapor Barrier/Retarder	0.1 perm or less
Class II Vapor Barrier/Retarder	0.1 perm to 1.0 perm
Class III Vapor Barrier/Retarder	1.0 perm to 10 perm

1.4 PREPARATORY PHASE OR PRECONSTRUCTION CONFERENCE

Organize pre-construction conferences between the air barrier inspector and the sub-contractors involved in the construction of, or penetration of, the air barrier system to discuss where the work of each sub-contractor begins and ends, the sequence of installation, and each sub-contractor's responsibility to ensure airtight joints, junctures, penetrations and transitions between materials. Discuss the products, and assemblies of products specified in the different sections to be installed by the different sub-contractors.

1.5 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Air Barrier System Shop Drawings; G, RO, Manufacturer produced warranted air barrier system

SD-03 Product Data

Air Barrier System Product Data; G, AE

SD-04 Samples

Material Samples For Air Barrier System; G, AE

SD-06 Test ReportsInspection; G, RO

PART 2 PRODUCTS

2.1 AIR BARRIER

Provide air barrier system of compatible parts from one or several manufacturers coordinated by the Contractor or provide a single warranted system provided by a primary manufacturer. The air barrier system as part of a tested exterior wall assembly must meet the conditions of acceptance as tested in accordance with NFPA 285. Materials used for roof assembly air barrier must conform to the appropriate UL and FM wind and fire requirements for the specified roof assemblies.

If a complete air barrier system from a single manufacturer is utilized,

whether warranted or not warranted, the air barrier system must conform to ASTM E2357.

Materials in the following categories, as used in the air barrier system or assembly of the exterior wall system, are tested and are required to conform to ASTM E2178: Self-adhered sheet membranes, fluid applied membranes, spray polyurethane foam, mechanically fastened commercial building wrap, factory bonded membranes to sheathing, and adhesive backed commercial building wrap and accessory products.

Other materials used as an air barrier such as concrete, glass, wood, metal or gypsum board may or may not conform to ASTM E2178 but are acceptable provided that when integrated into the air barrier system or assemblies they are not subject to material or environmental induced degradation in their final produced state once incorporated in the permanent construction.

All materials used must be identifiable through manufacturer testing data or literature to be compatible with all the attached or adjoining materials or substrates used in the system.

Provide Air Barrier System Shop Drawings, Material Samples for Air Barrier System and Air Barrier System Product Data.

PART 3 EXECUTION

3.1 QUALITY CONTROL

3.1.1 Documentation and Reporting

Document the entire installation process on daily job site reports. These reports include information on the Installer, substrates, substrate preparation, products used, ambient and substrate temperature, the location of the air barrier installation, the results of the quality control procedures, and testing results.

3.1.2 Quality Control Inspection

Conduct the following tests and inspections as applicable in the presence of the Contracting Officer during installation of the air barrier system, and submit quality control reports as indicated below.

a. Provide a Daily Report of Observations with a copy to the Contracting Officer.

b. Inspect to assure continuity of the air barrier system throughout the building enclosure and that all gaps are covered, the covering is structurally sound, and all penetrations are sealed allowing for no infiltration or exfiltration through the air barrier system.

c. Inspect to assure structural support of the air barrier system to withstand design air pressures.

d. Inspect to assure masonry surfaces receiving air barrier materials are smooth, clean, and free of cavities, protrusions and mortar droppings, with mortar joints struck flush or as required by the manufacturer of the air barrier material.

e. Inspect and test to assure site conditions for application

temperature, and dryness of substrates are within guidelines.

f. Inspect to assure substrate surfaces are properly primed, if applicable, and in accordance with manufacturer's instructions. Priming must extend at least 2 inches beyond the air barrier material to make it obvious that the primer was applied to the substrate before the air barrier material.

g. Inspect to assure laps in materials are at least a 2-inch minimum, shingled in the correct direction or mastic applied in accordance with manufacturer's recommendations, and with no fishmouths.

h. Inspect to assure that a roller has been used to enhance adhesion. Identify any defects such as fishmouths, wrinkles, areas of lost adhesion, and improper curing. Note the intended remedy for the deficiencies.

i. Measure application thickness of liquid applied materials to assure that manufacturer's specifications for the specific substrate are met.

j. Inspect to assure that the correct materials are installed for compatibility.

k. Inspect to assure proper transitions for change in direction and structural support at gaps.

l. Inspect to assure proper connection between assemblies (membrane and sealants) for cleaning, preparation and priming of surfaces, structural support, integrity and continuity of seal.

m. Perform adhesion tests for fluid-applied and self-adhered air barrier membranes to assure that the manufacturer's specified adhesion strength properties are met. Determine the bond strength of coatings to substrate in accordance with ASTM D4541.

n. Provide cohesion tests for spray polyurethane foam (SPF). Perform the tests in accordance with the specification sections which specify these materials.

o. Provide written test reports of all tests performed.

3.2 REPAIR AND PROTECTION

Upon completion of inspection, testing, sample removal and similar services, repair damaged construction and restore substrates, coatings and finishes. Protect construction exposed by or for quality control service activities, and protect repaired construction.

-- End of Section --

SECTION 07 27 19.01

SELF-ADHERING AIR BARRIERS

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 BARRIER ASSOCIATION OF AMERICA (ABAA)

ABAA Accreditation	Accreditation
ABAA QAP	Quality Assurance Program

ASTM INTERNATIONAL (ASTM)

ASTM D146/D146M	(2004; R 2020) Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing
ASTM D412	(2016; R 2021) Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension
ASTM D570	(2022) Standard Test Method for Water Absorption of Plastics
ASTM D903	(1998; R 2017) Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
ASTM D1876	(2008; R 2023) Standard Test Method for Peel Resistance of Adhesives (T-Peel Test)
ASTM D4263	(1983; R 2018) Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method
ASTM D4541	(2022) Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
ASTM E96/E96M	(2024a) Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials
ASTM E154/E154M	(2008; R 2025) Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover
ASTM E283/E283M	(2019) Standard Test Method for Determining Rate of Air Leakage Through

	Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
ASTM E331	(2000; R 2023) Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
ASTM E2178	(2021a) Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials
ASTM E2357	(2018) Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 285	(2023) Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components

1.2 RELATED REQUIREMENTS

Coordinate the requirements of Section 07 27 10 BUILDING AIR BARRIER SYSTEM and other building enclosure sections to provide a complete building air barrier system. Submit all materials, components, and assemblies of the air barrier system together as one complete submittal package.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Qualifications of Manufacturer; G, AE

Qualifications of Installer; G, AE

SD-02 Shop Drawings

Self-adhering Air Barrier Shop Drawings; G, AE

SD-03 Product Data

Self-adhering Air Barrier; G, AE

Primers, Adhesives, and Mastics; G, AE

Safety Data Sheets; G, AE

SD-04 Samples

Self-adhering Air Barrier System Mockup; G, AE

SD-06 Test Reports

Field Peel Adhesion Test; G, AE

Flame Propagation of Wall Assemblies; G, AE

Site Inspections and Testing; G, AE

SD-08 Manufacturer's Instructions

Self-adhering Air Barrier Manufacturer's Printed Instructions; G, AE

Primers, Adhesives, and Mastics; G, AE

1.4 MISCELLANEOUS REQUIREMENTS

For self-adhering air barrier provide the following:

1.4.1 Shop Drawings

Submit self-adhering air barrier shop drawings showing locations and extent of air barrier assemblies and details of all typical conditions, intersections with other building enclosure assemblies and materials, and membrane counterflashings. Show details for bridging of gaps in construction, treatment of inside and outside corners, expansion joints, methods of attachment of materials covering the self-adhered barrier without compromising the barrier. Indicate how miscellaneous penetrations such as conduit, pipes, electric boxes, brick ties, and similar items will be sealed.

1.4.2 Product Data

Submit manufacturer's technical data indicating compliance with performance and environmental requirements in Part 2 of this specification. Also submit self-adhering air barrier manufacturer's printed instructions for evaluating, preparing, and treating substrates, temperature and other limitations of installation conditions, safety requirements for installation, and Safety Data Sheets. Indicate flame and smoke spread ratings for all products.

1.4.3 Mockup

Provide a self-adhering air barrier system mockup. Apply product in an area designated by the Contracting Officer. Apply an area of not less than 54 square feet. Include all components specified as representative of the complete system. Notify the Contracting Officer a minimum of 48 hours prior to the test application. Select a test area representative of conditions to be covered including window or door openings, wall to ceiling transitions, flashings, and penetrations, as applicable.

1.4.4 Test Reports

Submit test reports indicating that field peel-adhesion tests on all

materials have been performed and the changes made, if required, in order to achieve successful and lasting adhesion. Submit test reports for flame propagation of wall assemblies tested in accordance with NFPA 285.

1.5 DELIVERY, STORAGE, AND HANDLING

1.5.1 Delivery

Deliver and store materials in sufficient quantity to allow for uninterrupted flow of work. Inspect materials delivered to the site for damage and store out of weather. Deliver materials to the jobsite in their original unopened packages, clearly marked with the manufacturer's name, brand designation, description of contents, and shelf life of containerized materials. Store and handle to protect from damage.

1.5.2 Storage

Inspect materials delivered to the site for damage; unload and store out of weather in manufacturer's original packaging. Store only in dry locations, not subject to open flames or sparks, and easily accessible for inspection and handling. Protect stored materials from direct sunlight. Keep materials sealed and separated from absorptive materials, such as wood and insulation.

1.6 QUALITY ASSURANCE

1.6.1 Qualifications of Manufacturer

Submit documentation verifying that the manufacturer of the self-adhering air barrier is currently accredited by Air Barrier Association of America (ABAA Accreditation https://www.airbarrier.org/).

1.6.2 Qualifications of Installer

Submit documentation verifying that installers of the self-adhering air barrier are currently certified in accordance with the ABAA QAP Quality Assurance Program (https://www.airbarrier.org/qap/).

1.6.3 Field Peel Adhesion Test

Perform a field peel-adhesion test on the construction mockup. Test the self-adhering air barrier for adhesion in accordance with ASTM D4541 using a Type II pull tester except use a disk that is 4 inches in diameter and cut through the membrane to separate the material attached to the dish from the surrounding material. Perform test after curing period in accordance with manufacturer's written recommendations. Record mode of failure and area which failed in accordance with ASTM D4541. Compare adhesion values with the manufacturer's established minimum values for the particular combination of material and substrate. Indicate on the inspection report whether the manufacturer's requirement has been met. Where the manufacturer has not declared a minimum adhesion value for their product and substrate combination, the inspector must record actual values.

1.7 PRECONSTRUCTION MEETING

Conduct a preconstruction meeting a minimum of two weeks prior to commencing work specified in this specification Section. Agenda must include, at a minimum, construction and testing of mockup, sequence of construction, coordination with substrate preparation, materials approved

for use, compatibility of materials, coordination with installation of adjacent and covering materials, and details of construction. Attendance is required by representatives of related trades including covering materials, substrate materials, adjacent materials, and materials and components of the air barrier system.

1.8 ENVIRONMENTAL CONDITIONS

1.8.1 Temperature

Install air barrier within the range of ambient and substrate temperatures as recommended in writing by the air barrier manufacturer. Verify that the surface to receive self-adhering air barrier is dry for a minimum of 48 hours prior to the installation of the barrier. Do not apply air barrier to damp or wet substrates. Do not apply during inclement weather or when ice, frost, surface moisture, or visible dampness is present on surfaces to be covered, or when precipitation is imminent.

1.8.2 Exposure to Weather and Ultraviolet Light

Protect air barrier products from direct exposure to rain, snow, sunlight, mist, and other extreme weather conditions. Replace, at no additional cost to the Government, barrier products that have been exposed to ultraviolet (sun)light longer than allowed by manufacturer's written requirements.

PART 2 PRODUCTS

2.1 SELF-ADHERING AIR BARRIER

Provide minimum 0.040 inch thick self-adhering, vapor permeable, air barrier membrane consisting of a cross-laminated high density polyethylene (HDPE) film, fully coated with rubberized butyl-based or acrylic-based adhesive. Provide membrane in rolls of various widths interleaved with disposable silicone release paper. Self-adhering air barrier must exhibit no visible water leakage when tested in accordance with ASTM E331 and must perform as a liquid water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. Use regular or low temperature formulation depending on site conditions, within temperature ranges specified by manufacturer.

2.1.1 Physical Properties

a. Air Permeance (ASTM E2178): In accordance with Section 07 27 10 BUILDING AIR BARRIER SYSTEM

b. Assembly Air Leakage (ASTM E2357, ASTM E283/E283M): In accordance with Section 07 27 10 BUILDING AIR BARRIER SYSTEM.

c. Tensile Strength (ASTM D412 die C modified): Not less than 400 psi.

d. Tensile Elongation (ASTM D412 die C modified): Not less than 200 percent.

e. Puncture Resistance (ASTM E154/E154M): Not less than 40 lbs.

f. Pliability (ASTM D146/D146M): Unaffected at minus 25 degrees F, 0.063 inch mandrel.

g. Lap Adhesion (ASTM D1876 modified): Not less than 4.0 lbs per inch.

h. Peel Adhesion (ASTM D903): Not less than 5.0 lbs per inch.

i. Water Vapor Permeance (Vapor Permeable Air Barrier) (ASTM E96/E96M, desiccant method B): greater than 10.0 perms.

j. Water Absorption (ASTM D570): Not to exceed 0.12 percent by weight.

k. Flame propagation of wall assemblies (NFPA 285): Pass

2.2 PRIMERS, ADHESIVES, AND MASTICS

Provide primers, adhesives, mastics and other accessory materials as recommended in writing by the manufacturer of the self-adhering air barrier for adequate bonding to each type of substrate. Adhesive must be butyl- or acrylic-based.

2.3 SHEET METAL FLASHING

Provide as specified in Section 07 60 00 FLASHING AND SHEET METAL.

2.4 JOINT SEALANTS

Provide as specified in Section 07 92 00 JOINT SEALANTS. Verify compatibility with adjacent products that are or will be in contact with one another.

PART 3 EXECUTION

3.1 EXAMINATION

Before installing air barrier, examine substrates, areas, and conditions under which air barrier assemblies will be applied, with Installer present, for compliance with requirements. Ensure the following conditions are met:

a. Surfaces are sound, dry, even, and free of oil, grease, dirt, excess mortar or other contaminants.

b. Concrete surfaces are cured and dry, smooth without large voids, spalled areas or sharp protrusions.

c. Verify substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method in accordance with ASTM D4263 and take suitable measures until substrate passes moisture test.

d. Verify sealants used in sheathing are compatible with membrane proposed for use. Perform field peel adhesion test on materials to which sealants are adhered.

3.2 PREPARATION

Clean, prepare, and treat substrate in accordance with manufacturer's written instructions. Ensure clean, dust-free, and dry substrate for air barrier application.

a. Prime masonry and concrete substrates with conditioning primer.

b. Prime gypsum sheathing an adequate number of coats to achieve required bond, with adequate drying time between coats.

c. Prime wood, metal, and painted substrates with primer.

d. Prepare, treat, and seal vertical and horizontal surfaces at terminations and penetrations through air barrier and at protrusions.

3.3 INSTALLATION

3.3.1 Installation of Self-adhering Air Barrier

Install materials in accordance with manufacturer's recommendations and the following:

a. Apply primer at rate recommended by manufacturer prior to membrane installation. Allow primer to dry completely before membrane application. Apply as many coats as necessary for proper adhesion.

b. When membrane is properly positioned, press into place and roll membrane with roller immediately after placement.

c. Apply membrane sheets to shed water naturally without interception by a sheet edge, unless that edge is sealed with permanently flexible termination mastic.

d. Position subsequent sheets of membrane applied above so that membrane overlaps the membrane sheet below by a minimum of 2-1/2 inches, unless greater overlap is recommended by manufacturer. Roll into place with roller.

e. Make side laps a minimum of 2-1/2 inches and end laps a minimum of 5 inches, unless greater overlap is recommended by manufacturer. Roll seams with roller.

f. Roll membrane to adhere to substrate. Cover corners and joints with two layers of reinforcement by first applying a 12 inch width of membrane centered along the axis. Flash drains and projections with a second ply of membrane for a distance of 6 inches from the drain or projection.

g. Seal around all penetrations through the air barrier resulting from pipes, vents, conduit, electrical fixtures, structural members, or other construction passing through it. Seal with termination mastic, extruded silicone sealant, membrane counterflashing or other sealing methods in accordance with manufacturer's written recommendations.

h. Continuously connect the air barrier between walls, roof, floor and below grade assemblies to form a continuous integrated air barrier system around the entire building enclosure. Extend the air barrier membrane into rough openings such as doors, windows, louvers, and other exterior penetrations. Seal edges of barrier at junctures with rough openings.

i. At changes in substrate plane, provide transition material (e.g., bead of sealant, mastic, extruded silicone sealant, membrane counterflashing or other material recommended by manufacturer) under membrane to eliminate all sharp 90-degree inside corners and to make a

smooth transition from one plane to another.

j. Provide mechanically fastened non-corrosive metal sheet to span gaps in substrate plane and to make a smooth transition from one plane to the other. Continuously support membrane with substrate.

k. At deflection and control joints, provide backup for the membrane to accommodate anticipated movement.

l. At expansion and seismic joints provide transition to the joint assemblies.

m. Apply a bead or trowel coat of mastic along membrane seams at reverse lapped seams, rough cuts, and as recommended by the manufacturer.

n. At end of each working day, seal top edge of membrane to substrate with termination mastic.

o. Do not allow materials to come in contact with chemically incompatible materials.

p. Counterflash upper edge of thru-wall flashing and air barrier. Counter flashing is specified in Section 07 60 00 FLASHING AND SHEET METAL. See applicable wall-type Sections for thru-wall flashing requirements.

3.4 FIELD QUALITY CONTROL

3.4.1 Site Inspections and Testing

Provide site inspections and testing in accordance with the manufacturer's instructions, Section 07 27 10 BUILDING AIR BARRIER SYSTEM and this section.

a. Conduct inspections and testing at 5, 50, and 95 percent completion of this scope of work. Forward written site inspections and testing reports to the Contracting Officer within five working days of the inspection and test being performed.

b. If inspections reveal defects, promptly remove and replace defective work at no additional expense to the Government.

3.5 FIELD PEEL ADHESION TEST

Conduct in accordance with test protocol indicated in Part 1, paragraph FIELD PEEL ADHESION TEST.

3.6 PROTECTION AND CLEANING

3.6.1 Protection

3.6.1.1 Adjacent Surfaces

Protect exposed adjacent surfaces that could be damaged by primers and adhesives associated with air barrier membrane. Provide protection during application and the remainder of construction in accordance with manufacturer's written instructions.

3.6.1.2 The Air Barrier Assembly

Protect finished portions of the air barrier assembly from damage during ongoing application and throughout the remainder of the construction period in accordance with manufacturer's written instructions. Coordinate timing of installation of materials that will cover the air barrier membrane to ensure the exposure period does not exceed that recommended by the air barrier manufacturer's written installation instructions. Remove and replace, at no additional cost to the Government, membrane products that exceed the manufacturer's allowed exposure limits.

3.6.2 Cleaning

Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction and as acceptable to the primary material manufacturer.

-- End of Section --

SECTION 07 42 13

METAL WALL PANELS

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.

ALUMINUM ASSOCIATION (AA)

AA ADM	(2020) Aluminum Design Manual
AA ASD1	(2024) Aluminum Standards and Data

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

AAMA 501.1	(2017) Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure
AAMA 800	(2016) Voluntary Specifications and Test Methods for Sealants

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

ANSI/AISC 341	(2022) Seismic Provisions for Structural Steel Buildings

AMERICAN IRON AND STEEL INSTITUTE (AISI)

AISI S100	(2016) North American Specification for the Design of Cold-Formed Steel Structural Members
AISI SG03-3	(2002; Suppl 2001-2004; R 2008) Cold-Formed Steel Design Manual Set

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7-22	(2022; Supp 1 2023; Supp 2 2023; Supp 3 2025) Minimum Design Loads and Associated Criteria for Buildings and Other Structures

ASTM INTERNATIONAL (ASTM)

ASTM A36/A36M	(2019) Standard Specification for Carbon Structural Steel
ASTM A123/A123M	(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A606/A606M	(2023) Standard Specification for Steel

	Sheet and Strip, High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, with Improved Atmospheric Corrosion Resistance
ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A924/A924M	(2022a) Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM A1008/A1008M	(2024) Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable
ASTM B117	(2025) Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM B209	(2014) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM C920	(2018; R 2024) Standard Specification for Elastomeric Joint Sealants
ASTM D522/D522M	(2017; R 2021) Mandrel Bend Test of Attached Organic Coatings
ASTM D523	(2014; R 2018) Standard Test Method for Specular Gloss
ASTM D610	(2025) Standard Practice for Evaluating Degree of Rusting on Painted Steel Surfaces
ASTM D714	(2002; R 2017) Standard Test Method for Evaluating Degree of Blistering of Paints
ASTM D822	(2013; R 2018) Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings
ASTM D968	(2022) Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D1056	(2020) Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber
ASTM D1308	(2020) Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Coating Systems
ASTM D1654	(2008; R 2016; E 2017) Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive

	Environments
ASTM D1667	(2022) Standard Specification for Flexible Cellular Materials - Poly (Vinyl Chloride) Foam (Closed-Cell)
ASTM D2244	(2025) Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
ASTM D2247	(2025) Standard Practice for Testing Water Resistance of Coatings in 100 Percent Relative Humidity
ASTM D2794	(1993; R 2024) Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
ASTM D3359	(2017) Standard Test Methods for Rating Adhesion by Tape Test
ASTM D3363	(2022) Standard Test Method for Film Hardness by Pencil Test
ASTM D4214	(2023) Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films
ASTM D4587	(2011; R 2019; E 2019) Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings
ASTM D5894	(2016) Standard Practice for Cyclic Salt Fog/UV Exposure of Painted Metal, (Alternating Exposures in a Fog/Dry Cabinet and a UV/Condensation Cabinet)
ASTM E72	(2022) Conducting Strength Tests of Panels for Building Construction
ASTM E84	(2024) Standard Test Method for Surface Burning Characteristics of Building Materials
ASTM E283	(2019) Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
ASTM E331	(2000; R 2023) Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
ASTM E1592	(2017) Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure

	Difference
ASTM G152	(2013; R 2021) Standard Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials
ASTM G153	(2013; R 2021) Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA)

MBMA MBSM	(2018) Metal Building Systems Manual

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM AMP 500	(2006) Metal Finishes Manual

SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)

SMACNA 1793	(2012) Architectural Sheet Metal Manual, 7th Edition

UL SOLUTIONS (UL)

UL Bld Mat Dir	(updated continuously online) Building Materials Directory

1.2 DEFINITIONS

Metal Wall Panel: Metal wall panels, attachment system components and accessories necessary for a complete weather-tight wall system.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Qualification of Manufacturer; G, RO

Qualification of Installation Contractor; G, RO

Sample Warranty; G, RO

SD-02 Shop Drawings

Installation Drawings; G, RO

SD-03 Product Data

Recycled Content; S

Steel Sheet Panels; G, AE

Factory Color Finish

Closure Materials

Pressure Sensitive Tape

Sealants and Caulking

Galvanizing Repair Paint

Enamel Repair Paint

Accessories

SD-04 Samples

Steel Sheet Panels; G, AE

Fasteners; G, AE

Metal Closure Strips; G, AESD-05 Design Data

Wind Load Design Analysis; G, AE

SD-06 Test Reports

Leakage Tests; G, RO

Wind Load Tests; G, RO

Coating Tests; G, RO

Chalking Tests; G, RO

Seismic Tests; G, RO

SD-07 Certificates

Coil Stock; G, RO

Fasteners; G, AE

Galvanizing Repair Paint; G, AE

Enamel Repair Paint; G, AE

SD-08 Manufacturer's Instructions

Installation of Wall panels; G, RO

SD-09 Manufacturer's Field Reports

Manufacturer's Field Inspection Reports; G, PO

SD-11 Closeout Submittals

Warranty; G, RO

Maintenance Instructions; G, RO

20 Year "No Dollar Limit" Warranty for Labor and Material

1.4 QUALITY CONTROL

1.4.1 Pre-Installation Conference

Upon notification of submittal receipt and approval by the Contracting Officer; and prior to the commencement of the work, attend a pre-installation conference to review the following:

a. Drawings and Specifications.

b. Qualification of Installer, Qualification of Welders.

c. Sustainable acquisition

d. Approved Warranty

e. Sample wall panels, 12 inches long by actual panel width

f. Sample metal closure strips, 10 inches long of each type

g. Color charts and chips

h. Coatings and base metal tests, chalking tests

i. Construction schedule, availability of materials, Installer's personnel, equipment, and facilities required to progress with the work without delay.

j. Methods and procedures related to installation of wall panels, including manufacturer's written instructions. Explicitly identify in writing, differences between manufacturer's instructions and the specified requirements.

k. Support conditions for compliance with requirements, including alignment between and attachment to structural members.

l. Flashing, special siding details, wall penetrations, openings, and condition of other construction that affect metal wall panels.

m. Governing regulations and requirements for insurance, certificates, and tests and inspections if applicable.

n. Temporary protection requirements for metal wall panel assembly during and after installation.

o. Wall panel observation and repair procedures after metal wall panel installation. Provide detailed written instructions including copies of Safety Data Sheets for maintenance and repair materials, and manufacturer's maintenance instructions.

1.4.1.1 Installation Drawings

Provide installation shop drawings for wall panels, flashing, accessories, and anchorage systems showing completely dimensioned structural frame and erection layouts, openings in the wall, special framing details, and construction details at corners, building intersections and flashing, location and type of mastic and metal filler strips.

1.4.1.2 Wind Load Design Analysis

Include in the wind design analysis a wall plan delineating dimensions and attachment patterns for each zone. Wind design analysis is required to be prepared and sealed by Registered Professional Engineer in the geographic area where the construction takes place. As applicable, submit the following wind load design analysis data, to include, but not limited to:

wind speed

exposure category, co-efficient, importance factor

type of facility

negative pressures for each zone

methods and requirements of attachment

1.4.2 Manufacturer's Technical Representative

The representative is required to receive authorization from manufacturer to approve field changes and is to be thoroughly familiar with the products and installations in the geographical area where construction takes place.

1.4.3 Qualification of Manufacturer

Certify that metal wall panel system manufacturer has a minimum of five years experience in manufacturing metal wall system and accessory products.

Manufacturer is required to provide engineering services by an authorized Registered Professional Engineer; currently licensed in the State where construction takes place, having a minimum of 4 years experience as an engineer knowledgeable in wind load design analysis, protocols, and procedures per MBMA MBSM, "Metal Building Systems Manual"; ASCE 7-22, and ASTM E1592.

Provide certified engineering calculations, using the products submitted, for Wind load requirements in accordance with ASCE 7-22.

1.4.3.1 Manufacturer's Certificates

Also provide the following certifications from the manufacturer:

Coil Stock

Fasteners

Galvanizing Repair Paint

Enamel Repair Paint

Submit certification from coil stock manufacturer or supplier that the machinery used forms the provided coil stock without warping, waviness, or rippling that is not a part of the panel profile, and without damage, abrasion or marring of the finish coating.

Provide evidence that products used within this specification are manufactured in the United States.

1.4.4 Certified Qualification of Installation Contractor

The installation contractor is to be approved and certified by the metal wall panel manufacturer prior to beginning the installation of the metal wall panel system. Subcontracting by Certified Contractor for the metal wall panel work is not permitted.

1.4.5 Single Source

Obtain each type of metal wall panels, clips, closure materials, and other accessories from the standard products of the single source from a single manufacturer to operate as a complete system for the intended use.

1.4.6 Manufacturer's Maintenance Instructions

Provide manufacturer's detailed written instructions including copies of Safety Data Sheets for maintenance and repair materials.

1.5 DELIVERY, HANDLING, AND STORAGE

Deliver and protect package components, sheets, metal wall panels, and other manufactured items to prevent damage or deformation during transportation and handling. Unload, store, and erect metal wall panels in a manner to prevent bending, warping, twisting, and surface damage. Always lift and carry panels by the long edge to prevent twisting and damage to the panels.

Stack and store metal wall panels horizontally on platforms or pallets, covered with suitable weather-tight and ventilated covering to ensure dryness, with positive slope for drainage of water. Do not store metal wall panels in contact with other materials that might cause staining, denting, or other surface damage. Ensure panels are stored in a dry environment, and minimize the amount of handling to minimize opportunities for damaging panels. Retain strippable protective covering on metal wall panel until actual installation.

1.6 PROJECT CONDITIONS

1.6.1 Field Measurements

Verify locations of wall framing and opening dimensions by field measurements before metal wall panel fabrication and indicate measurements on Shop Drawings.

1.6.2 Weather Limitations

Proceed with installation preparation only when existing and forecasted weather conditions permit Work to proceed without water entering into wall system or building.

1.7 WARRANTY

Final Warranty provided is required to conform to the Sample Warranty as reviewed and approved by the Contracting Officer.

1.7.1 20 Year "No Dollar Limit" Warranty for Labor and Material

Furnish manufacturer's no-dollar-limit warranty for the metal wall panel system. The warranty period is to be no less than 20 years from the date of Government acceptance of the work. Write warranty directly to the Government, commencing at time of Government's acceptance of the wall panel work. The warranty is to provide that if within the warranty period the metal wall panel system shows evidence of corrosion, perforation, rupture, or excess weathering due to deterioration of the wall panel system resulting from defective materials, then correction of the defective workmanship be the responsibility of the metal wall panel system manufacturer. Repairs that become necessary because of defective materials and workmanship while metal wall panel system is under warranty are to be performed within 72 hours after notification, unless additional time is approved by the Contracting Officer. Failure to perform repairs within 72 hours of notification constitutes grounds for having emergency repairs performed by others and does not void the remaining warranty.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

Factory color finished, metal wall panel system with exposed fastener attachment. Panel profile is to match existing profile.

2.1.1 Metal Wall Panel General Performance

Comply with performance requirements, conforming to AISI S100, without failure due to defective manufacture, fabrication, installation, or other defects in construction. Ensure wall panels and accessory components conform to the following standards:

ASTM A1008/A1008M

ASTM A123/A123M

ASTM A36/A36M

ASTM A653/A653M

ASTM A606/A606M

ASTM A924/A924M for metallic coated steel sheet

ASTM D522/D522M for applied coatings

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2.1.2 Structural Performance

Ensure maximum calculated fiber stress will not exceed the allowable value in the AISI or AA manuals; a one third overstress for wind is allowed. Midspan deflection under maximum design loads is limited to L/180. Contract drawings show the design wind loads and the extent and general

assembly details of the metal siding. Provide design for members and connections not shown on the drawings. Provide siding panels and accessories products by the same manufacturer.

Provide metal wall panel assemblies complying with the load and stress requirements in accordance with ASTM E1592. Wind Load force due to wind action governs the design for panels. Wall systems and attachments are required to resist the wind loads as determined by ASTM E72 and ASCE 7-22 in the geographic area where the construction takes place, in pounds per square foot. Submit five copies of wind load tests and seismic tests to the Contracting Officer. Provide metal wall panel assembly for seismic conditions complying with the applicable requirements of ANSI/AISC 341.

2.1.3 Air Infiltration

Air leakage is required to conform to the air leakage limits through the wall assembly area when tested according to ASTM E283.

2.1.4 Water Penetration Under Static Pressure

No water penetration is allowed when tested according to ASTM E331.

2.1.5 Water Penetration Under Dynamic Pressure

No evidence of water leakage is allowed when tested according to AAMA 501.1.

2.2 FABRICATION

Unless approved otherwise, fabricate and finish metal wall panels and accessories at the factory, by manufacturer's standard procedures and processes and as necessary to fulfill indicated and specified performance requirements. Comply with indicated profiles and with dimensional and structural requirements. Submit manufacturer's data indicating recycled content percentages.

Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel. Fabricate metal wall panel side laps with factory-installed captive gaskets or separator strips that provide a tight seal and prevent metal-to-metal contact, in a manner that seals weather-tight and minimize noise from movements within panel assembly.

2.2.1 Sheet Metal Accessories

Fabricate flashing and trim to comply with recommendations in SMACNA 1793 that apply to the design, dimensions, metal, and other characteristics of item indicated:

a. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.

b. End Seams: fabricate nonmoving end seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.

c. Sealed Joints: form non-expansion but movable joints in metal to accommodate elastomeric sealant to comply with SMACNA 1793.

d. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.

e. Fabricate cleats and attachment devices of size and metal thickness recommended by SMACNA 1793 or by metal wall panel manufacturer for application, but not less than thickness of metal being secured.

2.3 MATERIALS

2.3.1 Aluminum Sheet Panels

Submit a sample Aluminum Sheet Panel, 12 inches long by actual panel width, of each panel proposed to be used on the project.

Roll-form aluminum wall panels to the specified profile, with fy = 50 ksi, 24 guage. Provide material plumb and true, and within the tolerances listed:

a. Aluminum Sheet conforming to ASTM B209, AA ASD1 and AA ADM.

b. Individual panels are to have continuous length to cover the entire length of any wall area with no joints or seams and formed without warping, waviness, or ripples that are not part of the panel profile and free of damage to the finish coating system.

c. Provide panels with thermal expansion and contraction consistent with the type of system specified.

(1) Profile and coverage to be a minimum height and width from manufacturer's standard for the indicated wall area.

2.3.2 Steel Sheet Panels

Submit a sample Steel Sheet Panel, 12 inches long by actual panel width, of each panel proposed to be used on the project.

Roll-form steel wall panels to the specified profile, with fy= 50 ksi, 24 gauge and depth as indicated. Provide material plumb and true, and within the tolerances listed:

a. Galvanized Steel Sheet conforming to ASTM A653/A653M and AISI SG03-3.

b. Individual panels of a continuous length sufficient to cover the entire length of any unbroken wall area with no joints or seams and formed without warping, waviness, or ripples that are not part of the panel profile and free of damage to the finish coating system.

c. Provide panels with thermal expansion and contraction consistent with the type of system specified.

(1) Profile and coverage to be a minimum height and width from manufacturer's standard for the indicated wall area.

2.3.3 Factory Color Finish

Comply with NAAMM AMP 500 for recommendations for applying and designating finishes. Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved samples and are assembled or installed to

minimize contrast.

All panels are to receive a factory-applied polyvinylidene fluoride finish consisting of a baked-on top-coat with a manufacturer's recommended prime coat conforming to the following:

2.3.3.1 Metal Preparation

Carefully prepare all metal surface for painting on a continuous process coil coating line by alkali cleaning, hot water rinsing, application of chemical conversion coating, cold water rinsing, sealing with acid rinse, and thorough drying.

2.3.3.2 Prime Coating

Apply a base coat of epoxy paint, specifically formulated to interact with the top-coat, to the prepared surfaces by roll coating to a dry film thickness of 0.20 plus 0.05 mils. Prime coat is to be oven cured prior to application of finish coat.

2.3.3.3 Exterior Finish Coating

Roll coat the finish coating over the primer by roll coating to dry film thickness of 0.80 plus 5 mils for a total dry film thickness of 1.00 plus 0.10 mils. Oven-cure finish coat.

2.3.3.4 Interior Finish Coating

Apply a wash-coat on the reverse side over the primer by roll coating to a dry film thickness of 0.30 plus 0.05 mils for a total dry film thickness of 0.50 plus 0.10 mils. Oven-cured the wash coat.

2.3.3.5 Color

Provide exterior finish color asas specified. Submit manufacturer's color charts and chips, approximately 4 by 4 inches, showing full range of colors, textures, and patterns available for wall panels with factory applied finishes.

2.3.3.6 Physical Properties

Coating is to conform to the industry and manufacturer's standard performance criteria as listed by the following certified test reports:

General:	ASTM D5894 and ASTM D4587
Abrasion:	ASTM D968
Adhesion:	ASTM D3359
Chalking:	ASTM D4214
Chemical Pollution:	ASTM D1308
Color Change and Conformity:	ASTM D2244
Creepage:	ASTM D1654

Cyclic Corrosion Test:	ASTM D5894
Flame Spread:	ASTM E84
Flexibility:	ASTM D522/D522M
Formability:	ASTM D522/D522M
Gloss at 60 and 85 degrees:	ASTM D523
Humidity:	ASTM D2247 and ASTM D714
Oxidation:	ASTM D610
Pencil Hardness:	ASTM D3363
Reverse Impact:	ASTM D2794
Salt Spray:	ASTM B117
Weatherometer:	ASTM G152, ASTM G153 and ASTM D822

2.3.4 Miscellaneous Metal Framing

Cold-formed metallic-coated steel sheet conforming to ASTM A653/A653M.

2.3.4.1 Fasteners for Miscellaneous Metal Framing

Type, material, corrosion resistance, size, and sufficient length to penetrate the supporting member a minimum of 1 inch with other properties required to fasten miscellaneous metal framing members to supporting members and substrates in accordance with the wall panel manufacturer's and ASCE 7-22 requirements.

2.3.5 Fasteners

2.3.5.1 Exposed Fasteners

Provide corrosion resistant fasteners for wall panels, made of zinc-coated steel, compatible with the sheet panel and flashing and of a type and size recommended by the manufacturer to meet the performance requirements and design loads.

Fasteners for accessories are to be the manufacturer's standard. Provide an integral metal washer matching the color of attached material with compressible sealing EPDM gasket approximately 3/32 inch thick.

2.3.5.2 Hidden Fasteners

Provide corrosion resistant fasteners recommended by the manufacturer to meet the performance requirements and design loads.

2.3.5.3 Screws

Screws to be corrosion resistant zinc-coated steel, being the type and size recommended by the manufacturer to meet the performance requirements.

2.3.5.4 Rivets

Rivets to be closed-end type, corrosion resistant coated zinc-coated steel where watertight connections are required.

2.3.5.5 Attachment Clips

Fabricate clips from steel hot-dipped galvanized in accordance with ASTM A653/A653M, Z275 G 90, or Series 300 stainless steel. Size, shape, thickness, and capacity as required meeting the insulation thickness and design load criteria specified.

2.3.6 Accessories

All accessories to be compatible with the metal wall panels. Sheet metal flashing, trim, metal closure strips, caps, and similar metal accessories to not be less than the minimum thickness specified for the wall panels. Exposed metal accessories/finishes to match the panels furnished, except as otherwise indicated. Provide molded foam rib, ridge, and other closure strips of non-absorbent closed-cell, solid-cell synthetic rubber, or pre-molded neoprene to match configuration of the panels.

2.3.6.1 Rubber Closure Strips

Provide closed-cell, expanded cellular rubber conforming to ASTM D1056 and ASTM D1667; extruded or molded to the configuration of the specified wall panel and in lengths supplied by the wall panel manufacturer.

2.3.6.2 Metal Closure Strips

Submit sample metal closure strips, 10 inches long of each type proposed to be used on the project.

Provide factory fabricated steel closure strips to be the same gauge, color, finish, and profile of the specified wall panel.

2.3.6.3 Sealants and Caulking

Provide approved gun type sealants for use in hand- or air-pressure caulking guns at temperatures above 40 degrees F or frost-free application at temperatures above 10 degrees F with minimum solid content of 85 percent of the total volume. Sealants are required to dry with a tough, durable surface skin which permit remaining soft and pliable underneath, providing a weather-tight joint. No migratory staining is permitted on painted or unpainted metal, stone, glass, vinyl, or wood.

Prime all joints receiving sealants with a compatible one-component or two-component primer as recommended by the wall panel manufacturer.

2.3.6.4 Shop-Applied Caulking

Sealant for shop-applied caulking is to be non-curing butyl compliant with AAMA 800 to ensure the sealant's plasticity at the time of field erection.

2.3.6.5 Field-Applied Caulking

Sealant for field-applied caulking is to be an approved gun grade, non-sag sealant with an initial maximum Shore A durometer hardness of 25, and conforming to ASTM C920, Type II. Color to match panel colors.

2.3.6.6 Pressure Sensitive Tape

Provide pressure sensitive tape sealant, 100 percent solid with a release paper backing; permanently elastic, non-sagging, non-toxic and non-staining as approved by the wall panel manufacturer.

2.3.7 Sheet Metal Flashing and Trim

Shop fabricate sheet metal flashing and trim where practicable to comply with recommendations in SMACNA 1793 that apply to design, dimensions, metal, and other characteristics of item indicated. Obtain field measurements for accurate fit before shop fabrication.

Fabricate sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.

2.3.8 Repair of Finish Protection

Repair paint for color finish enameled wall panel is required to be compatible paint of the same formula and color as the specified finish furnished by the wall panel manufacturer. Provide quarts of repair paint matching the specified wall panels.

PART 3 EXECUTION

3.1 EXAMINATION

Examine the following:

a. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal wall panel supports, and other conditions affecting performance of the Work.

b. Examine primary and secondary wall framing to verify that rafters, purlins, angles, channels, and other structural panel support members and anchorages have been installed within alignment tolerances required by metal wall panel manufacturer, UL, ASTM, ASCE 7-22 and as required for the geographical area where construction takes place.

c. Examine solid wall sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal wall panel manufacturer.

d. Examine roughing-in for components and systems penetrating metal wall panels to verify actual locations of penetrations relative to seam locations of metal wall panels before metal wall panel installation.

Submit to the Contracting Officer a written report, endorsed by Installer, listing conditions detrimental to performance of the Work. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

Clean substrates of substances harmful to insulation, including removing projections capable of interfering with insulation attachment. Install miscellaneous framing installation, including sub-purlins, girts, angles, furring, and other miscellaneous wall panel support members and anchorage

are to be according to metal wall panel manufacturer's written instructions.

3.3 INSTALLATION

3.3.1 Wall Panel Installation

Provide full length metal wall panels, from sill to eave as indicated, unless otherwise indicated or restricted by shipping limitations. Anchor metal wall panels and other components of the Work securely in place, with provisions for thermal and structural movement in accordance with MBMA MBSM. Work is to allow for thermal movement of the wall panel, movement of the building structure, and to provide permanent freedom from noise due to wind pressure. Erect sheets true and plumb and in exact alignment with the horizontal and vertical edges of the building, securely anchored, and with the indicated eave, and sill. Ensure substrate is plumb and level prior to installation.

Erect wall panel system in accordance with the approved erection drawings, the printed instructions, and safety precautions of the manufacturer. Sheets are not to be subjected to overloading, abuse, or undue impact. Do not apply bent, chipped, or defective sheets. Field cutting metal wall panels by torch is not permitted.

3.3.1.1 Aluminum Wall Panels

Use aluminum or stainless-steel fasteners for exterior surfaces and aluminum or galvanized steel fasteners for interior surfaces.

3.3.1.2 Metal Protection

Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal wall panel manufacturer.

3.3.1.3 Joint Sealers

Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal wall panel assemblies. Provide types of gaskets, fillers, and sealants indicated or, if not indicated, types recommended by metal wall panel manufacturer.

3.3.2 Fastener Installation

Anchor metal wall panels and other components of the Work securely in place, using manufacturer's approved fasteners according to manufacturers' written instructions. Never overdrive fasteners and ensure fasteners are installed straight and not at an angle.

3.3.3 Flashing, Trim, and Closure Installation

3.3.3.1 General Requirements

Comply with performance requirements, manufacturer's written installation instructions, and SMACNA 1793. Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams to form permanently watertight and weather

resistant.

Install sheet metal work is to form weather-tight construction without waves, warps, buckles, fastening stresses or distortion, and allow for expansion and contraction. Cutting, fitting, drilling, and other operations in connection with sheet metal required to accommodate the work of other trades is to be performed by sheet metal mechanics.

3.3.3.2 Metal Flashing

Install exposed metal flashing at building corners, sills and eaves, junctions between metal siding and walling. Exposed metal flashing to be the same material, color, and finish as the specified metal wall panel. Fasten flashing at a minimum of 8 inches on center, except where flashing is held in place by the same screws that secure covering sheets. Flashing is to be furnished in at least 8 foot lengths. Exposed flashing is to have 1 inch locked and blind-soldered end joints, and expansion joints at intervals of not more than 16 feet.

Exposed flashing and flashing subject to rain penetration to be bedded in the specified joint sealant. Isolate flashing which is in contact with dissimilar metals by means of the specified asphalt mastic material to prevent electrolytic deterioration. Form drips to the profile indicated, with the edge folded back 1/2 inch to form a reinforced drip edge.

3.3.3.3 Closures

Install metal closure strips at open ends of corrugated or ribbed pattern walls, and at intersection of wall and wall unless open ends are concealed with formed eave flashing; and in other required areas.

Install mastic closure strips at intersection of the wall with metal walling; top and bottom of metal siding; heads of wall openings; and in other required locations.

3.4 APPLICATION

3.4.1 Workmanship

Make lines, arises, and angles sharp and true. Free exposed surfaces from visible wave, warp, buckle, and tool marks. Fold back exposed edges neatly to form a 1/2 inch hem on the concealed side. Make sheet metal exposed to the weather watertight with provisions for expansion and contraction.

Make surfaces to receive sheet metal plumb and true, clean, even, smooth, dry, and free of defects and projections which might affect the application. For installation of items not shown in detail or not covered by specifications conform to the applicable requirements of SMACNA 1793. Provide sheet metal flashing in the angles formed where roof decks abut walls, curbs, ventilators, pipes, or other vertical surfaces and wherever indicated and necessary to make the work watertight.

3.4.2 Erection Tolerances

Erect metal wall panels straight and true with plumb vertical lines correctly lapped and secured in accordance with the manufacturer's written instructions.

3.5 FIELD QUALITY CONTROL

3.5.1 Leakage Tests

Finished application of metal wall panels are to be subject to inspection and test for leakage by request of the Contracting Officer, Architect/Engineer. Conduct inspection and tests at no cost to the Government.

Inspection and testing are to be made promptly after erection to permit correction of defects and the removal and replacement of defective materials.

3.5.2 Repairs to Finish

Scratches, abrasions, and minor surface defects of finish may be repaired with the specified repair materials. Finished repaired surfaces are to be uniform and free from variations of color and surface texture.

Repaired metal surfaces that are not acceptable to the project requirements and Contracting Officer are to be immediately removed and replaced with new material.

3.5.3 Paint-Finish Metal Siding

Paint-finish metal siding will be tested for color stability by the Government during the manufacturer's specified guarantee period.

Remove and replace panels that indicate color changes, fading, or surface degradation, determined by visual examination, with new panels at no expense to the Government. Subject new panels to the specified tests for an additional year from the date of their installation.

3.5.4 Construction Monitoring

Make visual inspections as necessary to ensure compliance with specified requirements. Additionally, verify the following:

a. Materials comply with the specified requirements.

b. All materials are properly stored, handled, and protected from damage. Damaged materials are removed from the site.

c. Framing and substrates are in acceptable condition, in compliance with specification, prior to application of wall panels.

d. Panels are installed without buckles, ripples, or waves and in uniform alignment and modulus.

e. Side laps are formed, sealed, fastened, or seam locked as required.

f. The proper number, type, and spacing of attachment clips and fasteners are installed.

g. Installer adheres to specified and detailed application parameters.

h. Associated flashing and sheet metal are installed in a timely manner in accord with the specified requirements.

3.5.4.1 Manufacturer's Inspection

The metal wall panel manufacturer's technical representative must visit the work site to inspect ongoing work. Inspections are to include observing installation technique and verifying the quality of work-in-place for compliance with the manufacturer's instructions. Deficiencies identified by the manufacturer's technical representative must be corrected and re-inspected by the manufacturer's technical representative.

3.5.4.1.1 Frequency

The manufacturer's technical representative must visit the work site to inspect and document ongoing work a minimum of three separate occasions during the course of the installation. One visit must occur during the first 20 squares of installation, one at substantial completion of the metal panel work, and all others during different periods of installation. Notify the Contracting officer a minimum of five working days prior to each visit by the manufacturer's technical representative.

3.5.4.1.2 Field Inspection Report

Document inspection results in a report prepared and signed by the manufacturer's technical representative for each visit. Submit the report to the Contracting Officer with the contractor's daily Quality Control report. The manufacturer's field inspection report must include a description of ongoing work observed and whether the inspected work was satisfactory or unsatisfactory. The final report must include certification by the manufacturer's technical representative that the work was performed in accordance with the manufacturer's instructions and contains no deficiencies. Submit the final manufacturer's field inspection reports to the Contracting Officer within five working days of the final visit.

3.6 CLEAN-UP AND DISPOSAL

Clean all exposed sheet metal work at completion of installation. Remove metal shavings, filings, nails, bolts, and wires from work area. Remove grease and oil films, excess sealants, handling marks, contamination from steel wool, fittings and drilling debris and scrub the work clean. Exposed metal surfaces are to be free of dents, creases, waves, scratch marks, solder or weld marks, and damage to the finish coating.

Collect and place scrap/waste materials in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site; transport demolished materials from government property and legally dispose of them.

-- End of Section --

SECTION 07 60 00

FLASHING AND SHEET METAL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN WELDING SOCIETY (AWS)

AWS D1.2/D1.2M	(2014; Errata 1 2014; Errata 2 2020) Structural Welding Code - Aluminum

ASTM INTERNATIONAL (ASTM)

ASTM A308/A308M	(2010) Standard Specification for Steel Sheet, Terne (Lead-Tin Alloy) Coated by the Hot Dip Process
ASTM A480/A480M	(2025a) Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip
ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A792/A792M	(2022) Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process
ASTM B32	(2020) Standard Specification for Solder Metal
ASTM B69	(2021) Standard Specification for Rolled Zinc
ASTM B101	(2022) Standard Specification for Lead-Coated Copper Sheet and Strip for Building Construction
ASTM B209/B209M	(2021a) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM B221	(2021) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
ASTM B370	(2022) Standard Specification for Copper Sheet and Strip for Building Construction

ASTM D41/D41M	(2011; R 2023) Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing
ASTM D1784	(2020) Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds
ASTM D2244	(2025) Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
ASTM D4214	(2023) Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films
ASTM E2112	(2023) Standard Practice for Installation of Exterior Windows, Doors and Skylights

NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)

NRCA 0429	(2022) The NRCA Roofing Manual: Architectural Metal Flashing, Condensation and Air Leakage Control and Reroofing

SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)

SMACNA 1793	(2012) Architectural Sheet Metal Manual, 7th Edition

1.2 GENERAL REQUIREMENTS

Finished sheet metal assemblies must form a weathertight enclosure without waves, warps, buckles, fastening stresses or distortion, while allowing for expansion and contraction without damage to the system. The sheet metal installer is responsible for cutting, fitting, drilling, and other operations in connection with sheet metal modifications required to accommodate the work of other trades. Coordinate installation of sheet metal items used in conjunction with roofing with roofing work to permit continuous, uninterrupted roofing operations.

1.2.1 General Material Requirements

All materials specified in this Section installed in conjunction with the roofing system must be provided by the roofing system manufacturer, or by a manufacturer approved by the roofing system manufacturer for use in the roofing system, and must form a part of the Warranty as required by the applicable roofing system Section.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL

PROCEDURES:

SD-02 Shop Drawings

Exposed Sheet Metal Coverings; G, PO

Expansion Joints; G, AE

Gravel Stops and fascia; G, AE

Counterflashing; G, AEReglets; G, AECopings; G, AE

Drip Edges; G, AERecycled Content; S

SD-04 Samples

Finish Samples; G, AE

SD-07 Certificates

Warranty on Finishes; G, AE

SD-08 Manufacturer's Instructions

Instructions for Installation; G,

SD-10 Operation and Maintenance Data

Cleaning and Maintenance; G, PO

1.4 MISCELLANEOUS REQUIREMENTS

1.4.1 Product Data

Indicate thicknesses, dimensions, fastenings, anchoring methods, expansion joints, and other provisions necessary for thermal expansion and contraction. Scaled manufacturer's catalog data may be submitted for factory fabricated items.

1.4.2 Finish Samples

Submit two color charts and two finish sample chips from manufacturer's standard color and finish options for each type of finish indicated.

1.4.3 Operation and Maintenance Data

Submit detailed instructions for installation and quality control during installation, cleaning and maintenance, for each type of assembly indicated.

1.5 DELIVERY, HANDLING, AND STORAGE

Package and protect materials during shipment. Uncrate and inspect materials for damage, dampness, and wet-storage stains upon delivery to the job site. Remove from the site and replace damaged materials that cannot be restored to like-new condition. Handle sheet metal items to avoid damage to surfaces, edges, and ends. Store materials in dry, weather-tight, ventilated areas until installation.

PART 2 PRODUCTS

2.1 RECYCLED CONTENT

Provide products with recycled content. Provide data for each product with recycled content, identifying percentage of recycled content.

2.2 MATERIALS

Use any metal listed by NRCA 0429 or SMACNA 1793 for a particular item, unless otherwise indicated. Provide materials and configurations in accordance with NRCA 0429 or SMACNA 1793 for each material, while also meeting the minimum thickness requirements specified in this Section. Different items need not be of the same metal, except that contact between dissimilar metals must be avoided.

Provide sheet metal items in 8 to 10 foot lengths. Single pieces less than 8 feet long may be used to connect to factory-fabricated inside and outside corners, and at ends of runs. Factory fabricate corner pieces with minimum 12 inch legs. Provide accessories and other items essential to complete the sheet metal installation. Provide accessories made of the same or compatible materials as the items to which they are applied. Fabricate sheet metal items of the materials specified below and to the gage, thickness, or weight shown in Table I at the end of this section. Provide sheet metal items with mill finish unless specified otherwise. Where more than one material is listed for a particular item in Table I, each is acceptable and may be used, except as follows:

2.2.1 Exposed Sheet Metal Items

Provide exposed sheet metal items of the same material. Consider the following as exposed sheet metal: gutters, including hangers; downspouts; gravel stops and fascia; cap, valley, steeped, base, and eave flashings and related accessories.

2.2.2 Drainage

Do not use copper for an exposed item if drainage from that item will pass over exposed masonry, stonework or other metal surfaces. In addition to the metals listed in Table I, lead-coated copper may be used for such items.

2.2.3 Copper, Sheet and Strip

Provide in accordance with ASTM B370, cold-rolled temper, H 00 (standard).

2.2.4 Lead-Coated Copper Sheet

Provide in accordance with ASTM B101.

2.2.5 Lead Sheet

Provide in a minimum weight of 4 pounds per square foot.

2.2.6 Steel Sheet, Zinc-Coated (Galvanized)

Provide in accordance with ASTM A653/A653M, a minimum of 24 gauge, and a minimum zinc coat weighting of 90 ounces per square feet.

2.2.7 Zinc Sheet and Strip

Provide in accordance with ASTM B69, Type I, a minimum of 0.024 inch thick.

2.2.8 Steel Sheet, Aluminum Zinc-Coated

Provide in accordance with ASTM A792/A792M, a minimum of 24 gauge.

2.2.9 Stainless Steel

Provide in accordance with ASTM A480/A480M, Type 302 or 304, 2D Finish, fully annealed, dead-soft temper, a minimum of 24 gauge.

2.2.10 Terne-Coated Steel

Provide in accordance with ASTM A308/A308M, a minimum of 14 by 20 inch with minimum of 40 pound coating per double base box. ASTM A308/A308M.

2.2.11 Aluminum Alloy Sheet and Plate

Provide in accordance with ASTM B209/B209M anodized clear form alloy, and temper appropriate for use. Provide material not less than 0.065-in in thickness.

2.2.12 Finishes

Provide exposed exterior sheet metal and aluminum with a baked on, factory applied coil fluoropolymer color coating or approved equal siliconized polyester coating. Dry film thickness of coatings must be 0.8 to 1.3 mils. Color to be selected from manufacturer's full range of color choices. Field applications of color coatings are prohibited and will be rejected.

2.2.12.1 Warranty on Finishes

Provide a manufacturer's warranty to repair, or replace, sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within 10 years from date of project substantial completion. Deterioration includes the following:

a. Color fading more than 5 Delta E units when tested in accordance with ASTM D2244.

b. Chalking in excess of a No. 8 rating when tested in accordance with ASTM D4214.

c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2.2.13 Aluminum Alloy, Extruded Bars, Rods, Shapes, and Tubes

ASTM B221.

2.2.14 Solder

Provide in accordance with ASTM B32, 95-5 tin-antimony.

2.2.15 Reglets

2.2.15.1 Polyvinyl Chloride Reglets

Provide in accordance with ASTM D1784, Type II, Grade 1, Class 14333-D, 0.075 inch minimum thickness.

2.2.15.2 Metal Reglets

Provide factory fabricated caulked type or friction type reglets with a minimum opening of 1/4 inch and a depth of 1-1/4 inch, as approved.

2.2.15.2.1 Caulked Reglets

Provide with rounded edges, temporary reinforcing cores, and accessories as required for securing to adjacent construction. Provide built-up mitered corner pieces for inside and outside corners.

2.2.15.2.2 Friction Reglets

Provide with flashing receiving slots not less than 5/8 inch deep, one inch jointing tongues, and upper and lower anchoring flanges installed at 24 inch maximum snap-lock type receiver.

2.2.16 Copings

Unless otherwise indicated, provide copings in copper sheets, 8 or 10 feet long, joined by a 3/4 inch locked and soldered seam.

2.2.17 Asphalt Primer

Provide in accordance with ASTM D41/D41M.

2.2.18 Fasteners

Use the same metal as, or a metal compatible with the item fastened. Confirm compatibility of fasteners and items to be fastened to avoid galvanic corrosion due to dissimilar materials.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Workmanship

Make lines and angles sharp and true. Free exposed surfaces from visible wave, warp, buckle, and tool marks. Fold back exposed edges neatly to form a 1/2 inch hem on the concealed side. Make sheet metal exposed to the weather watertight with provisions for expansion and contraction.

Make surfaces to receive sheet metal plumb and true, clean, even, smooth, dry, and free of defects and projections. For installation of items not shown in detail or not covered by specifications conform to the applicable requirements of SMACNA 1793, Architectural Sheet Metal Manual. Provide sheet metal flashing in the angles formed where roof decks abut walls, curbs, ventilators, pipes, or other vertical surfaces and wherever indicated and necessary to make the work watertight. Join sheet metal items together as shown in Table II.

3.1.2 Nailing

Confine nailing of sheet metal generally to sheet metal having a maximum width of 18 inches. Confine nailing of flashing to one edge only. Space nails evenly not over 3 inch on center and approximately 1/2 inch from edge unless otherwise specified or indicated. Face nailing is not permitted. Where sheet metal is applied to other than wood surfaces, include in shop drawings, the locations for sleepers and nailing strips required to secure the work.

3.1.3 Cleats

Provide cleats for sheet metal 18 inches and over in width. Space cleats evenly not over 12 inches on center unless otherwise specified or indicated. Unless otherwise specified, provide cleats of 2 inches wide by 3 inches long and of the same material and thickness as the sheet metal being installed. Secure one end of the cleat with two nails and the cleat folded back over the nailheads. Lock the other end into the seam. Where the fastening is to be made to concrete or masonry, use screws and drive in expansion shields set in concrete or masonry. Pre-tin cleats for soldered seams.

3.1.4 Bolts, Rivets, and Screws

Install bolts, rivets, and screws where indicated or required. Provide compatible washers where required to protect surface of sheet metal and to provide a watertight connection. Provide mechanically formed joints in aluminum sheets 0.040 inches or less in thickness.

3.1.5 Seams

Straight and uniform in width and height with no solder showing on the face.

3.1.5.1 Flat-lock Seams

Finish not less than 3/4 inch wide.

3.1.5.2 Lap Seams

Finish soldered seams not less than one inch wide. Overlap seams not soldered, not less than 3 inches.

3.1.5.3 Loose-Lock Expansion Seams

Not less than 3 inches wide; provide minimum one inch movement within the joint. Completely fill the joints with the specified sealant, applied at not less than 1/8 inch thick bed.

3.1.5.4 Standing Seams

Not less than one inch high, double locked without solder.

3.1.5.5 Flat Seams

Make seams in the direction of the flow.

3.1.6 Soldering

Where soldering is specified, apply to copper, terne-coated stainless steel, zinc-coated steel, and stainless steel items. Pre-tin edges of sheet metal before soldering is begun. Seal the joints in aluminum sheets of 0.040 inch or less in thickness with specified sealants. Do not solder aluminum.

3.1.6.1 Edges

Scrape or wire-brush the edges of lead-coated material to be soldered to produce a bright surface. Flux brush the seams in before soldering. Treat with soldering acid flux the edges of stainless steel to be pre-tinned. Seal the joints in aluminum sheets of 0.040 inch or less in thickness with specified sealants. Do not solder aluminum.

3.1.7 Welding and Mechanical Fastening

Use welding for aluminum of thickness greater than 0.040 inch. Aluminum 0.040 inch or less in thickness must be butted and the space backed with formed flashing plate; or lock joined, mechanically fastened, and filled with sealant as recommended by the aluminum manufacturer.

3.1.7.1 Welding of Aluminum

Use welding of the inert gas, shield-arc type. For procedures, appearance and quality of welds, and the methods used in correcting welding work, conform to AWS D1.2/D1.2M.

3.1.7.2 Mechanical Fastening of Aluminum

Use No. 12, aluminum alloy, sheet metal screws or other suitable aluminum alloy or stainless steel fasteners. Drive fasteners in holes made with a No. 26 drill in securing side laps, end laps, and flashings. Space fasteners 12 inches maximum on center. Where end lap fasteners are required to improve closure, locate the end lap fasteners not more than 2 inches from the end of the overlapping sheet.

3.1.8 Protection from Contact with Dissimilar Materials

3.1.8.1 Copper or Copper-bearing Alloys

Paint with heavy-bodied bituminous paint surfaces in contact with dissimilar metal, or separate the surfaces by means of moistureproof building felts.

3.1.8.2 Aluminum

Do not allow aluminum surfaces in direct contact with other metals except stainless steel, zinc, or zinc coating. Where aluminum contacts another metal, paint the dissimilar metal with a primer followed by two coats of aluminum paint. Where drainage from a dissimilar metal passes over aluminum, paint the dissimilar metal with a non-lead pigmented paint. Aluminum may be used over concrete construction, provided that required reglets are of stainless steel and aluminum surface in contact with concrete or masonry is coated with bituminous paint or zinc chromate primer.

3.1.8.3 Metal Surfaces

Paint surfaces in contact with mortar, concrete, or other masonry materials with alkali-resistant coatings such as heavy-bodied bituminous paint.

3.1.8.4 Wood or Other Absorptive Materials

Paint surfaces that may become repeatedly wet and in contact with metal with two coats of aluminum paint or a coat of heavy-bodied bituminous paint.

3.1.9 Expansion and Contraction

Provide expansion and contraction joints at not more than 32 foot intervals for aluminum and at not more than 40 foot intervals for other metals. Provide an additional joint where the distance between the last expansion joint and the end of the continuous run is more than half the required interval. Space joints evenly. Join extruded aluminum gravel stops and fascia by expansion and contraction joints spaced not more than 12 feet apart.

3.1.10 Counterflashing

Except where indicated or specified otherwise, insert counterflashing in reglets located from 9 to 10 inches above roof decks, extend down vertical surfaces over upturned vertical leg of base flashings not less than 3 inches. Fold the exposed edges of counterflashings 1/2 inch. Where stepped counterflashings are required, they may be installed in short lengths a minimum 8 inches by 8 inches or may be of the preformed single piece type. Provide end laps in counterflashings not less than 3 inches and make it weathertight with plastic cement. Do not make lengths of metal counterflashings exceed 10 feet. Form flashings to the required shapes before installation. Factory form corners not less than 12 inches from the angle. Secure the flashings in the reglets with lead wedges and space not more than 18 inches apart; on short runs, place wedges closer together. Fill caulked-type reglets or raked joints which receive counterflashing with caulking compound. Turn up the concealed edge of counterflashings built into masonry or concrete walls not less than 1/4 inch and extend not less than 2 inches into the walls. Install counterflashing to provide a spring action against base flashing.

3.1.11 Metal Reglets

Keep temporary cores in place during installation. Ensure factory fabricated caulked type or friction type, reglets have a minimum opening of 1/4 inch and a minimum depth of 1-1/4 inch, when installed.

3.1.11.1 Caulked Reglets

Wedge flashing in reglets with lead wedges every 18 inches, caulked full and solid with an approved compound.

3.1.11.2 Friction Reglets

Install flashing snap lock receivers at 24 inches on center maximum. When flashing has been inserted the full depth of the slot, caulk the slot, lock, and fill with sealant.

3.1.12 Polyvinyl Chloride Reglets for Temporary Construction

Rigid polyvinyl chloride reglets may be provided in lieu of metal reglets for temporary construction.

3.1.13 Gravel Stops and fascia

Prefabricate in the shapes and sizes indicated and in lengths not less than 8 feet. Extend flange at least 4 inches onto roofing. Provide prefabricated, mitered corners internal and external corners. Install gravel stops and fascia after all plies of the roofing membrane have been applied, but before the flood coat of bitumen is applied. Prime roof flange of gravel stops and fascia on both sides with an asphalt primer. After primer has dried, set flange on roofing membrane and strip-in. Nail flange securely to wood nailer with large-head, barbed-shank roofing nails 1.5 inch long spaced not more than 3 inches on center, in two staggered rows.

3.1.13.1 Edge Strip

Hook the lower edge of fascia at least 3/4 inch over a continuous strip of the same material bent outward at an angle not more than 45 degrees to form a drip. Nail hook strip to a wood nailer at 6 inches maximum on center. Where fastening is made to concrete or masonry, use screws spaced 12 inches on center driven in expansion shields set in the concrete or masonry. Where horizontal wood nailers are slotted to provide for insulation venting, install strips to prevent obstruction of vent slots. Where necessary, install strips over 1/16 inch thick compatible spacer or washers.

3.1.13.2 Joints

Leave open the section ends of gravel stops and fascia 1/4 inch and backed with a formed flashing plate, mechanically fastened in place and lapping each section end a minimum of 4 inches set laps in plastic cement. Face nailing is not permitted. Install prefabricated aluminum gravel stops and fascia in accordance with the manufacturer's printed instructions and details.

3.1.14 Metal Drip Edges

Provide a metal drip edge, designed to allow water run-off to drip free of underlying construction, at eaves and rakes prior to the application of roofing shingles. Apply directly on the wood deck at the eaves and over the underlay along the rakes. Extend back from the edge of the deck not more than 3 inches and secure with compatible nails spaced not more than 10 inches on center along upper edge.

3.1.15 Flashing at Wall Openings

Install pan flashing in the rough opening sill at all penetrations in the exterior wall assemblies, such as windows, louvers, storefronts and curtain walls. Pan sill flashing must have end dams at both jambs a minimum of 2 in high and a rear dam of 2 in high. Flashing must comply with ASTM E2112 and SMACNA 1793.

3.1.16 Sheet Metal Covering on Flat, Sloped, or Curved Surfaces

Except as specified or indicated otherwise, cover and flash all minor

flat, sloped, or curved surfaces such as crickets, bulkheads, dormers and small decks with metal sheets of the material used for flashing; maximum size of sheets, 16 by 18 inches. Fasten sheets to sheathing with metal cleats. Lock seams and solder. Lock aluminum seams as recommended by aluminum manufacturer. Provide an underlayment of roofing felt for all sheet metal covering.

3.1.17 Expansion Joints

Provide expansion joints for roofs, walls, and floors as specified. Provide expansion joints in continuous sheet metal at 40 foot intervals for copper and stainless steel and at 32 foot intervals for aluminum. Provide evenly spaced joints. Provide an additional joint where the distance between the last expansion joint and the end of the continuous run is more than half the required interval spacing. Conform to the requirements of Table I.

3.1.17.1 Roof Expansion Joints

Consist of curb with wood nailing members on each side of joint, bituminous base flashing, metal counterflashing, and metal joint cover. Bituminous base flashing is specified in Roofing Section. Provide counterflashing as specified in paragraph COUNTERFLASHING, except as follows: Provide counterflashing with vertical leg of suitable depth to enable forming into a horizontal continuous cleat. Secure the inner edge to the nailing member. Make the outer edge projection not less than one inch for flashing on one side of the expansion joint and be less than the width of the expansion joint plus one inch for flashing on the other side of the joint. Hook the expansion joint cover over the projecting outer edges of counterflashing. Provide roof joint with a joint cover of the width indicated. Hook and lock one edge of the joint cover over the shorter projecting flange of the continuous cleat, and the other edge hooked over and loose locked with the longer projecting flange. Joints are specified in Table II.

3.1.17.2 Floor and Wall Expansion Joints

Provide U-shape with extended flanges for expansion joints in concrete and masonry walls and in floor slabs.

3.1.18 Stepped Flashing

Provide stepped flashing where sloping roofs surfaced with shingles abut vertical surfaces. Place separate pieces of base flashing in alternate shingle courses.

3.1.19 Copings

Provide coping with locked and soldered seam. Terminate outer edges in edge strips. Install with sealed lap joints as indicated.

3.1.20 Through Wall Flashing

Provide through wall flashing as required in the applicable wall system Sections.

3.2 PAINTING

Touch ups in the field may be applied only after metal substrates have

been cleaned and pretreated in accordance with manufacturer's written instructions and products.

Field-paint dissimilar sheet metals in contact to separate and deter galvanic interactions.

3.3 CLEANING

Clean exposed sheet metal work at completion of installation. Remove grease and oil films, handling marks, contamination from steel wool, fittings and drilling debris, and scrub-clean. Free the exposed metal surfaces of dents, creases, waves, scratch marks, and solder or weld marks.

3.4 REPAIRS TO FINISH

Scratches, abrasions, and minor surface defects of finish may be repaired in accordance with the manufacturer's printed instructions and as approved. Repair damaged surfaces caused by scratches, blemishes, and variations of color and surface texture. Replace items which cannot be repaired.

-- End of Section --

SECTION 07 92 00

JOINT SEALANTS

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 C509	(2006; R 2021) Standard Specification for Elastomeric Cellular Preformed Gasket and Sealing Material
ASTM C834	(2017; R 2023) Standard Specification for Latex Sealants
ASTM C920	(2018; R 2024) Standard Specification for Elastomeric Joint Sealants
ASTM C1193	(2016) Standard Guide for Use of Joint Sealants
ASTM C1521	(2019; R 2020) Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints
ASTM D1056	(2020) Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

CDPH SECTION 01350	(2017; Version 1.2) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

SCAQMD Rule 1168	(2022) Adhesive and Sealant Applications

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Sealants; G, AE

Primers; G, AE

Bond Breakers; G, AE

Backstops; G, AE

Cleaning Solvents; G, AE

SD-06 Test Reports

Field Adhesion; G, PO

SD-07 Certificates

Indoor Air Quality For Interior Sealants; S

Indoor Air Quality For Interior Floor Joint Sealants; S

1.3 PRODUCT DATA

Include storage requirements, shelf life, curing time, instructions for mixing and application, and accessories. Provide manufacturer's Safety Data Sheets (SDS) for each solvent, primer and sealant material proposed.

1.4 ENVIRONMENTAL CONDITIONS

Apply sealant when the ambient temperature is between 40 and 90 degrees F.

1.5 DELIVERY AND STORAGE

Deliver materials to the jobsite in unopened manufacturers' sealed shipping containers, with brand name, date of manufacture, and material designation clearly marked thereon. Label elastomeric sealant containers to identify type, class, grade, and use. Handle and store materials in accordance with manufacturer's printed instructions. Prevent exposure to foreign materials or subjection to sustained temperatures exceeding 90 degrees F or lower than0 degrees F. Keep materials and containers closed and separated from absorptive materials such as wood and insulation.

1.6 QUALITY ASSURANCE

1.6.1 Compatibility with Substrate

Verify that each sealant is compatible for use with each joint substrate in accordance with sealant manufacturer's printed recommendations for each application.

1.6.2 Joint Tolerance

Provide joint tolerances in accordance with manufacturer's printed instructions.

1.6.3 Mock-Up

Provide a mock-up of each type of sealant using materials, colors, and techniques approved for use on the project. Approved mock-ups may be incorporated into the Work.

1.6.4 Adhesion

Provide in accordance with ASTM C1193 or ASTM C1521.

PART 2 PRODUCTS

2.1 SEALANTS

Provide sealant products that have been tested, found suitable, and documented as such by the manufacturer for the particular substrates to which they will be applied.

In areas with ambient temperatures that exceed 110 degrees F, do not use polybutene, bituminous, acrylic-latex, polyvinyl acetate latex sealants, polychloroprene (neoprene), polyvinyl chloride (PVC), and polyurethane foams, and neoprene, PVC, and styrene butadiene rubber extruded seals and closure strips due to these materials having maximum recommended surface temperature ranges from 130 to 180 degrees F.

2.1.1 Interior Sealants

Provide ASTM C834. Provide sealant products used on the interior of the building (defined as inside of the weatherproofing system) meeting either emissions requirements of CDPH SECTION 01350 (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of SCAQMD Rule 1168. Provide certification or validation of indoor air quality for interior sealants. Location(s) and color(s) of sealant for the following (Note, color "as selected" refers to manufacturer's full range of color options):

LOCATION	COLOR
a. Small voids between walls or partitions and adjacent lockers, casework, shelving, door frames, built-in or surface mounted equipment and fixtures, and similar items.	Gray
b. Perimeter of frames at doors, windows, and access panels which adjoin exposed interior concrete and masonry surfaces.	Gray
c. Joints of interior masonry walls and partitions which adjoin columns, pilasters, concrete walls, and exterior walls unless otherwise detailed.	Gray
d. Joints between edge members for acoustical tile and adjoining vertical surfaces.	Gray
e. Interior locations, not otherwise indicated or specified, where small voids exist between materials specified to be painted.	Gray
f. Joints between bathtubs and ceramic tile; joints between shower receptors and ceramic tile; joints formed where non-planar tile surfaces meet.	Gray

LOCATION	COLOR
g. Joints formed between tile floors and tile base cove; joints between tile and dissimilar materials; joints occurring where substrates change.	Gray
h. Behind escutcheon plates at valve pipe penetrations and showerheads in showers.	Gray

2.1.2 Exterior Sealants

For joints in vertical surfaces, provide ASTM C920, Type S or M, Grade NS, Class 25, Use NT. For joints in horizontal surfaces, provide ASTM C920, Type S or M, Grade P, Class 25, Use T. Provide location(s) and color(s) of sealant as follows (Note, color "as selected" refers to manufacturer's full range of color options):

LOCATION	COLOR
a. Joints and recesses formed where frames and subsills of windows, doors, louvers, and vents adjoin masonry, concrete, or metal frames. Use sealant at both exterior and interior surfaces of exterior wall penetrations.	Gray
b. Joints between new and existing exterior masonry walls.	Gray
c. Masonry joints where shelf angles occur.	Gray
d. Joints in wash surfaces of stonework.	Gray
e. Expansion and control joints.	Gray
f. Interior face of expansion joints in exterior concrete or masonry walls where metal expansion joint covers are not required.	Gray
g. Voids where items pass through exterior walls.	Gray
h. Metal reglets, where flashing is inserted into masonry joints, and where flashing is penetrated by coping dowels.	Gray
i. Metal-to-metal joints where sealant is indicated or specified.	Gray
j. Joints between ends of gravel stops, fascia, copings, and adjacent walls.	Gray

2.1.3 Floor Joint Sealants

ASTM C920, Type S or M, Grade P, Class 25, Use T. Provide sealant products used on the interior of the building (defined as inside of the weatherproofing system) meeting either emissions requirements of CDPH SECTION 01350 (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of SCAQMD Rule 1168. Provide certification or validation of indoor air quality for interior floor joint sealants. Provide location(s) and color(s) of sealant as follows (Note, color "as selected" refers to manufacturer's full range of color options):

LOCATION	COLOR
a. Seats of metal thresholds for exterior doors.	Gray
b. Control and expansion joints in floors, slabs, ceramic tile, and walkways.	Gray

2.2 PRIMERS

Non-staining, quick drying type and consistency as recommended by the sealant manufacturer for the particular application. Provide primers for interior applications that meet the indoor air quality requirements of the paragraph INTERIOR SEALANTS above.

2.3 BOND BREAKERS

Type and consistency as recommended by the sealant manufacturer to prevent adhesion of the sealant to the backing or to the bottom of the joint. Provide bond breakers for interior applications that meet the indoor air quality requirements of the paragraph INTERIOR SEALANTS above.

2.4 BACKSTOPS

Provide glass fiber roving, neoprene, butyl, polyurethane, or polyethylene foams free from oil or other staining elements as recommended by sealant manufacturer. Provide 25 to 33 percent oversized backing for closed cell and 40 to 50 percent oversized backing for open cell material, unless otherwise indicated. Provide backstop material that is compatible with sealant. Do not use oakum or other types of absorptive materials as backstops.

2.4.1 Rubber

Provide in accordance with ASTM D1056, Type 2, closed cell, Class B, Grade 2A1 or 2A2, round cross section for cellular rubber sponge backing.

2.4.2 Synthetic Rubber

Provide in accordance with ASTM C509, Option I, Type I preformed rods for synthetic rubber backing.

2.4.3 Silicone Rubber Base

Provide in accordance with ASTM C920, from a single component, with

solvent release, Non-sag, Type S, Grade NS, Class 25. Color as selected from manufacturer's full range of color choices.

2.5 CLEANING SOLVENTS

Provide type(s) recommended by the sealant manufacturer and in accordance with environmental requirements herein. Protect adjacent aluminum and bronze surfaces from solvents. Provide solvents for interior applications that meet the indoor air quality requirements of the paragraph INTERIOR SEALANTS above.

PART 3 EXECUTION

3.1 FIELD QUALITY CONTROL

Perform a field adhesion test in accordance with manufacturer's instructions and ASTM C1193, Method A or ASTM C1521, Method A, Tail Procedure. Remove sealants that fail adhesion testing; clean substrates, reapply sealants, and re-test. Test sealants adjacent to failed sealants. Submit field adhesion test report indicating tests, locations, dates, results, and remedial actions taken.

3.2 SURFACE PREPARATION

Prepare surfaces according to manufacturer's printed installation instructions. Clean surfaces from dirt, frost, moisture, grease, oil, wax, lacquer, paint, or other foreign matter that would destroy or impair adhesion. Remove oil and grease with solvent; thoroughly remove solvents prior to sealant installation. Wipe surfaces dry with clean cloths. When resealing an existing joint, remove existing caulk or sealant prior to applying new sealant. For surface types not listed below, provide in accordance with sealant manufacturer's printed instructions for each specific surface.

3.2.1 Steel Surfaces

Remove loose mill scale by sandblasting or, if sandblasting is impractical or would damage finished work, scraping and wire brushing. Remove protective coatings by sandblasting or using a residue free solvent. Remove resulting debris and solvent residue prior to sealant installation.

3.2.2 Aluminum or Bronze Surfaces

Remove temporary protective coatings from surfaces that will be in contact with sealant. When masking tape is used as a protective coating, remove tape and residual adhesive prior to sealant application. For removing protective coatings and final cleaning, use non-staining solvents recommended by the manufacturer of the item(s) containing aluminum or bronze surfaces.

3.2.3 Concrete and Masonry Surfaces

Where surfaces have been treated with curing compounds, oil, or other such materials, remove materials by sandblasting or wire brushing. Remove laitance, efflorescence and loose mortar from the joint cavity. Remove resulting debris prior to sealant installation.

3.2.4 Wood Surfaces

Ensure wood surfaces that will be in contact with sealants are free of splinters, sawdust and other loose particles.

3.3 SEALANT PREPARATION

Do not add liquids, solvents, or powders to sealants. Mix multicomponent elastomeric sealants in accordance with manufacturer's printed instructions.

3.4 APPLICATION

3.4.1 Joint Width-To-Depth Ratios

Acceptable Ratios:

JOINT WIDTH	JOINT DEPTH	
	Minimum	Maximum
For metal, glass, or other nonporous surfaces:		
1/4 inch (minimum)	1/4 inch	1/4 inch
over 1/4 inch	1/2 of width	Equal to width
For wood, concrete, masonry, or stone:		
1/4 inch (minimum)	1/4 inch	1/4 inch
over 1/4 inch to 1/2 inch	1/4 inch	Equal to width
over 1/2 inch to 1 inch	1/2 inch	5/8 inch
Over 1 inch	prohibited	

Unacceptable Ratios: Where joints of acceptable width-to-depth ratios have not been provided, clean out joints to acceptable depths and grind or cut to acceptable widths without damage to the adjoining work. Grinding is prohibited at metal surfaces.

3.4.2 Unacceptable Sealant Use

Do not install sealants in lieu of other required building enclosure weatherproofing components such as flashing, drainage components, and joint closure accessories, or to close gaps between walls, floors, roofs, windows, and doors, that exceed acceptable installation tolerances. Remove sealants that have been used in an unacceptable manner and correct building enclosure deficiencies to comply with contract documents requirements.

3.4.3 Masking Tape

Place masking tape on the finished surface on one or both sides of joint cavities to protect adjacent finished surfaces from primer or sealant smears. Remove masking tape within 10 minutes of joint filling and

tooling.

3.4.4 Backstops

Provide backstops dry and free of tears or holes. Tightly pack the back or bottom of joint cavities with backstop material to provide joints in specified depths. Provide backstops where indicated and where backstops are not indicated but joint cavities exceed the acceptable maximum depths specified in JOINT WIDTH-TO-DEPTH RATIOS Table.

3.4.5 Primer

Clean out loose particles from joints immediately prior to application of. Apply primer to joints in concrete masonry units, wood, and other porous surfaces in accordance with sealant manufacturer's printed instructions. Do not apply primer to exposed finished surfaces.

3.4.6 Bond Breaker

Provide bond breakers to surfaces not intended to bond in accordance with, sealant manufacturer's printed instructions for each type of surface and sealant combination specified.

3.4.7 Sealants

Provide sealants compatible with the material(s) to which they are applied. Do not use a sealant that has exceeded its shelf life or has jelled and cannot be discharged in a continuous flow from the sealant gun. Apply sealants in accordance with the manufacturer's printed instructions with a gun having a nozzle that fits the joint width. Work sealant into joints so as to fill the joints solidly without air pockets. Tool sealant after application to ensure adhesion. Apply sealant uniformly smooth and free of wrinkles. Upon completion of sealant application, roughen partially filled or unfilled joints, apply additional sealant, and tool smooth as specified. Apply sealer over sealants in accordance with the sealant manufacturer's printed instructions.

3.5 PROTECTION AND CLEANING

3.5.1 Protection

Protect areas adjacent to joints from sealant smears. Masking tape may be used for this purpose if removed 5 to 10 minutes after the joint is filled and no residual tape marks remain.

3.5.2 Final Cleaning

Upon completion of sealant application, remove remaining smears and stains and leave the work in a clean and neat condition.

a. Masonry and Other Porous Surfaces: Immediately remove fresh sealant that has been smeared on adjacent masonry, rub clean with a solvent, and remove solvent residue, in accordance with sealant manufacturer's printed instructions. Allow excess sealant to cure for 24 hours then

remove by wire brushing or sanding. Remove resulting debris.

b. Metal and Other Non-Porous Surfaces: Remove excess sealant with a solvent moistened cloth. Remove solvent residue in accordance with solvent manufacturer's printed instructions.

-- End of Section --

SECTION 08 11 13

STEEL DOORS AND FRAMES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel

ASTM INTERNATIONAL (ASTM)

ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A879/A879M	(2012; R 2017) Standard Specification for Steel Sheet, zinc Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface
ASTM A924/A924M	(2022a) Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM C578	(2023) Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation
ASTM C591	(2022) Standard Specification for Unfaced Preformed Rigid Cellular Polyisocyanurate Thermal Insulation
ASTM C612	(2014; R 2019) Standard Specification for Mineral Fiber Block and Board Thermal Insulation
ASTM D2863	(2019) Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)
ASTM F2247	(2018) Standard Test Method for Metal Doors Used in Blast Resistant Applications (Equivalent Static Load Method)
ASTM F2927	(2012) Standard Test Method for Door Systems Subject to Airblast Loadings

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

ANSI/BHMA A156.115	(2016) Hardware Preparation in Steel Doors and Steel Frames

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 80	(2025) Standard for Fire Doors and Other Opening Protectives

STEEL DOOR INSTITUTE (SDI/DOOR)

SDI/DOOR 111	(2009) Recommended Details for Standard Steel Doors, Frames, and Accessories and Related Components
SDI/DOOR 113	(2023) Standard Practice for Determining the Steady-State Thermal Transmittance of Steel Door and Frame Assemblies
SDI/DOOR A250.6	(2020) Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames
SDI/DOOR A250.8	(2023) Specifications for Standard Steel Doors and Frames
SDI/DOOR A250.11	(2022) Recommended Erection Instructions for Steel Frames

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 4-010-01	(2018; with Change 3, 2024) DoD Minimum Antiterrorism Standards for Buildings

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Doors; G, AE

Frames; G, AE

Accessories

SD-03 Product Data

Doors; G, AE

Recycled Content for Steel Door Product; S

Frames; G, AE

Recycled Content for Steel Frame Product; S

Accessories

1.3 DELIVERY, STORAGE, AND HANDLING

Deliver doors, frames, and accessories undamaged and with protective wrappings or packaging. Provide temporary steel spreaders securely fastened to the bottom of each welded frame. Store doors and frames on platforms under cover in clean, dry, ventilated, and accessible locations, with 1/4 inch airspace between doors. Remove damp or wet packaging immediately and wipe affected surfaces dry. Replace damaged materials with new.

PART 2 PRODUCTS

2.1 STANDARD STEEL DOORS

SDI/DOOR A250.8, except as specified otherwise. Prepare doors to receive door hardware as specified in Section 08 71 00 DOOR HARDWARE. Undercut where indicated. Provide exterior doors with top edge closed flush and sealed to prevent water intrusion. Provide doors at 1-3/4 inch thick, unless otherwise indicated. Provide door material that uses a minimum of 25 percent recycled content. Submit shop drawings showing each type of door. Provide a schedule of doors within the shop drawing submittal identifying door number, door and frame types and construction, dimensions, thickness, door louvers, fire ratings, hardware sets, accessories, and glazing size and type. Provide data indicating percentage of recycled content for steel door product. Exterior doors must be tested in accordance with ASTM F2247 or ASTM F2927 to meet requirements of UFC 4-010-01.

2.1.1 Classification - Level, Performance, Model

2.1.1.1 Heavy Duty Doors

SDI/DOOR A250.8, Level 2, physical performance Level B, Model 2, with core construction as required by the manufacturer for exterior doors, of size(s) and design(s) indicated. Where vertical stiffener cores are required, the space between the stiffeners must be filled with board insulation. Provide Level 2 where indicated.

2.2 ACCESSORIES

2.2.1 Astragals

For pairs of exterior steel doors which will not have aluminum astragals or removable mullions, as specified in Section 08 71 00 DOOR HARDWARE provide overlapping steel astragals with the doors.

2.2.2 Moldings

Provide moldings around glass of interior and exterior doors and louvers of interior doors. Provide nonremovable moldings on outside of exterior doors and on corridor side of interior doors. Other moldings may be stationary or removable. Secure inside moldings to stationary moldings, or provide snap-on moldings.

2.3 INSULATION CORES

Provide insulating cores at all exterior doors, and provide an apparent U-factor of.37 BTU/h x ft2 x degrees F in accordance with SDI/DOOR 113 and conforming to:

a. Rigid Cellular Polyisocyanurate Foam: ASTM C591, Type I or II, foamed-in-place or in board form, with oxygen index of not less than 22 percent when tested in accordance with ASTM D2863; or

b. Rigid Polystyrene Foam Board: ASTM C578, Type I or II; or

c. Mineral board: ASTM C612, Type I.

2.4 STANDARD STEEL FRAMES

SDI/DOOR A250.8, Level 4, except as otherwise specified. Form frames to sizes and shapes indicated, with welded corners. Provide steel frames for doors, unless otherwise indicated. Submit shop drawings showing each type of frame. Provide frame product that uses a minimum of 25 percent recycled content. Provide data indicating percentage of recycled content for steel frame product.

2.4.1 Welded Frames

Continuously weld frame faces at corner joints. Mechanically interlock or continuously weld stops and rabbets. Grind welds smooth.

Weld frames in accordance with the recommended practice of the Structural Welding Code Sections 1 through 6, AWS D1.1/D1.1M and in accordance with the practice specified by the producer of the metal being welded.

2.4.2 Stops and Beads

Provide form and loose stops and beads from 20 gage steel. Provide for glazed and other openings in standard steel frames. Secure beads to frames with oval-head, countersunk Phillips self-tapping sheet metal screws or concealed clips and fasteners. Space fasteners approximately 12 to 16 inch on center. Miter molded shapes at corners. Butt or miter square or rectangular beads at corners.

2.4.3 Anchors

Provide anchors to secure the frame to adjoining construction. Provide steel anchors, zinc-coated not lighter than 18 gage.

2.4.3.1 Wall Anchors

Provide at least three anchors for each jamb. For frames which are more than 7.5 feet in height, provide one additional anchor for each jamb for each additional 2.5 feet or fraction thereof.

a. Masonry: Provide anchors of corrugated or perforated steel straps or 3/16 inch diameter steel wire, adjustable or T-shaped;

b. Stud partitions: Weld or otherwise securely fasten anchors to backs of frames. Design anchors to be fastened to closed steel studs with sheet metal screws, and to open steel studs by wiring or welding;

c. Completed openings: Secure frames to previously placed concrete or masonry with expansion bolts in accordance with SDI/DOOR 111; and

d. Solid plaster partitions: Secure anchors solidly to back of frames and tie into the lath. Provide adjustable top strut anchors on each side of frame for fastening to structural members or ceiling construction above. Provide size and type of strut anchors as recommended by the frame manufacturer.

2.4.3.2 Floor Anchors

Provide floor anchors drilled for 3/8 inch anchor bolts at bottom of each jamb member. Where floor fill occurs, terminate bottom of frames at the indicated finished floor levels and support by adjustable extension clips resting on and anchored to the structural slabs.

2.5 EXTERIOR FRAMES

Provide thermal insulation in all exterior frames. Provide frames of a minimum Level 4, with frames of a minimum thickness of 0.067 inch, 14 gage.

2.6 HARDWARE PREPARATION

Drill and tap doors and frames to receive finish hardware. Prepare doors and frames for hardware in accordance with the applicable requirements of SDI/DOOR A250.8 and SDI/DOOR A250.6. For additional requirements refer to ANSI/BHMA A156.115. Drill and tap for surface-applied hardware at the project site. Build additional reinforcing for surface-applied hardware into the door at the factory. Punch door frames, with the exception of frames that will have weatherstripping gasketing, to receive a minimum of two rubber or vinyl door silencers on lock side of single doors and one silencer for each leaf at heads of double doors. Set lock strikes out to provide clearance for silencers.

2.7 FINISHES

2.7.1 Hot-Dip Zinc-Coated and Factory-Primed Finish

Fabricate exterior doors and frames from hot dipped zinc coated steel, alloyed type, that complies with ASTM A924/A924M and ASTM A653/A653M. The coating weight must meet or exceed the minimum requirements for coatings having 0.4 ounces per square foot, total both sides, i.e., A40. Repair damaged zinc-coated surfaces by the application of zinc dust paint. Thoroughly clean and chemically treat to insure maximum paint adhesion. Factory prime as specified in SDI/DOOR A250.8.

2.7.2 Electrolytic Zinc-Coated Anchors and Accessories

Provide electrolytically deposited zinc-coated steel in accordance with ASTM A879/A879M, Commercial Quality, Coating Class A. Phosphate treat and factory prime zinc-coated surfaces as specified in SDI/DOOR A250.8.

2.8 FABRICATION AND WORKMANSHIP

Provide finished doors and frames that are strong and rigid, neat in appearance, and free from defects, waves, scratches, cuts, dents, ridges, holes, warp, and buckle. Provide molded members that are clean cut, straight, and true, with joints coped or mitered, well formed, and in true alignment. Dress exposed welded and soldered joints smooth. Design door

frame sections for use with the wall construction indicated. Corner joints must be well formed and in true alignment. Conceal fastenings where practicable.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Frames

Set frames in accordance with SDI/DOOR A250.11. Plumb, align, and brace securely until permanent anchors are set. Anchor bottoms of frames with expansion bolts or powder-actuated fasteners. Build in or secure wall anchors to adjoining construction.

3.1.2 Doors

Hang doors in accordance with clearances specified in SDI/DOOR A250.8. After erection and glazing, clean and adjust hardware.

3.1.3 Fire Doors and Frames

Install fire doors and frames, including hardware, in accordance with NFPA 80.

3.2 PROTECTION

Protect doors and frames from damage. Repair damaged doors and frames prior to completion and acceptance of the project or replace with new, as directed. Wire brush rusted frames until rust is removed. Clean thoroughly. Apply an all-over coat of rust-inhibitive paint of the same type used for shop coat.

3.3 CLEANING

Upon completion, clean exposed surfaces of doors and frames thoroughly. Remove mastic smears and other unsightly marks.

-- End of Section --

SECTION 08 34 16.20

VERTICAL LIFT FABRIC DOORS

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.

ALUMINUM ASSOCIATION (AA)

AA ADM	(2020) Aluminum Design Manual
AA DAF45	(2003; Reaffirmed 2009) Designation System for Aluminum Finishes

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

AAMA 611	(2014) Voluntary Specification for Anodized Architectural Aluminum

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 325	(2017) Steel Construction Manual
AISC 360	(2016) Specification for Structural Steel Buildings

AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)

ANSI/ASNT CP-189	(2020) ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

AMERICAN WELDING SOCIETY (AWS)

AWS A5.10/A5.10M	(2023) Welding Consumables - Wire Electrodes, Wires and Rods for Welding of Aluminum and Aluminum-Alloys - Classification
AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel
AWS D1.2/D1.2M	(2014; Errata 1 2014; Errata 2 2020) Structural Welding Code - Aluminum

ASTM INTERNATIONAL (ASTM)

ASTM A36/A36M	(2019) Standard Specification for Carbon Structural Steel
ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by

	the Hot-Dip Process
ASTM A992/A992M	(2022) Standard Specification for Structural Steel Shapes
ASTM A1023/A1023M	(2021) Standard Specification for Stranded Carbon Steel Wire Ropes for General Purposes
ASTM B209	(2014) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM B221	(2021) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
ASTM D751	(2019) Standard Test Methods for Coated Fabrics
ASTM D2136	(2019; E 2021) Coated Fabrics - Low-Temperature Bend Test
ASTM E84	(2024) Standard Test Method for Surface Burning Characteristics of Building Materials

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM AMP 500	(2006) Metal Finishes Manual

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA AB 1	(2002) Molded-Case Circuit Breakers, Molded Case Switches, and Circuit-Breaker Enclosures
NEMA ICS 1	(2022) Standard for Industrial Control and Systems: General Requirements
NEMA ICS 2	(2000; R 2020) Industrial Control and Systems Controllers, Contactors, and Overload Relays Rated 600 V
NEMA ICS 5	(2017) Industrial Control and Systems: Control Circuit and Pilot Devices
NEMA ICS 6	(1993; R 2016) Industrial Control and Systems: Enclosures
NEMA KS 1	(2013) Enclosed and Miscellaneous Distribution Equipment Switches (600 V Maximum)
NEMA MG 1	(2021) Motors and Generators

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2026; TIA 26-1; ERTA 26-1; TIA 26-2; TIA 26-3; TIA 26-4; TIA 26-5; TIA 26-6; TIA

	26-7; ERTA 26-2; ERTA 26-3) National Electrical Code
NFPA 79	(2015) Electrical Standard for Industrial Machinery
NFPA 220	(2024) Standard on Types of Building Construction
NFPA 409	(2022) Standard on Aircraft Hangars

U.S. DEPARTMENT OF DEFENSE (DOD)

MIL-STD-889	(2021; Rev D) Galvanic Compatibility of Electrically Conductive Materials
UFC 1-200-01	(2022; with Change 4, 2024) DoD Building Code
UFC 3-301-01	(2023; with Change 6, 2026) Structural Engineering
UFC 4-010-06	(2023) Cybersecurity of Facility-Related Control Systems

UL SOLUTIONS (UL)

UL 98	(2016; Reprint Jan 2022) UL Standard for Safety Enclosed and Dead-Front Switches
UL 248-1	(2011) Low Voltage Fuses - Part 1: General Requirements
UL 248-12	(2011; Reprint Aug 2020) Low Voltage Fuses - Part 12: Class R Fuses
UL 489	(2025) UL Standard for Safety Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures
UL 508	(2018; Reprint Jul 2021) UL Standard for Safety Industrial Control Equipment
UL 698A	(2018; Rev 2019) UL Standard for Safety Industrial Control Panels Relating to Hazardous (Classified) Locations
UL 1449	(2021; Reprint Dec 2022) UL Standard for Safety Surge Protective Devices

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Manufacturer's Qualifications; G, AE

Installer's Qualifications; G, AE

SD-02 Shop Drawings specific to this project, sealed by the Door Manufacturer's Registered Professional Engineer.

Door Design; G, AE

SD-03 Product Data

Diagrams, performance curves and characteristic curves of equipment and systems.

Electric Operator; G, AE

Motors; G, AE

Doors; G, AE

Controls; G, AE

Door Fabric; G, AE

Surge Protection Device (SPD); G, AE

SD-05 Design Data

Calculations; G, AE

Door Load Diagrams; G, AE

Door Compliance Matrix; G, AE

SD-06 Test Reports

Safety Arrester Operation Test; G, AE

Door Fabric: ASTM D2136; G, AE

Door Fabric: ASTM E84; G, AE

Door Fabric Connection; G, AE

Weld Inspection Report; G, AE

SD-07 Certificates

Manufacturer's Qualifications; G, AE

Installers Qualifications; G, AE

Welding Procedures and Qualifications; G, AE

SD-09 Manufacturer's Field Reports

Acceptance Testing Procedure and Report; G, AE

SD-10 Operation and Maintenance Data

Door Operation, Data Package 2; G, AE

Emergency and Routine Preventative Maintenance Plan; G, AE

SD-11 Closeout Submittals

Acceptance Testing Procedure and Report; G, AE

Manufacturer's Warranty; G, AE

1.3 DESIGN REQUIREMENTS

1.3.1 Door Design and Components

The vertical lift fabric doors and components indicated in the construction documents are representative of a commercially-available door. Design and fabricate the door to fit within the space allocated and in accordance with the criteria specified herein and without binding, interfering, or damaging the adjacent structure or itself. Provide a door with a minimum maintenance free operation for 3 years or 1,500 cycles, whichever occurs first, as counted by the door close limit switch. Construct the door with limited combustible construction materials in accordance with NFPA 220 and NFPA 409.

Include a Door Compliance Matrix along with your submittal which references each specification requirement and the corresponding document and page number where compliance may be verified by the reviewer.

Shop drawings of motors, all electrical control devices, and all electrical control panels, including schematic diagrams, dimensional drawings of control panels, details of control panel installations, internal wiring diagrams of control panels, and wiring diagrams indicating all external connections between control panels and from control panels to remote control devices. Furnish list of materials for all control devices, both inside and remote from control panels including manufacturer's model number, electrical ratings, location, and quantity of each item furnished.

Show all vertical lift fabric doors and components, including types, sizes, locations, fabric, supporting, bracing and framing steel and aluminum members, metal gages, fasteners, speed, hardware provisions, signage, installation details, and other details of construction. Include supporting brackets for motors, location of motors, and safety devices. Include personnel door, mullion pit and cover or retractable pin and strike if utilized. Provide details for the closure between bulkhead and doors. Include details for supporting and bracing the door assembly from the structure. Demonstrate through detailing that the indicated superstructure's non-dead load, service level deflections are accommodated in both the downward and upward directions. Indicate finishes to be used.

1.3.1.1 Steel Door Components

The door manufacturer's registered professional engineer is responsible for designing all supporting, bracing and framing steel members associated with the door system for the specified loads in accordance with the requirements of AISC 325 and AISC 360. Comply with the AWS D1.1/D1.1M Standards for all steel welding. Refer to Section 05 12 00 STRUCTURAL

STEEL for other requirements, including bolted connections.

1.3.1.2 Aluminum Door Components

The door manufacturer's registered professional engineer is responsible for designing all supporting, bracing and framing aluminum members associated with the door system for the specified loads in accordance with the requirements of the Aluminum Association (AA ADM). Comply with the AWS D1.2/D1.2M Standards for all aluminum welding.

1.3.1.3 Door Operational Performance

Provide a door which does not bind, catch or become adversely out of level during door operation. Door operation includes (1) fully opening then closing, (2) partially opening then closing, and (3) partially opening, then fully opening, and then closing. Partially opened doors may occur at any intermediate point and smooth operation of the door is required with smooth operation without binding.

1.3.2 Loads

Use the governing design loads for the design of the door system in accordance with UFC 1-200-01, UFC 3-301-01 and all other applicable criteria.

1.3.2.1 Wind Loads

In the closed position, design the entire door system to withstand the component and cladding wind pressures as indicated by the Engineer of Record for a Partially Enclosed building, based upon the indicated design wind velocity, geometry and other factors. Design all elements of the door's components and cladding to withstand both the highest positive and negative pressures based upon the actual tributary area from the wind, as indicated.

In addition, design the entire door system to be both fully open and fully operational for wind velocities up to 78 mph. Calculate the applicable component and cladding wind pressures, including importance factor, and utilize the controlling wind pressures or a positive and negative wind pressure of 15 psf on the surface of the door, whichever is greater. Design door mullions and jambs for the unbalanced positive or negative pressure on the surface of a closed adjacent door with the other adjacent door being open.

Submit complete calculations for all components sealed by the door manufacturer's registered professional engineer for review. Include calculations with analysis of the intermediate and bottom beams using the above applied wind conditions and door positions. Do not design intermediate or bottom beams to rely upon stabilization or bracing from the fabric when the door is not in the closed position. In both the open and closed position, design all intermediate beams for the maximum potential rotation permitted by manufacturer detailing such that applied wind loads are not assumed to act in only the strong axis.

1.3.2.2 Other Loads

Provide door mullions and jambs of adequate strength to transmit the forces from design wind loads, in addition to the other loads resulting from door operations or the door's action as a tributary element, with no

detrimental effect on the operation of the door. Submit the vertical and horizontal loads imposed upon the building structure by the vertical lift fabric door system.

1.3.3 Door Speed

Provide for each door leaf to open fully with a minimum speed of 6 inches per second under all design conditions. Provide door mullion(s), when required by the contract documents, to rotate with a minimum wire rope retraction speed of 6 inches per second.

1.3.4 Door Weight

Submit door load diagrams of the door in the closed and governing open position(s). Provide details showing clearance and attachment requirements for coordination with the structural steel, miscellaneous steel, slab/foundation, and demonstration that superstructure's unfactored deflections are accommodated by the design of the mullions, pits and door leaves.

1.3.5 Cybersecurity

Design all control systems (including systems separate from a utility monitoring and control system) in accordance with UFC 4-010-06. Implement cybersecurity requirements to mitigate vulnerabilities to all facility-related control systems.

1.4 QUALITY ASSURANCE

1.4.1 Manufacturer's Qualifications

Use a vertical lift fabric door product from a manufacturer who is regularly engaged in the design, fabrication, erection, and service of vertical lift fabric doors of type and size required for this project. The manufacturer must have at least 5 years of similar vertical lift fabric door design experience. Similar doors must have comparable function and design including size, configuration, type of use, retractable or moving elements, safety features, controls, and other key engineering elements as the door being specified. It is acceptable to show that a series of similar doors collectively meet all comparable elements to the door being specified, although not necessarily individually. Submit written manufacturer evidence on similar past door designs and installations listing the name, location, contact information of owners, installation dates, overall sizes, features, and other relevant information for experience and qualifications evaluation. Only manufacturers who can submit this evidence of actual installations where the products have proven practical, durable, and require a minimum of maintenance, will be qualified under this specification.

1.4.2 Installer's Qualifications

A manufacturer's representative, skilled and experienced in the erection of vertical lift fabric doors of the type specified herein, is required to supervise installation of the door system(s) in accordance with approved shop drawings. For each Installer, submit written evidence of similar past door installations listing the name, locations, contacts information of owners, installation dates, overall sizes, features, and other relevant information for experience and qualifications evaluation.

1.4.3 Warranty

Provide a three-year warranty for all mechanical and electrical components against defects in material and workmanship beginning on the date of Project Acceptance. Manufacturer is responsible for items requiring adjustment, repair or replacement for the three-year maintenance-free warranty period, or 1500 door cycles, whichever occurs first. Provide a ten year warranty for defects in the fabric material.

1.4.3.1 Maintenance and Repair Action Plan

Provide an Emergency and Routine Preventative Maintenance Plan. In Data Package SD-10 "Operation and Maintenance Data", include a list of phone numbers and personnel contactsand provide a list of suggested spare parts materials and tools to be purchased by the Contracting Officer. Include a list of annual visual safety inspections to be performed or contracted by the government and provide a door design which accommodates each of the visual inspection items with removable panels or viewing ports where inspection items are not directly viewable. A Preventative Maintenance Plan which requires adjustment or maintenance intervals less than 3 years or 1,500 cycles is not permitted.

Submit vertical lift fabric door manuals in accordance with Section 01 78 23OPERATION AND MAINTENANCE DATA.

1.4.4 Delivery, Storage and Handling

Provide shipment of all materials required for door installation in protective packaging. Protect door and accessories from damage during delivery, storage, and handling. Mark all packaging clearly with manufacturer's brand name, door model and job site location. Store in dry location with adequate ventilation, and free from dust and water. Storage must permit easy access for inspection and handling. Remove damaged items that cannot be restored to like new condition or provide new items.

1.5 WELDING PROCEDURES AND QUALIFICATIONS

Prior to welding, submit certification for each welder stating the type of welding and positions qualified for, the code and procedure qualified under, date qualified, and the firm and individual certifying the qualification tests. If the qualification date of the welder or welding operator is more than 6 months old, the welding operator's qualification certificate must be accompanied by a current certificate by the welder attesting to the fact that he has been engaged in welding since the date of certification, with no break in welding service greater than 6 months.

Comply with applicable provisions of AWS D1.1/D1.1M for Steel.

Comply with applicable provisions of AWS D1.2/D1.2M for Aluminum.

PART 2 PRODUCTS

2.1 MATERIALS

Select materials based on durability, low maintenance, weather resistance and strength (permanent deformation from loading is not permitted). Comply with ASTM E84 for limited combustible construction for all door system materials.

2.1.1 Steel Plate and Bars

ASTM A36/A36M

2.1.2 Steel Sheet

ASTM A653/A653M

2.1.3 Steel Shapes

ASTM A992/A992M

2.1.4 Aluminum Extrusions

ASTM B221, Alloy 6063-T6, Alloy 6005-T5 or 6000 Series Aluminum

2.1.5 Aluminum Sheets and Strips

ASTM B209, alloy and temper best suited for the purpose.

2.1.6 Aluminum Welding Rods and Bare Electrodes

AWS A5.10/A5.10M.

2.1.7 Door Fabric

Provide fabric material that is a heavy-duty, rip stop, vinyl coated polyester fabric weighing not less than 19 oz/square yard, capable of carrying 250 lb/in per panel. Provide fabric that is impervious and resistant to solvents, fuel, lubricants, and other similar fluids commonly found in aircraft maintenance hangars. Provide fabric that is ultraviolet (UV) stabilized, self-extinguishing (0-75 flame spread), and suitable to withstand temperatures between plus 158 to minus 31 degrees F in compliance with ASTM D2136. Use a translucent fabric material as shown in the drawings to allow daylighting of the hangar aircraft servicing area. Provide translucent fabric material that meets the same requirements and loadings as the standard door fabric. Fabric color will be selected by the Government from the manufacturer's standard colors. Construct door system such that fabric is tight between the intermediate beams when the door is closed and the wind locks engaged. Test the fabric to meet the criteria of ASTM E84 (flame spread - Class A interior wall and ceiling finish), ASTM D2136 (cold cracking, brittleness and temperature), and ASTM D751 (tensile and tear strength). Provide a minimum 4:1 factor of safety on the fabric design while accounting for degradation due to UV and temperature effects.

Submit door fabric panel samples for weight, strength, and color approval.

2.1.8 Wire Rope

ASTM A1023/A1023M.

2.2 DOORS

Door system consists of individual hoist-up fabric door leaves with intermediate aluminum beams or trusses. Maximum wind load deflection of steel structural door members is not to exceed the member length divided by 120. Maximum wind load deflection of extruded aluminum door members is not to exceed the member length divided by 30. Design and install the

door system to accommodate the anticipated downward deflection due to self weight of the door system after all the building dead load has been applied. Then provide a door system which accommodates the stated unfactored downward and upward deflections of the superstructure to which it is being attached.

2.2.1 Fabric Door Leaves

When one-piece fabric construction is utilized, loop fabric over the uppermost beam and attach the fabric to both flanges of the intermediate beams, top beam, and bottom beam with self-tapping screws through corrosion resistant anodized or coated aluminum batten strip. Provide independent, third party laboratory testing to demonstrate door fabric connection has a minimum 2:1 factor of safety above the required connection forces while accounting for fabric degradation due to UV and temperature effects.

Alternatively, when fabric panel construction is utilized, attach the fabric at all beams using a keder type connection. Provide independent, third party laboratory testing to demonstrate connections are stronger than the fabric.

2.2.2 Intermediate Door Beams

Provide corrosion resistant, extruded aluminum intermediate beams of a suitable depth dependent on the door width and the wind load requirements with a spacing not to exceed 6 feet. Provide, at each end of the beams, a guide block of self-lubricating material or rollers that run along the guides. Built-up members meeting these requirements are acceptable. Design the intermediate door beams and guide block or rollers to carry the full design wind load without failure and without being pulled from the door guides. Guide block or roller design cannot put the intermediate beam into tension under design wind load which would cause pulling forces on door jambs. Provide guide block material of nylon, polyoxymethylene (POM), or Ultra High Molecular Weight (UHMW) polyethylene. Provide rollers that are galvanized steel with maintenance free, lifetime sealed ball-bearings in case-hardened steel races. Midspan splices are prohibited in intermediate beams.

2.2.3 Door Guides

The vertical door guides are an integral part of the door, made of extruded aluminum with a suitable depth and width dependent on the size of the intermediate beams and wind load requirements. Provide guide rails with a T-shaped center guide designed to prevent guide blocks from escaping the guides and designed to prevent placing the intermediate beam in tension under design winds loads (catenary effect). Design the guides to provide weather sealing on the inside and outside faces. Provide adequate space inside the guides, or within the door, for all required components such as the nylon belt, polyester belt, or wire rope of the drive unit, windlocks and safety arresters. Provide removable door guides with anchorage to the mullion and jambs, as applicable, of the size and type required to carry the full design wind load without failure and without permanent deformation. Removable door guides will be mechanically fastened to permit the guide rail to be readily removed with standard tools. Provide guide blocks or roller, inside the guides, sufficient to prevent scraping or damage to the guide rail during normal door operation.

2.3 ELECTRIC OPERATORS

2.3.1 Drive Units

Provide each door leaf with a motor drive system with horsepower sized as appropriate for the weight of the door leaf plus door friction to account for operational wind speeds and corresponding pressures. Equip the gear motor with a drum on which the nylon belt, polyester belt, or wire ropes are wound, including required safety wraps and connections. For dead ends on wire ropes, provide a minimum of two unclamped dead wraps on the wire rope drum with the dead end anchored on the drum barrel by clamps or by inserting end fitting into reinforced pockets. For hoists using synthetic belts, provide a minimum of five dead wraps and belt anchorage to the drum.

If a single motor drive is used, wind the belts and wire ropes on the same drum. When using wire ropes, provide a grooved drum. Attach the belts and wire ropes to the bottom beam via the safety arresters. Provide a hand crank device or other manual means on the motor for manual operation of the door in the event of a power failure. Provide a gear motor that is removable without disturbing limit switch adjustment. Coordinate the drive units with the location of aircraft such that the drive units are accessible while aircraft are in the hangar.

Submit drive unit system horsepower, belt type, and locations. Safety arrestor type, test reports, and brake system details.

2.3.2 Belt/Wire Rope System

Properly select and utilize belts and/or wire ropes to transmit motive force to each door leaf. Install belts/wire ropes free of any kinks and design the system and sheave diameter to prevent the occurrence of any kinks, and abnormal stress in the operating belts/wire ropes. Where belts/wire ropes pass through openings of the building structure, construct the openings to prevent abrasion, wear, or damage to the belts/wire ropes. Design belts, wire ropes, and their connections to have a minimum 6:1 factor of safety, including impact loads.

Do not use belt systems where individual lifted door weight exceeds 6,200 Lbs. Include edge wear indicators on belts and properly terminate at all connections. Provide fully stitched flat eye belt terminations which are permanent and do not require routine adjustment or maintenance.

Properly swage wire rope ends and include thimble loops to prevent wire rope abrasion at end connections. Provide wire rope end connections which are permanent and do not require routine adjustment or maintenance.

Minimize the quantity of motors, sheaves and drums used to guide the belts or wire ropes to reduce maintenance requirements. Provide sheave units in accessible locations that allow inspection and preventive maintenance. Do not locate motors, sheaves, and drums in enclosed locations, which are not readily accessible for visual inspection and maintenance.

2.3.3 Door Drop Prevention

2.3.3.1 Door Leaf Safety Arresters

Supply each door leaf with safety arresters at each jamb door guide that automatically activate and support the door in case the door lifting system fails similar to a belt or wire rope breaking. Attach safety

arresters to each end of the bottom beam which travel in the vertical guide tracks and cannot escape from, or pull off of, the door's guide rails. Provide safety arresters that immediately engage to stop the downward movement of the door in case of belt/wire rope failure in accordance with the below test requirements.

Perform a "Safety Arrestor Operation Test" on each set of safety arresters by a nationally recognized independent testing source to withstand at least 110 percent of the maximum door leaf weight.

The "Safety Arrestor Operation Test" will be deemed successful when it contains at least the following minimum criteria:

a. Test door weight to at least 110 percent of the specific project's door weight.

b. Test by simulating the door lifting system abruptly disengaging, similar to a belt or wire rope breaking.

c. Verify the Safety Arresters automatically engage.

d. Verify door leaf is brought to rest after an initial downward movement (or drop) of not more than 12 inches and that the door leaf is held firmly in this position.

e. Verify that damage from activation of the Safety Arrestors is limited to localized replaceable components, such as the guide rails or safety arrestors, and not a system failure which would require repair or replacement of any other portion of the door system or its structural support.

Submit independent testing source documentation of successful "Safety Arrester Operation Test".

2.3.3.2 Door Leaf Safety Arrester Alternative

Door leaf safety arresters may be omitted, if each door leaf is provided with four or more lifting belts/wire ropes and if is it demonstrated through analysis of the entire door system that the door leaf remains stable, without falling, with the loss of either end belt/wire rope, or any two intermediate belts/wire ropes. Additionally demonstrate, that other failure mechanisms inherent in the door system will not result in a falling door leaf.

2.3.3.3 Swing-Up Door Mullion Safety Arrester

Provide swing-up door mullions with a lifting motor that includes a backup arresting system or secondary brake system to prevent the mullion from falling in case of motor, wire rope, or primary brake failure.

2.3.4 Slack Belt/Wire Rope Breaker

Use a safety device on all belts and wire ropes that will send a slack belt/wire rope condition to the appropriate drive unit(s) and prevent unsafe operation or any other unsafe condition.

2.3.5 Motors

NEMA MG 1, high-starting torque, reversible type with sufficient

horsepower and torque output to move the door in either direction from any position. Provide a motor to produce a door travel speed of not less than 6 inches per second without exceeding the rated capacity. Provide motors that operate on the indicated voltage. Provide motor enclosures that are drip-proof type or NEMA totally enclosed. Supply a hand crank which fits the motor for manual operation of the door in the event of a power failure. Install motors in approved locations. Provide motors that have a minimum service factor of 1.2 at continuous duty under maximum full load. Provide motors in accordance with Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM and requirements listed above.

When two or more motors are used, provide mechanical linkage, electronic position monitoring and/or logic to eliminate the possibility that the door may bind, catch or become adversely out of level during door operation.

Submit motor characteristics including horsepower, service factor, safety factor, and standards compliance.

2.3.6 Controls

Provide control equipment in accordance with NEMA ICS 2. Provide control enclosures in accordance with NEMA ICS 6, Type 12 or Type 4X. Provide door electrical controls in accordance with NEMA AB 1, NEMA ICS 2, NEMA ICS 5, and NEMA KS 1. Provide door electrical controls in accordance with NEMA ICS 1, NEMA ICS 6, NFPA 70, NFPA 79, UL 98, UL 248-1, UL 248-12, UL 489, UL 508, UL 1449, and UL 698A. Provide UL listed door control components. Provide each Door Module with the following operators:

a. Main Control Panel (Station) NEMA Type 4X enclosure.

b. Remote (Auxiliary) Control Panel (Station) at the opposite end of hangar door NEMA Type 4X enclosure to match Main Control Panel.

c. Provide "Open" operator on the exterior of each bay of doors, keyed for use by Fire Department personnel to allow entry in the event of an emergency, in a NEMA Type 4X enclosure.

Provide conduit and control wiring between Main, Auxiliary, emergency stop controls, proximity switches, limit switches, and each door motor drive unit. Provide power and controls wiring and conduit in accordance with Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM.

Submit controls characteristics including all electrical components and devices used in the control system, enclosures, safety devices, transformer size and voltage, and emergency power connection.

2.3.6.1 Control Panel Enclosures

Provide NEMA ICS 6, Type 12 or Type 4X control panel enclosures. Provide an integral main power disconnect switch that is mechanically interlocked with the control panel door at each control panel. Provide factory wired field wiring terminal strip in each control panel and instantaneous three-phase thermal overload relays. Provide each control panel enclosure including an internal motor starter or VFD with adequate integral ventilation (air conditioning if required) for operation in a 120 degree F ambient environment. Provide NEMA rated control relays. Provide main control panel with programmable logic controller.

Provide a three phase UL 1449 listed surge protection device (SPD) for the incoming power to each door control panel. Provide a UL 1449 listed surge suppression device (SPD) for each control circuit (limit switch, proximity switch, motor, brake, solenoid, indicating light, and pushbutton) that is routed external from each door main control panel.

Submit data for each incoming and outgoing power feeder and each control circuit.

Provide devices to control the logic and sequence of door and mullion operation to ensure safe, smooth and dependable operation at each control panel. Provide interlocks to preclude personnel injury, including an interlock between the power supply system and use of the hand crank for manual operation of the door. Provide constant-pressure type, fully guarded, illuminated push buttons on the control panel for both up and down operations. Provide mushroom type emergency stop button on each control panel. Utilize individual user password protected touch screen interface to select desired door or mullion motion. Door motion will be initiated via fully guarded push buttons.

Provide back-up power hook up at the control panel to connect to a portable generator provided by the Base via a pin and sleeve female receptacle (coordinate with Base) and manual transfer switch provided on the main control panel.

2.3.7 Limit Switches

Provide limit switches or proximity switches to automatically stop doors and mullions at the fully open and fully closed positions. Provide limit switches or proximity switch positions that are readily adjustable. Provide limit switches or proximity switches for the wind lock with visual indication on the control panel for each door leaf. Provide visual indication to notify the door operator that the wind locks are engaged for all door leaves.

Provide each retractable mullion pin with a limit switch or proximity switch interlock that proves that the electric mullion pin is fully extended and locked before the door can be moved. If the limit switch or proximity switch is located below 18 inches above the hangar floor, either provide rated Class I Division 2 explosion-proof device or provide an intrinsically safe circuit rated for a Class I Division 2 hazardous location.

Demonstrate the operability of all limit switches prior to Government occupancy.

2.3.8 Door Control Alarms

Provide an audible alarm device on each door main control panel (minimum 100 dbA) that sounds 5 seconds before the door moves and continues to sound when the door is moving. Coordinate this audible signal such that it is clearly different from all of the other audible signals utilized in the hangar bay.

Provide a visual alarm device above each door main control panel (LED beacon with 1600 lumens) that operates 5 seconds before the door moves and continues to operate when the door is moving. Coordinate the color of this visual signal such that it is clearly a different color than all of the other visual signals utilized in the hangar bay.

2.3.9 Safety Device

Provide an intrinsically safe (suitable for a Class I Division 2 hazardous location) electric safety edge on the bottom of the edge of each door, continuous over the full length of the door. Provide a safety edge located inside of a rubber cushioned bottom weather sealing edge (or boot) with sufficient vertical height (factoring in the time and distance that it takes to stop a closing door) to prevent collision damage along the bottom edge of the door. Activate the safety edge when the door is closing and do not allow the safety edge to prevent the door from completely closing and properly sealing along its entire length.

2.3.10 Control Transformers

Provide fused transformers inside of each Main Control Panel as necessary to reduce the voltage on the control circuits to 120 volts or less.

2.3.11 Electrical Components

NFPA 70. Provide automatic control and safety devices, including failsafe battery powered wireless limit switches or hard-wired limit switches electrified components. Wire rope reel type take-up devices are not allowed. Provide control wiring in accordance with NFPA 70. Provide conduit, wiring, and mounting of controls in accordance with Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM.

2.3.12 User Interface with Diagnostics

Supply a human machine interface (HMI) on the face of the Main Control Panel and all Auxiliary Control Panels. The function of the diagnostic panel is to provide information on the status of electrical components in the door system. Provide a large (10 inch minimum diagonal measure) HMI touch screen to include a graphical representation of the entire door system to facilitate ease of use. Provide the HMI with current door status including windlocks. Include a self-diagnostic system to provide detailed status information of a malfunction and provide guided trouble shooting and diagnostic features. Provide a log for malfunctions and system alarms on the HMI as well as detailed service monitoring and service history. Control operation and configuration of the system is by unique, multi-level password access to limit access to the system to qualified and authorized users. Provide HMI with automatic screen lock after 60 seconds of inactivity. Include functionality on the HMI for remote access to the system, by the manufacturer via both Internet and cellular modem, to review malfunction logs, update programming/settings, or assist in troubleshooting, should the user choose to permit such access as permitted by cybersecurity restrictions.

2.4 HEADER BOX

Construct the header boxes of carbon steel and finished in accordance with the paragraph FINISHES.

2.5 BOTTOM BEAM

Construct the bottom beam of carbon steel and finished in accordance with the paragraph FINISHES. Provide a bottom beam of a suitable width and depth to carry the load of the intermediate beams when the door is not closed, and to ensure full closing and a tight floor seal under full

design wind speeds spanning between windlocks located at each jamb. Provide a heavy-duty bottom rubber seal to form a tight seal with the floor under all design conditions. Provide a bottom edge safety device that is integral with the bottom seal.

Design bottom beams to span between safety arrestors at the jambs and support the weight of the door, including intermediate beams, while remaining stable and within the door guides. If the door leaf safety arrestor alternative is utilized per paragraph DOOR LEAF SAFETY ARRESTERS, design the bottom beam to support the weight of the door, including intermediate beams with either end belt/wire rope, or any two intermediate belts/wire ropes, removed while remaining stable and within the door guides. Midspan splices are prohibited in the bottom beam.

2.6 WIND LOCK

At each door leaf provide wind locks at each jamb, which automatically activate and lock the bottom beam into place when the door reaches its closed position to maintain a tight floor seal and intermediate beam stability with tight fabric under design wind conditions. Provide a limit switch, or a proximity switch, with indicator to notify the door operator that all wind locks are engaged properly. Provide switches located below 18 inches above finish floor that are compliant with NFPA 70, Class I, Division 2 hazardous environment.

2.7 SWING-UP MULLION WHERE INDICATED

The swing-up mullions will be designed to swing up under the door leaf in the raised position. They will be constructed of carbon steel and finished in accordance with the paragraph FINISHES. The mullion hinge pivot will be of a maintenance-free bearing design. Provide sufficient length of door guide, between fall arrestors and mullion hinge pivot, to permit door's safety arrestors to fully engage and stop the door from falling in the case of a belt/wire rope break or other failure condition when the door is in the fully open position.

The swing-up mullion must be raised and lowered by a wire rope hoist with a secondary back-up wire rope arresting system. If the secondary back-up wire rope arresting system is fully integrated into the hoist unit, it will be produced by one manufacturer. Wire rope hoist and secondary system will connect to mullion a minimum of 10 feet above finish floor. Attach using a double shear connection through the mullion. Demonstrate through calculations that the lifting apparatus and its connection to the mullion is designed for all loads. Refer to the paragraph ELECTRICAL OPERATION for controls and interlocks of mullion and door panels.

2.7.1 Mullion Pit and Cover where Indicated

Provide a mullion pit frame, guide plate, and cover(s), manufactured of aluminum or steel, for each mullion. Hinged cover plates will be attached to the mullion pit frame. Mullion pit covers will be designed to support a 35,000 pounds force single wheel load with a tire pressure of 200 psi and contact area 175 square inches.

2.8 PERSONNEL DOOR

Personnel doors are not required in Hangar doors.

2.9 OPERATION

2.9.1 Door Operation

Provide a vertical lift fabric door which guides up and down in weather sealed vertical guides attached to the structure and mullions. Provide a door system which operates by lifting the bottom beam upwards in each door leaf, thereby stacking the intermediate beams one on top of the other, with the fabric material folding in pleats. Door operational safety is of paramount importance.

When the door system is fully open, all door system components will be outside of the required clearance area for the door opening.

When the door system is fully closed the door system will seal the opening and form a portion of the building's air barrier. The intermediate beams hang between the two fabric faces thus pulling the fabric material tight and sealing along the guides at each jamb. The tension created in the fabric panels is permitted to stabilize the intermediate beams, if proven capable by the manufacturer, and the bottom beam seal will fit tightly along the entire length of the door threshold.

Submit in accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA. Including wiring diagrams and the complete manufacturer's instructions for operation and maintenance of the doors, door mullions where indicated, and accessories, including emergency operation, in the event of general building power failure to the doors.

2.9.2 Electrical Operation

Provide the main control panel with control logic such that when the integral female pin and sleeve emergency power receptacle is inserted and the integral manual transfer switch associated with the pin and sleeve receptacle is engaged the control panel will automatically limit only one door lift motor or one mullion lift motor to operate at a time.

The door will be stopped by a primary limit switch when the door is opened completely. In case of over travel, the door will be stopped by a secondary limit switch to prevent damage. Slack belt/wire rope breakers will stop the drive unit when the door is closed. In case of belt/wire rope break/rupture or if an obstruction should prevent the door from being closed the slack belt/wire rope breakers will also stop the drive unit. Weight or springs activate the slack breakers.

A touch screen (HMI) control panel station is required at the main and at all auxiliary stations.

Control door operation by three buttons marked "OPEN", "CLOSE", and "STOP". The "OPEN" and "STOP" buttons require only momentary pressure to operate. The "CLOSE" button requires constant pressure to maintain the closing motion of the door. The door will immediately stop, and remain in that position, when the door is in motion and the "STOP" button is pressed or the "CLOSE" button is released. From that stop position, the door operation is then continued in either direction by the "OPEN" or "CLOSE" buttons. Removing the pressure from the "CLOSE" button results in stopping the motor drive and setting the brake.

Two buttons marked "Horizontal Position and Vertical Position" control the mullion operation. Both buttons are controlled by constant pressure to

open and to close. Removing the pressure from either button stops the motor drive and sets the brake. The electrical control panel provides an interlock function to coordinate door leaf and mullion operation.

Buttons are illuminated on the HMI (control panel) and utilize simple flashing/solid illumination schemes to inform the operator of door status (fully open, closed, in motion, etc.). The large touch screen display graphically illustrates the door system to permit the user to select desired operation and inform the user of current door status. Door operation on the HMI (Control Panel) are password protected, by individual user, to prevent accidental or unauthorized operation.

Multipart doors will utilize a human machine interface display (HMI) for door leaf/mullion operation. Upon selection, door operation will be controlled by three buttons marked UP, DOWN, and STOP. The UP and STOP buttons will operate as indicated in the door operation controls section above.

When operating a mullion, controls will operate as described in the mullion operation controls above.

The main control panel will be equipped with backup method of controlling the door system should an HMI failure occur.

2.10 FINISHES

2.10.1 Ferrous Metal

Provide cleaned, prepared and shop-finished ferrous metal surfaces in accordance with Section 09 90 00 PAINTS AND COATINGS. Follow coating system manufacturer's written instructions. Shop finishing of all ferrous metal coatings is required with field coatings limited to touch-up painting and coating of only unfinished accessories such as bolts and brackets.

2.10.2 Aluminum

Before fabrication, clean the units and provide the coating system specified below in accordance with the requirements of the Aluminum Association Designation System, AA DAF45.

Clear Anodized: Conforming to AA-M12-C22-A41 in accordance with NAAMM AMP 500 and complying with AAMA 611. The minimum finish thickness is 0.7 mil or greater.

2.11 SIGNAGE

Provide a placard sign immediately adjacent to all control panels indicating the below Notice. Include the service level wind speed which corresponds to the ultimate wind speed used in design of the open/operational door in paragraph WIND LOADS in the Notice post.

Notice:

Vertical lift fabric doors will be closed and not operated when wind speeds above 60 mph are expected.

Vertical lift fabric doors will be transferred to back-up power for operation when commercial power is not available.

PART 3 EXECUTION

3.1 PROTECTIVE COATINGS

3.1.1 Cleaning

After fabrication, clean all metal surfaces thoroughly of all mill scale, rust, oil, grease and other foreign substances. Apply rust-preventive primer to all steel parts immediately after cleaning.

3.1.2 Shop Painting

After cleaning, coat with primer all steel surfaces other than machine-finished parts. Keep paint off finished bearing surfaces. Before assembly, prime surfaces that will be inaccessible after assembly. Handle painted materials with care to avoid scraping and breaking the protective film. Ferrous metal surfaces that will be exposed after fabrication will be shop coated and touch-up painted in the field in accordance with the paragraph FINISHES.

3.1.3 Metal Protection

Provide in accordance with Chapter 4 of UFC 1-200-01 when door system is in a corrosion prone location or where door system components use dissimilar metals. If dissimilar metals are used, also provide in accordance with MIL-STD-889. Provide added corrosion protection to the design such as, but not limited to, the following. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose. Where aluminum will contact masonry or concrete, protect against corrosion by painting contact surfaces with bituminous coating.

3.2 WELDS

3.2.1 Visual Inspection

Furnish the services of AWS-certified welding inspectors for fabrication and erection inspection and testing and verification inspections in accordance with AWS D1.1/D1.1M. Perform visual inspections on 100 percent of all welds with a Certified Welding Inspector. Document this inspection with the Nondestructive Testing.

Inspect proper preparation, size, gaging location, and acceptability of all welds; identification marking; operation and current characteristics of welding sets in use.

3.2.2 Nondestructive Testing

Perform nondestructive testing in accordance with AWS D1.1/D1.1M. Perform ultrasonic testing in accordance with Table 6.2 of AWS D1.1/D1.1M. Test 50 percent of all welds, with sampling representative of all weld types and locations for the entire door system and for the duration of the fabrication schedule. All personnel performing NDT are required to be certified in accordance with ANSI/ASNT CP-189 in the method of testing being performed. Submit certificates showing compliance with ANSI/ASNT CP-189 for all NDT technicians. If more than 10 percent of welds made by a welder contain defects identified by testing, then all

groove welds made by that welder are required to be tested by ultrasonic testing, and all fillet welds made by that welder are required to be inspected by magnetic particle testing (MT) or dye penetrant testing (PT). When groove welds made by an individual welder are required to be tested, magnetic particle or dye penetrant testing may be used only in areas inaccessible to ultrasonic testing. Retest all repaired areas. Submit weld inspection report.

3.3 ERECTION

Provide all work associated with these door systems under the direct supervision and control of the fabricator for safety, control of product liability, and Engineer of Record responsibilities. Coordinate the erection of the doors with the work of other trades. Coordinate the design, fabrication and erection of the door systems and adjust for actual camber, fabrication, and erection tolerances of the supporting structure including simulated door weight load testing and survey to ensure proper fit-up of the final door system. Coordinate mullion pit locations (including their drains), alignment and orientation. Ensure that all steel support, bracing and framing members are furnished and accurately installed. Coordinate electrical work, including locations of all panels, equipment, motors and other components for required clearances, access and routing of power.

3.3.1 Assembly

Assemble and install the doors and accessories in accordance with the manufacturer's recommendations and installation manual. Secure guides to the walls plum, level, and in-line. Anchor guides at spacing indicated on the manufacturer's installation drawings. Provide additional supports as necessary for attachment of guides, brackets, doors, and operation mechanisms. After erection is complete and before touch-up field painting is applied, thoroughly clean all abraded surfaces, field welds, and field bolts; coat in accordance with paragraph FINISHES.

3.3.2 Cleaning

Clean both the interior and exterior of doors after the completion of erection.

3.3.3 Control Panel Installation

Locate all door control panels indoors, adjacent to the door opening, and with an unobstructed line of sight for the entire door opening. Provide all conduit entries into the bottom of the control panel. Mount control panels and provide three phase power to each control panel.

3.4 ELECTRICAL WORK

NFPA 70. Provide all conduit, wiring, and mounting of controls in accordance with Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM.

Door manufacturer to coordinate with the qualified, licensed electrical contractor who will provide and install all 480 3-phase supply power to all components (such as Main, auxiliary, controllers, panels, motors, and other electrical devices) which require this low voltage supply power. The qualified, licensed electrical contractor will provide and install all conduit for the control level power under the review and approval of the door manufacturer. Either the qualified, licensed electrical contractor

or a factory authorized technician may provide and install all wiring for control level power under the review and approval of the door manufacturer in accordance with the approved construction submittals.

3.5 ACCEPTANCE TESTING PROCEDURE AND REPORT

Submit an Acceptance Testing Procedure for approval for such items as hangar door position switches which interact with HVAC controls. After Government approval, perform the testing and submit a report of the results. Provide acceptance testing for the entire door system, including every component, performed by the door manufacturer and suppliers. The following subparagraphs are included in the acceptance testing.

3.5.1 General

Upon completion of installation, including work by other trades, lubricate, adjust, and test doors to verify operation in accordance with manufacturer's product data. Final adjustments will be made by the Manufacturer's authorized representative. Adjust and re-test the doors until the entire installation is fully operational and acceptable. Acceptance testing must consist of operating each door and mullion open and closed (one cycle) ten times successfully and consecutively within a nine-hour time interval in accordance with manufacturer's recommended time interval between open/close cycles. Provide Contracting Officer's Representative a copy of the final acceptance testing report with completed tests.

3.5.2 Door Drop Prevention Demonstration

Perform a non-destructive demonstration of the safety arrester function by slowly engaging the installed safety arresters on the guiderails at a height of 3 feet above closed position in a controlled manner so as to not fall and not damage any door system components or adjacent structure. Perform demonstration on all door leaves and components in the presence of the Contracting Officer's Representative.

If the door leaf safety arrestor alternative is utilized per paragraph DOOR LEAF ARRESTER ALTERNATIVE, perform a non-destructive demonstration showing the bottom beam is able to support the door with the loss of either end belt/wire rope, or any two intermediate belts/wire ropes, in a safe and controlled manner so as to not fall and not damage any door components or adjacent structure. Perform demonstration on all door leaves and components in the presence of the Contracting Officer's Representative.

3.6 PERSONNEL TRAINING

Provide an 8-hour on-site training session for the door operating personnel and maintenance department. In the training, outline door safety, operation, troubleshooting and repair guidelines.

3.7 EXTRA MATERIALS

Supply a door fabric patch kit with approximately 45 square feet of fabric for each hangar door and all other materials required for door panel repair. Provide all unique tools required to maintain the door system. Provide a patch kit with color matched fabric and associated repair materials and tools.

3.8 INSPECTION AND ADJUSTMENT

Within the 12 month warranty period, following the initial period of use and changes in seasonal temperature, the manufacturer's authorized representative will return to inspect and adjust doors to confirm the door system is fully operational and acceptable. Provide the Contracting Officer's Representative an inspection report outlining observations, door condition, operation, and all items requiring adjustment or requiring repair/replacement under the door system warranty. Include a report with recommended annual inspection and maintenance items. As needed, schedule a follow-up visit to complete items requiring adjustment, repair or replacement. Manufacturer is responsible for items requiring adjustment, repair or replacement for the 3 year maintenance-free warranty period or 1500 cycles, whichever occurs first, beginning after the first 12 month contractor's warranty period.

-- End of Section --

SECTION 08 71 00

DOOR HARDWARE

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 E283	(2019) Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

ANSI/BHMA A156.1	(2021) Butts and Hinges
ANSI/BHMA A156.2	(2022) Bored and Preassembled Locks and Latches
ANSI/BHMA A156.3	(2020) Exit Devices
ANSI/BHMA A156.4	(2024) Door Controls - Closers
ANSI/BHMA A156.6	(2021) Architectural Door Trim
ANSI/BHMA A156.7	(2022) Template Hinge Dimensions
ANSI/BHMA A156.13	(2022) Mortise Locks & Latches Series 1000
ANSI/BHMA A156.16	(2023) Auxiliary Hardware
ANSI/BHMA A156.18	(2020) Materials and Finishes
ANSI/BHMA A156.21	(2019) Thresholds
ANSI/BHMA A156.22	(2021) Gasketing
ANSI/BHMA A156.26	(2012) Continuous Hinges

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 72	(2025; TIA 25-1; TIA 25-2; TIA 25-3; TIA 25-4; ERTA 25-1; ERTA 25-2) National Fire Alarm and Signaling Code
NFPA 80	(2025) Standard for Fire Doors and Other Opening Protectives
NFPA 101	(2024) Life Safety Code

NFPA 252	(2022) Standard Methods of Fire Tests of Door Assemblies

STEEL DOOR INSTITUTE (SDI/DOOR)

SDI/DOOR A250.8	(2023) Specifications for Standard Steel Doors and Frames

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

36 CFR 1191	Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines

UL SOLUTIONS (UL)

UL Bld Mat Dir	(updated continuously online) Building Materials Directory

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Manufacturer's Detail Drawings; G, AE

Verification of Existing Conditions; G, AE

Hardware Schedule; G, AE

Keying System; G, AE

SD-03 Product Data

Hardware Items; G, AE

SD-08 Manufacturer's Instructions

Installation

SD-10 Operation and Maintenance Data

Hardware Schedule Items, Data Package 1; G, AE

1.3 SHOP DRAWINGS

Submit manufacturer's detail drawings indicating all hardware assembly components and interface with adjacent construction. Base shop drawings on verified field measurements and include verification of existing conditions.

1.4 PRODUCT DATA

Indicate fire-ratings at applicable components. Provide documentation of ABA/ADA accessibility compliance of applicable components, as required by 36 CFR 1191 Appendix D - Technical.

1.5 HARDWARE SCHEDULE

Provide Hardware Item List and Hardware Schedule containing the following information, and additional information as needed to identify the complete make up of each hardware set and its application to each opening:

1.5.1 Hardware Item List:

a. Hardware Type

b. Item Number

c. Quantity

d. Size(s)

e. Reference Publication / Type Number

f. Manufacturer's Name / Catalog Number

g. Key Control Symbols

h. UL Mark (If fire rated and listed)

i. BHMA Finish(es)

j. Remarks

1.5.2 Hardware Schedule

a. Hardware Set Number

b. Opening Number(s)

c. Opening Description (single/double leaf, hand, size, door/frame material)

d. Fire Rating

e. Sound Rating

f. Hardware Items

g. Quantity

h. Size

i. BHMA Finish

j. Remarks

In addition, submit hardware schedule data package 1 in accordance with

Section 01 78 23 OPERATION AND MAINTENANCE DATA.

1.6 QUALITY ASSURANCE

1.6.1 Hardware Manufacturers and Modifications

Provide, as far as feasible, locks, hinges, and closers of one lock, hinge, or closer manufacturer's make. Modify hardware as necessary to provide features indicated or specified.

1.7 DELIVERY, STORAGE, AND HANDLING

Deliver hardware in original individual containers, complete with necessary appurtenances including fasteners and instructions. Mark each individual container with item number as shown on hardware schedule.

PART 2 PRODUCTS

2.1 TEMPLATE HARDWARE

Hardware applied to metal or to prefinished doors must be manufactured using a template. Provide templates to door and frame manufacturers in accordance with ANSI/BHMA A156.7 for template hinges. Coordinate hardware items to prevent interference with other hardware.

2.2 HARDWARE FOR FIRE DOORS AND EXIT DOORS

Provide all hardware necessary to meet the requirements of NFPA 72 for door alarms, NFPA 80 for fire doors, NFPA 101 for exit doors, NFPA 252 for fire tests of door assemblies, ABA/ADA accessibility requirements, and all other requirements indicated, even if such hardware is not specifically mentioned in paragraph HARDWARE SCHEDULE. Provide Underwriters Laboratories, Inc. labels for such hardware in accordance with UL Bld Mat Dir or equivalent labels in accordance with another testing laboratory approved in writing by the Contracting Officer.

2.3 HARDWARE ITEMS

Clearly and permanently mark with the manufacturer's name or trademark, hinges, pivots, locks, latches, exit devices, bolts and closers where the identifying mark is visible after the item is installed. For closers with covers, the name or trademark may be beneath the cover. Coordinate electrified door hardware components with corresponding components specified in Division 28 ELECTRONIC SECURITY SYSTEMS (ESS).

2.3.1 Hinges

Provide in accordance with ANSI/BHMA A156.1. Provide hinges that are 4-1/2 by 4-1/2 inch unless otherwise indicated. Construct loose pin hinges for interior doors and reverse-bevel exterior doors so that pins are non-removable when door is closed. Other anti-friction bearing hinges may be provided in lieu of ball bearing hinges.

2.3.2 Continuous Hinges

Where continuous hinges are required, provide in accordance with ANSI/BHMA A156.26.

2.3.3 Locks and Latches

a. At exterior locations provide locksets of full stainless steel type 302 or 304 construction including fronts, strike, escutcheons, knobs, bolts and all interior working parts. Marine Grade I, fully non-ferrous.

b. In non-air-conditioned interior environments or humid interior environments, provide interior locksets on the same Marine Grade I, fully non-ferrous as exterior locksets.

2.3.3.1 Bored Locks and Latches

Provide in accordance with ANSI/BHMA A156.2, Series 4000, Grade 1.

2.3.4 Exit Devices

Provide in accordance with ANSI/BHMA A156.3, Grade 1. Provide adjustable strikes for rim type and vertical rod devices. Provide open back strikes for pairs of doors with mortise and vertical rod devices. Provide

Use stainless steel or bronze base metal with plated finishes. Also include stainless steel fasteners and screws.

2.3.5 Cylinders and Cores

Provide cylinders and cores for new locks, including locks provided under other sections of this specification. Provide cylinders and cores with six pin tumblers. Provide cylinders from the products of one manufacturer, and provide cores from the products of one manufacturer.

2.3.6 Keying System

Provide cylinders of Grade 1 products from one manufacturer. Notify the Contracting Officer 90 days prior to the required delivery of the cylinders. Provide temporary cores and keys for the Contractor's use during construction, and for testing of locksets.

2.3.7 Lock Trim

Provide cast, forged, or heavy wrought construction and commercial plain design for lock trim.

2.3.7.1 Knobs and Roses

Provide in accordance with ANSI/BHMA A156.2 and ANSI/BHMA A156.13 for knobs, roses, and escutcheons. For unreinforced knobs, roses, and escutcheons, provide a 0.050 inch thickness. For reinforced knobs, roses, and escutcheons, provide an outer shell thickness of 0.035 inch and a combined total thickness of 0.070 inch, except at knob shanks. Provide knob shanks 0.060 inch thick.

2.3.7.2 Lever Handles

Provide lever handles where indicated in the Hardware Schedule. Provide in accordance with ANSI/BHMA A156.3 for mortise locks of lever handles for exit devices. Provide lever handle locks with a breakaway feature (such as a weakened spindle or a shear key) to prevent irreparable damage to the lock when force in excess of that specified in ANSI/BHMA A156.13 is

applied to the lever handle. Provide lever handles return to within 1/2 inch of the door face.

2.3.8 Keys

Provide one file key, one duplicate key, and one working key for each key change and for each master keying system. Provide one additional working key for each lock of each keyed-alike group. Stamp each key with appropriate key control symbol and "U.S. property - do not duplicate." Do not place room number on keys.

2.3.9 Closers

Provide in accordance with ANSI/BHMA A156.4, Series C02000, Grade 1, with PT 4C. Provide with brackets, arms, mounting devices, fasteners, and other features necessary for the particular application. Size closers in accordance with manufacturer's printed recommendations, or provide multi-size closers, Sizes 1 through 6, and list sizes in the Hardware Schedule. Provide manufacturer's 10 year warranty.

Use stainless steel inside bracketed or door mounted closers on exterior doors. Non-ferrous closers, such as aluminum or cast bronze, are permissible where door utilization is minimal. On interior doors use closers of 302 or 304 stainless steel or non-ferrous materials. On surface-mounted closers use or apply rust inhibiting finish on all ferrous parts. Also apply this finish on concealed closers.

2.3.9.1 Identification Marking

Engrave each closer with manufacturer's name or trademark, date of manufacture, and manufacturer's size designation in locations that will be visible after installation.

2.3.10 Door Protection Plates

Provide in accordance with ANSI/BHMA A156.6.

2.3.10.1 Sizes of Kick Plates

2 inch less than door width for single doors; 1 inch less than door width for pairs of doors. Provide 10 inch kick plates for flush doors .

2.3.11 Door Stops and Silencers

Provide in accordance with ANSI/BHMA A156.16. Silencers Type L03011. Provide three silencers for each single door, two for each pair.

2.3.12 Thresholds

Provide in accordance with ANSI/BHMA A156.21. Use J35100, with vinyl or silicone rubber insert in face of stop, for exterior doors opening out, unless specified otherwise.

2.3.13 Weatherstripping Gasketing

Provide in accordance with ANSI/BHMA A156.22. Provide the type and function designation where specified in paragraph HARDWARE SCHEDULE. Provide a set to include head and jamb seals, sweep strips, . Air leakage of weatherstripped doors not to exceed 1.25 cubic feet per minute of air

per square foot of door area when tested in accordance with ASTM E283. Provide weatherstripping with one of the following:

2.3.13.1 Extruded Aluminum Retainers

Extruded aluminum retainers not less than 0.050 inch wall thickness with vinyl, neoprene, silicone rubber, or polyurethane inserts. Provide clear (natural) anodized aluminum.

2.3.13.2 Interlocking Type

Zinc or bronze not less than 0.018 inch thick.

2.3.13.3 Spring Tension Type

Spring bronze or stainless steel not less than 0.008 inch thick.

2.3.14 Rain Drips

Provide in accordance with ANSI/BHMA A156.22. Provide extruded aluminum rain drips, not less than 0.08 inch thick, clear anodized finish. Provide the manufacturer's full range of color choices to the Contracting Officer for color selection. Provide rain drips with a 4 inch overlap on each side of each exterior door that is not protected by an awning, roof, eave or other horizontal projection. Set drips in sealant and fasten with stainless steel screws.

2.3.14.1 Door Rain Drips

Approximately 1-1/2 inch high by 5/8 inch projection. Align bottom with bottom edge of door.

2.3.14.2 Overhead Rain Drips

Approximately 1-1/2 inch high by 2-1/2 inch projection. Align bottom with door frame rabbet.

2.3.15 Special Tools

Provide special tools, such as spanner and socket wrenches and dogging keys, as required to service and adjust hardware items.

2.4 FASTENERS

Provide fasteners of type, quality, size, and quantity appropriate to the specific application. Fastener finish to match hardware. Provide stainless steel or nonferrous metal fasteners in locations exposed to weather. Verify metals in contact with one another are compatible and will avoid galvanic corrosion when exposed to weather.

2.5 FINISHES

Provide in accordance with ANSI/BHMA A156.18. Provide hardware in BHMA 630 finish (satin stainless steel), unless specified otherwise. Provide items not manufactured in stainless steel in BHMA 626 finish (satin chromium plated) over brass or bronze, except prime coat finish for surface door closers, and except BHMA 652 finish (satin chromium plated) for steel hinges. Provide hinges for exterior doors in stainless steel with BHMA 630 finish. Furnish exit devices in BHMA 626 finish in lieu of

BHMA 630 finish except where BHMA 630 is specified under paragraph HARDWARE SETS. Match exposed parts of concealed closers to lock and door trim. Match hardware finish for aluminum doors to the doors.

PART 3 EXECUTION

3.1 INSTALLATION

Provide hardware in accordance with manufacturers' printed installation instructions. Fasten hardware to wood surfaces with full-threaded wood screws or sheet metal screws. Provide machine screws set in expansion shields for fastening hardware to solid concrete and masonry surfaces. Provide toggle bolts where required for fastening to hollow core construction. Provide through bolts where necessary for satisfactory installation.

3.1.1 Weatherstripping Installation

Provide full contact, weathertight seals that allow operation of doors without binding the weatherstripping.

3.1.1.1 Stop Applied Weatherstripping

Fasten in place with color matched sheet metal screws not more than 9 inch on center after doors and frames have been finish painted.

3.1.2 Threshold Installation

Extend thresholds the full width of the opening and notch end for jamb stops. Set thresholds in a full bed of sealant and anchor to floor with cadmium-plated, countersunk, steel screws in expansion sleeves. For aluminum thresholds placed on top of concrete surfaces, coat the underside surfaces that are in contact with the concrete with fluid applied waterproofing as a separation measure prior to placement.

3.2 FIRE DOORS AND EXIT DOORS

Provide hardware in accordance with NFPA 72 for door alarms, NFPA 80 for fire doors, NFPA 101 for exit doors, and NFPA 252 for fire tests of door assemblies. .

3.3 HARDWARE LOCATIONS

Provide in accordance with SDI/DOOR A250.8, unless indicated or specified otherwise.

a. Kick and Armor Plates: Push side of single-acting doors. Both sides of double-acting doors.

b. Mop Plates: Bottom flush with bottom of door.

3.4 FIELD QUALITY CONTROL

After installation, protect hardware from paint, stains, blemishes, and other damage until acceptance of work. Submit notice of testing 15 days before scheduled, so that testing can be witnessed by the Contracting Officer. Adjust hinges, locks, latches, bolts, holders, closers, and other items to operate properly. Demonstrate that permanent keys operate respective locks, and give keys to the Contracting Officer. Correct,

repair, and finish, errors in cutting and fitting and damage to adjoining work.

3.5 HARDWARE SETS

Hardware Set HW-1	
Hinges	Heavy weight ball bearing hinges, 4-1/2 inch by 4-1/2 inch, stainless steel, BHMA 630.
Exit Device	Rim exit device, ANSI/BHMA A156.3 Grade 1, UL listed panic hardware. Provide cylinder dogging where permitted.
Closer	Heavy duty surface door closer, ANSI/BHMA A156.4 Grade 1, adjustable spring power with backcheck, parallel arm mounting.
Kick Plate	10 inch stainless steel kick plate, minimum 16 gage, BHMA 630.
Door Stop	Wall bumper type door stop with rubber bumper.
Threshold	Extruded aluminum threshold with vinyl insert, ANSI/BHMA J35100.
Weatherstripping	Extruded aluminum weatherstripping with replaceable neoprene seals at head and jambs.
Door Sweep	Surface mounted door sweep with neoprene insert.

-- End of Section --

SECTION 09 67 23.14

CHEMICAL RESISTANT RESINOUS FLOORING

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 C307	(2023) Standard Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacings
ASTM C413	(2018; R 2023) Standard Test Method for Absorption of Chemical-Resistant Mortars, Grouts, and Monolithic Surfacings and Polymer Concretes
ASTM C531	(2018; R 2023) Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, and Monolithic Surfacings, and Polymer Concretes
ASTM C579	(2023) Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes
ASTM C580	(2018; R 2023) Standard Test Method for Flexural Strength and Modulus of Elasticity of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes
ASTM C722	(2018; R 2023) Standard Specification for Chemical-Resistant Resin Monolithic Floor Surfacings
ASTM D1308	(2020) Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Coating Systems
ASTM D4060	(2019) Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM D4263	(1983; R 2018) Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method
ASTM E162	(2025) Standard Test Method for Surface Flammability of Materials Using a Radiant

Heat Energy Source

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

CDPH SECTION 01350	(2017; Version 1.2) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 99	(2024, TIA 24-2) Health Care Facilities Code

NATIONAL TERRAZZO AND MOSAIC ASSOCIATION (NTMA)

NTMA Info Guide	(2017) Terrazzo Reference Guide

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

SCAQMD Rule 1113	(2016) Architectural Coatings

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910	Occupational Safety and Health Standards

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Flooring Systems; G

SD-03 Product Data

Sealer and Resin; G

Floor Surfacing; G

Conductive Sparkproof Flooring; G

Indoor Air Quality for Primer; S

Indoor Air Quality for Top Coating; S

Indoor Air Quality for Sealer And Resin; S

Mixing; G

SD-04 Samples

Flooring Systems; G

SD-06 Test Reports

Testing; G

SD-07 Certificates

Qualifications of Installer; G

Certification Letter from the Manufacturer stating that the installed chemical resistant resinous flooring system complies with the specified materials and performance requirements.

SD-08 Manufacturer's Instructions

Application; G

SD-10 Operation and Maintenance Data

Flooring Systems; G

1.3 QUALITY ASSURANCE

1.3.1 Qualifications of Installer

Perform installation by an applicator approved by the manufacturer of the floor surfacing materials. Furnish a written Certification Letter from the Manufacturer detailing the Qualifications of Installer.

1.3.2 Shop Drawings

Submit drawings indicating the type and layout of the flooring system for approval.

1.4 DELIVERY, STORAGE, AND HANDLING

Deliver the materials to the project site in unopened bags and containers clearly labeled with the name of the manufacturer, type of material, batch number, and date of manufacture. Store materials, other than aggregates, away from fire, sparks, or smoking areas. Maintain the storage area between50 and 90 degrees F.

1.5 ENVIRONMENTAL REQUIREMENTS

Maintain the ambient room and floor temperatures at 65 degrees F, or above, for a period extending from 48 hours before installation until one week after installation. Cure concrete for at least 28 days and keep it free of water for at least 7 days prior to receiving surfacing in accordance with ASTM D4263. Measure and insure moisture content of wood substrates between 8 and 10 percent prior to application.

PART 2 PRODUCTS

2.1 MATERIALS

Provide materials (except aggregate) used in the flooring from a single manufacturer. Furnish and install trowel applied type epoxy finish of 1/4 inch thickness with properties and chemical resistance conforming to the requirements specified in NTMA Info Guide. resin-based flooring. Meet the following material requirements:

2.1.1 Primer

Type recommended by the manufacturer to penetrate into the pores of the substrate and bond with the floor surfacing matrix to form a permanent monolithic bond between substrate and surfacing matrix. 100% solid epoxy concrete primer at 10 mils. (0.01 inches). Primer products used on the interior of the building (defined as inside of the weatherproofing system) must meet either emissions requirements of CDPH SECTION 01350 (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of SCAQMD Rule 1113. Provide validation of indoor air quality for primer.

2.1.2 Aggregate

Provide silica sand, quartz, granite, or other suitable chemical resistant material having a Mohr's hardness of not less than 6.0 aggregate. Epoxy mortar coat with anti-sparking glass aggregate at 185 mils (0.185 inches).

2.1.3 Binder

Provide thermo-setting epoxy binder. Apply epoxy gel coat at 16 mils (0.016 inch) thickness.

2.1.4 Fillers

If required, provide inert silica, quartz or other hard aggregate material fillers as recommended by the flooring manufacturer. Furnish fillers in the quantity necessary to impart the required color and physical characteristics. Provide a filler containing sufficient fines to obtain an even-textured, nonslip type of surface on the finished topping. Apply conductive epoxy prime coat at 6 mils (0.006 inches) thickness.

2.1.5 Top Coating

Furnish clear color coating of type recommended by the manufacturer. Apply high wear conductive urethane top coat with non-skid aggregate and abrasion resistant additive. Floor top coating products used on the interior of the building (defined as inside of the weatherproofing system) must meet either emissions requirements of CDPH SECTION 01350 (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of SCAQMD Rule 1113. Provide validation of indoor air quality for top coating.

2.2 FLOORING SYSTEMS

Submit cured samples of each floor finish or color combination indicated. The complete systems, after curing, must have the following properties when tested in accordance with the test methods listed for each property.

2.2.1 Epoxy Matrix Floor Surfacing

2.2.1.1 Compressive Strength

ASTM C579; 10,000 psi minimum at 7 days.

2.2.1.2 Tensile Strength

ASTM C307; 1500 psi minimum at 7 days.

2.2.1.3 Flexural Modulus of Elasticity

ASTM C580; 500,000 psi minimum at 7 days.

2.2.1.4 Thermal Coefficient of Expansion

ASTM C531; 0.00004 inches per inch per degree F maximum.

2.2.1.5 Shrinkage

ASTM C531; 0.5 percent maximum.

2.2.1.6 Bond Strength

300 psi minimum with 100 percent concrete failure (2500 psi Compressive Strength Concrete).

2.2.1.7 Flame Spread Index

ASTM E162; 25 maximum.

2.2.1.8 Smoke Deposited

ASTM E162; 4 mg maximum.

2.2.1.9 Abrasion Resistance

ASTM D4060; 15 mg maximum weight loss.

2.2.1.10 Moisture Absorption

ASTM C413; 1.0 percent maximum.

2.2.1.11 Chemical Resistance

ASTM D1308; no effect when exposed to the following reagents for 7 days:

Acetic acid: 5 percent solution
Ammonium Hydroxide: 10 percent solution
Citric Acid: 5 percent solution
Coffee
Cola Syrup
Isopropyl Alcohol
Mineral Oil
Sodium Hydroxide: 5 percent solution
Tri-Sodium Phosphate: 5 percent solution
Urea: 6.6 percent solution

2.3 CONDUCTIVE SPARKPROOF FLOORING

Trowel or spray apply conductive sparkproof industrial resin-based flooring 221 mil (0.221 inches) thick, epoxy, polyester, or other resinous material conforming to ASTM C722with Type A surfacings (chemical resistance and moderate to heavy traffic resistance). Ground conductive flooring and conform to the requirements for conductive flooring of NFPA 99.

2.4 SEALER AND RESIN

Provide a sealer product recommended by the industrial resin-based

flooring manufacturer; when applied to the resin topping and dried, it must be nonslip and resistant to staining and suitable for the type application indicated. Floor resin and sealer products used on the interior of the building (defined as inside of the weatherproofing system) must meet either emissions requirements of CDPH SECTION 01350 (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of SCAQMD Rule 1113. Provide validation for Indoor Air Quality for Sealer and Resin.

2.5 COLOR

Provide color as indicated in drawings.

PART 3 EXECUTION

3.1 SURFACE PREPARATION

Remove all dirt, dust, debris, and other loose particles by sweeping or vacuum cleaning. Protect adjacent surfaces not scheduled to receive the flooring by masking, or by other means, to maintain these surfaces free of the flooring material.

3.1.1 Concrete Surfaces

3.1.1.1 Mechanical Cleaning

Completely remove dirt, wax, paint, laitance, and oil, grease, contaminates, by grinding with a terrazzo machine, sanding with coarse open grid sandpaper, sand blasting, chipping, bush hammering, or wire brushing.

3.1.1.2 Acid Etching

Apply a 10 percent solution of muriatic acid at a rate of one quart/each 10 square feet of concrete surface. Allow the solution to stand until it stops bubbling but not less than 5 minutes. Remove the acid and wash the surfaces several times, as required, to remove all traces of the acid. Always dilute acid by pouring into water. Use face shield rubber gloves, and other safety equipment when using acids, alkalis, or solvents.

3.1.1.3 Air Drying

After cleaning, allow concrete surface to air dry thoroughly prior to application of surfacing. Blowers or oil free compressed air may be used. Do not use flame-drying methods. Prior to application of surfacing, test concrete surface for excessive moisture in at least two locations. Place rubber mats at each location with smooth side against concrete and place weight on top of mat to hold in position and ensure contact with concrete. Polyethylene with all edges taped may be used in lieu of mats. After 8 hours remove mat or sheeting and examine floor surface for moisture accumulation. If tests indicate accumulation of moisture at either location, perform additional air drying until additional tests show no moisture accumulation.

3.1.2 Substrate Cracks, Spalls, Joints, and Depressions

Fill all cracks, joints, spalls, and other depressions in the substrate with a latex underlayment, as recommended by the manufacturer compatible with the floor surfacing material.

3.1.2.1 CONCRETE SUBSTRATES

Prepare substrates according to resinous flooring manufacturer's written instructions to ensure adhesion of resinous flooring.

Concrete Substrates: Prepare according to ASTM F710.

Verify that substrates are dry and free of curing compounds, sealers, and hardeners.

Alkalinity and Adhesion Testing: Perform tests recommended by flooring manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9 pH.

Moisture Testing: Perform tests so that each test area does not exceed 200 sq. ft., and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.

Anhydrous Calcium Chloride Test: ASTM F1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.

Relative Humidity Test: Using in-situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement

3.2 MIXING

Proportion and mix the floor surfacing components in accordance with the manufacturer's instructions. Submit flooring manufacturer's descriptive data, mixing, proportioning, and installation instructions. Include maintenance literature for resinous flooring.

3.3 APPLICATION

Submit complete instructions for application of flooring system including any precautions or special handling instructions required to comply with OSHA 29 CFR 1910-Subpart Z. Apply primer, floor surfacing, and seal coat in accordance with the manufacturer's recommendations and the following requirements.

3.3.1 Primer

Apply primer uniformly over the entire area to receive floor surfacing using clean rubber squeegees or clean steel trowels. Do not allow primer to collect in depressions. Allow primer to dry thoroughly before the next coat is applied. Reprime porous areas or areas where primer has dried.

3.3.2 Floor Surfacing

Apply mixed surfacing material to provide a finish floor surfacing not less than 1/4 inch thick. The entire surfacing in any one room or area must be placed in one continuous operation without use of cold joints or divider strips. All surfaces must be flush, true to plane and line, and level within 1/4 inch in 10 feet.

3.3.3 Seal Coat

Apply seal coat uniformly covering all surfaces after floor surfacing has cured and as recommended by the supplier.

3.4 TESTING

Submit reports of tests for conductive sparkproof flooring, including analysis and interpretation of test results. Properly identify each report. Identify and record the test methods used.

3.4.1 Electrical Resistance

Test the flooring between 30 and 45 days after flooring installation is completed, and prior to its use, in accordance with paragraph 12-4.1.3.8(b)(7) of NFPA 99. The resistance of the floor at any one location must be more than 5,000 ohms in areas with 110 volts service, more than 10,000 ohms in areas with 220 volt service, and average less than 1,000,000 ohms and more than 25,000 ohms in all areas. Perform tests using a technician experienced in such work.

3.4.2 Spark Resistance

Test the floor for spark resistance by stroking the floor vigorously with a 12 inch hardened steel file in a 3 foot arc. Perform the test for each 80 square feet of floor area. Perform the tests in a darkened space and only when the relative humidity of the atmosphere within the space does not exceed 50 percent. The floor must not produce a spark when tested under these conditions.

3.5 PROTECTION

Allow surfacing to set for a minimum period of 48 hours before traffic is allowed on the floor. Protect finished flooring from traffic by covering with 30 pound building paper or other equally effective means until final acceptance of the project.

-- End of Section --

SECTION 09 90 00

PAINTS AND COATINGS

PART 1 GENERAL

1.1 RELATED REQUIREMENTS

1.1.1 Painting Included

Where a space or surface is indicated to be painted, include the following unless indicated otherwise.

a. Surfaces behind portable objects and surface mounted articles readily detachable by removal of fasteners, such as screws and bolts.

b. New factory finished surfaces that require identification or color coding and factory finished surfaces that are damaged during performance of the work.

c. Existing coated surfaces that are damaged during performance of the work.

1.1.1.1 Exterior Painting

Includes new surfaces of the building and appurtenances. Also included are existing coated surfaces made bare by cleaning operations.

1.1.1.2 Interior Painting

Includes new surfaces of the building and appurtenances as indicated and existing coated surfaces made bare by cleaning operations. Where a space or surface is indicated to be painted, include the following items, unless indicated otherwise.

a. Exposed columns, girders, beams, joists, and metal deck; and

b. Other contiguous surfaces.

1.1.2 Painting Excluded

Do not paint the following unless indicated otherwise.

a. Surfaces concealed and made inaccessible by panelboards, fixed ductwork, machinery, and equipment fixed in place.

b. Surfaces in concealed spaces. Concealed spaces are defined as enclosed spaces above suspended ceilings, furred spaces, attic spaces, crawl spaces, elevator shafts and chases.

c. Steel to be embedded in concrete.

d. Copper, stainless steel, aluminum, anodized aluminum, brass, and lead except existing coated surfaces.

e. Hardware, fittings, and other factory finished items.

f. Do not paint surfaces in the following areas: columns girders, beams, joists, metal deck, hangers, conduit, pipes, fire sprinkler piping, and ductwork in ceiling space. Fire alarm equipment to be paint as required by code or as required in other section of this specification.

1.1.3 Mechanical and Electrical Painting

Includes field coating of interior new and existing surfaces.

a. Where a space or surface is indicated to be painted, include the following items unless indicated otherwise.

(1) Exposed piping, conduit, and ductwork;

(2) Supports, hangers, air grilles, and registers;

(3) Miscellaneous metalwork and insulation coverings.

b. Do not paint the following, unless indicated otherwise:

(1) New zinc-coated, aluminum, and copper surfaces under insulation

(2) New aluminum jacket on piping

(3) New interior ferrous piping under insulation.

1.1.3.1 Fire Extinguishing Sprinkler Systems

Clean, pretreat, prime, and paint new fire extinguishing sprinkler systems including valves, piping, conduit, hangers, supports, miscellaneous metalwork, and accessories. Apply coatings to clean, dry surfaces, using clean brushes.

1.1.4 Miscellaneous Painting

1.1.4.1 Lettering

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 CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH 0100	(2017; Suppl 2020) Documentation of the Threshold Limit Values and Biological Exposure Indices

ASTM INTERNATIONAL (ASTM)

ASTM D523	(2014; R 2018) Standard Test Method for Specular Gloss
ASTM D4263	(1983; R 2018) Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method
ASTM D4444	(2013; R 2018) Standard Test Method for

	Laboratory Standardization and Calibration of Hand-Held Moisture Meters
ASTM D6386	(2022) Standard Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Painting
ASTM F1869	(2023) Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

Intelligence Bulletin 65	(2013) Occupational Exposure to Carbon Nanotubes and Nanofibers

MASTER PAINTERS INSTITUTE (MPI)

MPI 3	(2016) Primer, Alkali Resistant, Water Based
MPI 4	(2016) Interior/Exterior Latex Block Filler
MPI 8	(2016) Alkyd, Exterior Flat (MPI Gloss Level I)
MPI 9	(2016) Alkyd, Exterior Gloss (MPI Gloss Level 6)
MPI 10	(2016) Latex, Exterior Flat (MPI Gloss Level 1)
MPI 11	(2016) Latex, Exterior Semi-Gloss, MPI Gloss Level 5
MPI 23	(2015) Primer, Metal, Surface Tolerant
MPI 42	(2012) Textured Coating, Latex, Flat
MPI 44	(2016) Latex, Interior, (MPI Gloss Level 2)
MPI 47	(2016) Alkyd, Interior, Semi-Gloss (MPI Gloss Level 5)
MPI 48	(2016) Alkyd, Interior, Gloss (MPI Gloss Level 6-7)
MPI 49	(2015) Alkyd, Interior, Flat (MPI Gloss Level 1)
MPI 50	(2015) Primer Sealer, Latex, Interior
MPI 51	(2016) Alkyd, Interior, (MPI Gloss Level 3)2
MPI 52	(2016) Latex, Interior, (MPI Gloss Level 3)
MPI 54	(2016) Latex, Interior, Semi-Gloss (MPI

	Gloss Level 5)
MPI 72	(2016) Polyurethane, Two-Component, Pigmented, Gloss (MPI Gloss Level 6-7)
MPI 76	(2016) Primer, Alkyd, Quick Dry, for Metal
MPI 77	(2015) Epoxy, Gloss
MPI 79	(2016) Primer, Alkyd, Anti-Corrosive for Metal
MPI 94	(2016) Alkyd, Exterior, Semi-Gloss (MPI Gloss Level 5)
MPI 95	(2015) Primer, Quick Dry, for Aluminum
MPI 101	(2016) Primer, Epoxy, Anti-Corrosive, for Metal
MPI 107	(2016) Primer, Rust-Inhibitive, Water Based
MPI 108	(2015) Epoxy, High Build, Low Gloss
MPI 119	(2016) Latex, Exterior, Gloss (MPI Gloss Level 6)
MPI 120	(2020) Epoxy, High Build, Self Priming, Low Gloss
MPI 134	(2015) Primer, Galvanized, Water Based
MPI 138	(2016) Latex, Interior, High Performance Architectural, (MPI Gloss Level 2)
MPI 139	(2016) Latex, Interior, High Performance Architectural, (MPI Gloss Level 3)
MPI 140	(2016) Latex, Interior, High Performance Architectural, (MPI Gloss Level 4)
MPI 141	(2016) Latex, Interior, High Performance Architectural, Semi-Gloss (MPI Gloss Level 5)
MPI 144	(2016) Latex, Interior, Institutional Low Odor/VOC, (MPI Gloss Level 2)
MPI 145	(2016) Latex, Interior, Institutional Low Odor/VOC, (MPI Gloss Level 3)
MPI 146	(2016) Latex, Interior, Institutional Low Odor/VOC, (MPI Gloss Level 4)
MPI 147	(May 2016) Latex, Interior, Institutional Low Odor/VOC, Semi-Gloss (MPI Gloss Level 5)
MPI 149	(2016) Primer Sealer, Interior,

	Institutional Low Odor/VOC
MPI 153	(2016) Light Industrial Coating, Interior, Water Based, Semi-Gloss (MPI Gloss Level 5)
MPI 161	(2016) Light Industrial Coating, Exterior, Water Based (MPI Gloss Level 3)
MPI 163	(2016) Light Industrial Coating, Exterior, Water Based, Semi-Gloss (MPI Gloss Level 5)
MPI 164	(2016) Light Industrial Coating, Exterior, Water Based, Gloss (MPI Gloss Level 6)
MPI 177	(2020) Epoxy, Semi-Gloss (MPI Gloss Level 5)
MPI 214	(2016) Latex, Exterior (MPI Gloss Level 2)
MPI ASM	(2019) Architectural Painting Specification Manual
MPI GPS-1-14	(2014) Green Performance Standard GPS-1-14
MPI GPS-2-14	(2014) Green Performance Standard GPS-2-14
MPI MRM	(2015) Maintenance Repainting Manual

SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC 7/NACE No.4	(2007) Brush-Off Blast Cleaning
SSPC Glossary	(2011) SSPC Protective Coatings Glossary
SSPC PA 1	(2024) Shop, Field, and Maintenance Coating of Metals
SSPC SP 1	(2015) Solvent Cleaning
SSPC SP 2	(2024) Hand Tool Cleaning
SSPC SP 3	(2024) Power Tool Cleaning
SSPC SP 6/NACE No.3	(2007) Commercial Blast Cleaning
SSPC SP 10/NACE No. 2	(2015) Near-White Blast Cleaning
SSPC VIS 1	(2002; E 2004) Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning
SSPC VIS 3	(2004) Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning
SSPC VIS 4/NACE VIS 7	(1998; E 2000; E 2004) Guide and Reference Photographs for Steel Surfaces Prepared by Waterjetting

SSPC-SP WJ-1/NACE WJ-1	(2012) Clean to Bare Substrate, Waterjet Cleaning of Metals
SSPC-SP WJ-2/NACE WJ-2	(2012) Very Thorough Cleaning, Waterjet Cleaning of Metals
SSPC-SP WJ-3/NACE WJ-3	(2012) Thorough Cleaning, Waterjet Cleaning of Metals
SSPC-SP WJ-4/NACE WJ-4	(2012) Light Cleaning, Waterjet Cleaning of Metals

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA Method 24	(2000) Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.1000	Air Contaminants

1.3 DEFINITIONS

1.3.1 Qualification Testing

Qualification testing is the performance of all test requirements listed in the product specification. This testing is accomplished by MPI to qualify each product for the MPI Approved Product List, and may also be accomplished by Contractor's third-party testing lab if an alternative to Batch Quality Conformance Testing by MPI is desired.

1.3.2 Batch Quality Conformance Testing

Batch quality conformance testing determines that the product provided is the same as the product qualified to the appropriate product specification. This testing must be accomplished by an MPI testing lab.

1.3.3 Coating

SSPC Glossary; (1) A liquid, liquefiable, or mastic composition that is converted to a solid protective, decorative, or functional adherent film after application as a thin layer; (2) Generic term for paint, lacquer, enamel.

1.3.4 DFT or dft

Dry film thickness, the film thickness of the fully cured, dry paint or coating.

1.3.5 DSD

Degree of Surface Degradation, the MPI system of defining degree of

surface degradation. Five levels are generically defined under the Assessment sections in the MPI MRM, MPI Maintenance Repainting Manual.

1.3.6 EXT

MPI short term designation for an exterior coating system.

1.3.7 INT

MPI short term designation for an interior coating system.

1.3.8 Loose Paint

Paint or coating that can be removed with a dull putty knife.

1.3.9 mil / mils

The English measurement for 0.001 in or one one-thousandth of an inch.

1.3.10 MPI Gloss Levels

MPI system of defining gloss. Seven gloss levels (G1 to G7) are generically defined under the Evaluation sections of the MPI Manuals. Traditionally, Flat refers to G1/G2, Eggshell refers to G3, Semigloss refers to G5, and Gloss refers to G6.

Gloss levels are defined by MPI as follows:

Gloss Level	Description	Units at 60 degree angle	Units at 80 degree angle
G1	Matte or Flat	0 to 5	10 max
G2	Velvet	0 to 10	10 to 35
G3	Eggshell	10 to 25	10 to 35
G4	Satin	20 to 35	35 min
G5	Semi-Gloss	35 to 70	
G6	Gloss	70 to 85	
G7	High Gloss		

Gloss is tested in accordance with ASTM D523. Historically, the Government has used Flat (G1 / G2), Eggshell (G3), Semi-Gloss (G5), and Gloss (G6).

1.3.11 MPI System Number

The MPI coating system number in each MPI Division found in either the MPI Architectural Painting Specification Manual or the Maintenance Repainting Manual and defined as an exterior (EXT/REX) or interior system (INT/RIN).

1.3.12 Paint

SSPC Glossary; (1) Any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer that

is converted to an opaque solid film after application. Used for protection, decoration, identification, or to serve some other functional purposes; (2) Application of a coating material.

1.3.13 REX NOT USED

1.3.14 RIN NOT USED

1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

Samples of specified materials may be taken and tested for compliance with specification requirements.

SD-03 Product Data

Coating; G

Product Data Sheets

SD-04 Samples

Color; G, AE

SD-07 Certificates

Indoor Air Quality for Paints and Primers

Indoor Air Quality for Consolidated Latex Paints

SD-08 Manufacturer's Instructions

Mixing

Manufacturer's Safety Data Sheets

SD-10 Operation and Maintenance Data

Coatings, Data Package 1; G

1.5 QUALITY ASSURANCE

1.5.1 Regulatory Requirements

1.5.1.1 Environmental Protection

In addition to requirements specified elsewhere for environmental protection, provide coating materials that conform to the restrictions of the local Air Pollution Control District and regional jurisdiction. Notify Contracting Officer of any paint specified herein which fails to conform.

1.5.1.2 Lead Content

Do not use coatings having a lead content over 0.06 percent by weight of nonvolatile content.

1.5.1.3 Chromate Content

Do not use coatings containing zinc-chromate or strontium-chromate.

1.5.1.4 Asbestos Content

Provide asbestos-free materials.

1.5.1.5 Mercury Content

Provide materials free of mercury or mercury compounds.

1.5.1.6 Silica

Provide abrasive blast media containing no free crystalline silica.

1.5.1.7 Human Carcinogens

Provide materials that do not contain ACGIH 0100 confirmed human carcinogens (A1) or suspected human carcinogens (A2).

1.5.1.8 Carbon Based Fibers / Tubes

Materials must not contain carbon based fibers such as carbon nanotubes or carbon nanofibers. Intelligence Bulletin 65 ranks toxicity of carbon nanotubes on a par with asbestos.

1.5.2 Coating Contractor's Qualification

Submit the name, address, telephone number, and e-mail address of the Contractor that will be performing all surface preparation and coating application. Submit evidence that key personnel have successfully performed surface preparation and application of coatings on all surface types indicated on a minimum of three similar projects within the past three years. List information by individual and include the following:

a. Name of individual and proposed position for this work.

b. Information about each previous assignment including:

Position or responsibility

Employer (if other than the Contractor)

Name of facility owner

Mailing address and telephone number of facility owner

Name of individual in facility owner's organization who can be contacted as a reference

Location, size and description of structure

Dates work was carried out

Description of work carried out on structure

1.5.3 Approved Products List

The current MPI, "Approved Product List" which lists paint by brand, label, product name and product code as of the date of Contract award, will be used to determine compliance with the submittal requirements of this specification. The Contractor may choose to use a subsequent MPI "Approved Product List", however, only one list may be used for the entire Contract and each coating system is to be from a single manufacturer. Provide all coats on a particular substrate from a single manufacturer. No variation from the MPI Approved Products List is acceptable.

1.5.4 Paints and Coatings Indoor Air Quality Certifications

Provide paint and coating products certified to meet indoor air quality requirements by MPI GPS-1-14, MPI GPS-2-14 or provide certification by other third-party programs. Provide current product certification documentation from certification body.

Provide certification of Indoor Air Quality for Paints and Primers. Provide certification of Indoor Air Quality for Consolidated Latex Paints. Submit required indoor air quality certifications in one submittal package.

1.6 PACKAGING, LABELING, AND STORAGE

Provide paints in sealed containers that legibly show the Contract specification number, designation name, formula or specification number, batch number, color, quantity, date of manufacture, manufacturer's formulation number, manufacturer's directions including any warnings and special precautions, and name and address of manufacturer. Furnish pigmented paints in containers not larger than 5 gallons. Store paints and thinners in accordance with the manufacturer's written directions, and as a minimum, stored off the ground, under cover, with sufficient ventilation to prevent the buildup of flammable vapors, and at temperatures between 40 to 95 degrees F.

1.7 SAFETY AND HEALTH

Comply with applicable Federal, State, and local laws and regulations, and with the ACCIDENT PREVENTION PLAN, including the Activity Hazard Analysis as specified in Appendix A of EM 385-1-1. Include in the Activity Hazard Analysis the potential impact of painting operations on painting personnel and on others involved in and adjacent to the work zone.

1.7.1 Toxic Materials

To protect personnel from overexposure to toxic materials, conform to the most stringent guidance of:

a. The applicable manufacturer's Safety Data Sheets (SDS) or local regulation.

b. 29 CFR 1910.1000.

c. ACGIH 0100, threshold limit values.

1.8 ENVIRONMENTAL REQUIREMENTS

Comply, at minimum, with manufacturer recommendations for space ventilation during and after installation. Isolate area of application

from rest of building when applying high-emission paints or coatings.

1.8.1 Coatings

Do not apply coating when air or substrate conditions are:

a. Less than 5 degrees F above dew point;

b. Below 50 degrees F or over 95 degrees F, unless specifically pre-approved by the Contracting Officer and the product manufacturer. Do not, under any circumstances, violate the manufacturer's application recommendations.

PART 2 PRODUCTS

2.1 MATERIALS

Conform to the coating specifications and standards referenced in PART 3. Submit Product Data Sheets for specified coatings and solvents. Provide preprinted cleaning and maintenance instructions for all coating systems. Submit Manufacturer's Instructions on Mixing: Detailed mixing instructions, minimum and maximum application temperature and humidity, pot life, and curing and drying times between coats.

2.2 COLOR SELECTION OF FINISH COATS

Provide colors of finish coats as indicated or specified. Allow Contracting Officer to select colors not indicated or specified. Manufacturers' names and color identification are used for the purpose of color identification only. Named products are acceptable for use only if they conform to specified requirements. Products of other manufacturers are acceptable if the colors are approximately the colors indicated and the product conforms to specified requirements.

Provide color, texture, and pattern of wall coating systems as indicated . Submit manufacturer's samples of paint colors. Cross reference color samples to color scheme as indicated. Submit color stencil codes. Tint each coat progressively darker to enable confirmation of the number of coats.

PART 3 EXECUTION

3.1 PROTECTION OF AREAS AND SPACES NOT TO BE PAINTED

Prior to surface preparation and coating applications, remove, mask, or otherwise protect hardware, hardware accessories, machined surfaces, radiator covers, plates, lighting fixtures, public and private property, and other such items not to be coated that are in contact with surfaces to be coated. Following completion of painting, reinstall removed items by workmen skilled in the trades. Restore surfaces contaminated by coating materials, to original condition and repair damaged items.

3.2 SURFACE PREPARATION

Remove dirt, splinters, loose particles, grease, oil, and other foreign matter and substances deleterious to coating performance as specified for each substrate before application of paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Schedule cleaning so that dust and other contaminants will not fall on wet, newly painted surfaces.

Spot-prime exposed ferrous metals such as nail heads on or in contact with surfaces to be painted with water-thinned paints, with a suitable corrosion-inhibitive primer capable of preventing flash rusting and compatible with the coating specified for the adjacent areas. Refer to MPI ASM and MPI MRM for additional more specific substrate preparation requirements.

3.2.1 Substrate Repair

a. Repair substrate surface damaged during coating removal;

b. Sand edges of adjacent soundly-adhered existing coatings so they are tapered as smooth as practical to areas involved with coating removal; and

c. Clean and prime the substrate as specified.

3.3 PREPARATION OF METAL SURFACES

3.3.1 Existing and New Ferrous Surfaces

a. Ferrous Surfaces including Shop-coated Surfaces and Small Areas That Contain Rust, Mill Scale and Other Foreign Substances: detergent wash in accordance with SSPC SP 1 to remove oil and grease. Where shop coat is missing or damaged, clean according to SSPC SP 3, or SSPC SP 10/NACE No. 2. Brush-off blast remaining surface in accordance with SSPC 7/NACE No.4; Water jetting to SSPC-SP WJ-4/NACE WJ-4 may be used to remove loose coating and other loose materials. Use inhibitor as recommended by coating manufacturer to prevent premature rusting. Protect shop-coated ferrous surfaces from corrosion by treating and touching up corroded areas immediately upon detection.

b. Surfaces With More Than 20 Percent Rust, Mill Scale, and Other Foreign Substances: Clean entire surface in accordance with SSPC SP 6/NACE No.3 / SSPC-SP WJ-3/NACE WJ-3.

c. Metal Floor Surfaces to Receive Nonslip Coating: Clean in accordance with SSPC SP 10/NACE No. 2.

3.3.2 Final Ferrous Surface Condition:

3.3.2.1 Tool Cleaned Surfaces

Comply with SSPC SP 2 and SSPC SP 3. Use as a visual reference, photographs in SSPC VIS 3 for the appearance of cleaned surfaces.

3.3.2.2 Abrasive Blast Cleaned Surfaces

Comply with SSPC 7/NACE No.4, SSPC SP 6/NACE No.3, and SSPC SP 10/NACE No. 2. Use as a visual reference, photographs in SSPC VIS 1 for the appearance of cleaned surfaces.

3.3.2.3 Waterjet Cleaned Surfaces

Comply with SSPC-SP WJ-1/NACE WJ-1, SSPC-SP WJ-2/NACE WJ-2, SSPC-SP WJ-3/NACE WJ-3 or SSPC-SP WJ-4/NACE WJ-4. Use as a visual reference, photographs in SSPC VIS 4/NACE VIS 7 for the appearance of cleaned surfaces.

3.3.3 Galvanized Surfaces

a. New or Existing Galvanized Surfaces With Only Dirt and Zinc Oxidation Products: Clean with steam, or non-alkaline detergent solution in accordance with SSPC SP 1. Completely remove coating by brush-off abrasive blast if the galvanized metal has been passivated or stabilized. Do not "passivate" or "stabilize" new galvanized steel to be coated. If the absence of hexavalent stain inhibitors is not documented, test as described in ASTM D6386, Appendix X2, and remove by one of the methods described therein.

3.3.4 Non-Ferrous Metallic Surfaces

Aluminum and aluminum-alloy, lead, copper, and other nonferrous metal surfaces.

Surface Cleaning: Solvent clean in accordance with SSPC SP 1 and wash with mild non-alkaline detergent to remove dirt and water soluble contaminants.

3.4 PREPARATION OF CONCRETE AND CEMENTITIOUS SURFACE

3.4.1 Concrete and Masonry

a. Curing: Allow concrete, stucco and masonry surfaces to cure at least 30 days before painting, and concrete slab on grade to cure at least 90 days before painting.

b. Surface Cleaning: Remove the following deleterious substances.

(1) Dirt, Chalking, Grease, and Oil: Wash new surfaces with a solution composed of 1/2 cup trisodium phosphate, 1/4 cup household detergent, and 4 quarts of warm water. Then rinse thoroughly with fresh water. For large areas, water blasting may be used.

(2) Fungus and Mold: Wash surfaces with a solution composed of 1/2 cup trisodium phosphate, 1/4 cup household detergent, one quart 5 percent sodium hypochlorite solution and 3 quarts of warm water. Rinse thoroughly with fresh water.

(3) Paint and Loose Particles: Remove by wire brushing.

(4) Efflorescence: Remove by scraping or wire brushing followed by washing with a 5 to 10 percent by weight aqueous solution of hydrochloric (muriatic) acid. Do not allow acid to remain on the surface for more than five minutes before rinsing with fresh water. Do not acid clean more than 4 square feet of surface, per workman, at one time.

c. Cosmetic Repair of Minor Defects: Repair or fill mortar joints and minor defects, including but not limited to spalls, in accordance with manufacturer's recommendations and prior to coating application.

d. Allowable Moisture Content: Latex coatings may be applied to damp surfaces, but not to surfaces with droplets of water. Do not apply epoxies to damp vertical surfaces as determined by ASTM D4263 or

horizontal surfaces that exceed 3 lbs of moisture per 1000 square feet in 24 hours as determined by ASTM F1869. In all cases follow manufacturer's recommendations. Allow surfaces to cure a minimum of 30 days before painting.

3.4.2 Gypsum Board, Plaster, and Stucco

3.4.2.1 Surface Cleaning

Verify that plaster and stucco surfaces are free from loose matter and that gypsum board is dry. Remove loose dirt and dust by brushing with a soft brush, rubbing with a dry cloth, or vacuum-cleaning prior to application of the first coat material. A damp cloth or sponge may be used if paint is water-based.

3.4.2.2 Repair of Minor Defects

Prior to painting, repair joints, cracks, holes, surface irregularities, and other minor defects with patching plaster or spackling compound and sand smooth.

3.4.2.3 Allowable Moisture Content

Latex coatings may be applied to damp surfaces, but not surfaces with droplets of water. Do not apply epoxies to damp surfaces as determined by ASTM D4263. Verify that new plaster to be coated has a maximum moisture content of 8 percent, when measured in accordance with ASTM D4444, Method A, unless otherwise authorized. In addition to moisture content requirements, allow new plaster to age a minimum of 30 days before preparation for painting.

3.5 APPLICATION

3.5.1 Coating Application

a. Comply with applicable federal, state and local laws enacted to ensure compliance with Federal Clean Air Standards. Apply coating materials in accordance with SSPC PA 1. SSPC PA 1 methods are applicable to all substrates, except as modified herein.

b. At the time of application, paint must show no signs of deterioration. Maintain uniform suspension of pigments during application.

c. Unless otherwise specified or recommended by the paint manufacturer, paint may be applied by brush, roller, or spray. Use trigger operated spray nozzles for water hoses. Use rollers for applying paints and enamels of a type designed for the coating to be applied and the surface to be coated. Wear protective clothing and respirators when applying oil-based paints or using spray equipment with any paints.

d. Only apply paints, except water-thinned types, to surfaces that are completely free of moisture as determined by sight or touch.

e. Thoroughly work coating materials into joints, crevices, and open spaces. Pay special attention to ensure that all edges, corners, crevices, welds, and rivets receive a film thickness equal to that of adjacent painted surfaces.

f. Apply each coat of paint so that dry film is of uniform thickness and free from runs, drops, ridges, waves, pinholes or other voids, laps, brush marks, and variations in color, texture, and finish. Completely hide all blemishes.

g. Touch up damaged coatings before applying subsequent coats. Broom clean and clear dust from interior areas before and during the application of coating material.

h. Apply paint to new fire extinguishing sprinkler systems including valves, piping, conduit, hangers, supports, miscellaneous metal work, and accessories. Shield sprinkler heads with protective coverings while painting is in progress. Remove sprinkler heads which have been painted and replace with new sprinkler heads. Unfinished spaces include attic spaces, spaces above suspended ceilings, crawl spaces, pipe chases, mechanical equipment room, and space where walls or ceiling are not painted or not constructed of a prefinished material. Upon completion of painting, remove protective covering from sprinkler heads.

i. Piping in Unfinished Areas: Provide primed surfaces with one coat of red alkyd gloss enamel (MPI 9) applied to a minimum dry film thickness of 1.0 mil in attic spaces, spaces above suspended ceilings, crawl spaces, pipe chases, mechanical equipment room, and spaces where walls or ceiling are not painted or not constructed of a prefinished material.

j. Piping in Finished Areas: Provide primed surfaces with two coats of paint to match adjacent surfaces, except provide valves and operating accessories with one coat of red alkyd gloss enamel (MPI 9) applied to a minimum dry film thickness of 1.0 mil or two component gloss polyurethane (MPI 72) in exterior applications.

k. Provide labeling on the surfaces of all feed and cross mains to show the pipe function such as "Sprinkler System", "Fire Department Connection", "Standpipe". For pipe sizes 4-inch and larger provide white painted stenciled letters and arrows, a minimum of 2 in in height and visible from at least two sides when viewed from the floor. For pipe sizes less than 4-inch, provide white painted stenciled letters and arrows, a minimum of 0.75 in in height and visible from the floor.

l. All fire suppression system valves must be marked with permanent tags indicating normally open or normally closed.

m. Drying Time: Allow time between coats, as recommended by the coating manufacturer, to permit thorough drying, but not to present topcoat adhesion problems. Provide each coat in specified condition to receive next coat.

n. Primers, and Intermediate Coats: Do not allow primers or intermediate coats to dry more than 30 days, or longer than recommended by manufacturer, before applying subsequent coats. Follow manufacturer's recommendations for surface preparation if primers or intermediate coats are allowed to dry longer than recommended by manufacturers of subsequent coatings. Cover each preceding coat or surface completely by ensuring visually perceptible difference in shades of successive coats.

o. Finished Surfaces: Provide finished surfaces free from runs, drops, ridges, waves, laps, brush marks, and variations in colors.

p. Thermosetting Paints: Apply topcoats over thermosetting paints (epoxies and urethanes) within the overcoat window recommended by the manufacturer.

q. Floors: For nonslip surfacing on level floors, as the intermediate coat is applied, cover wet surface completely with almandite garnet, Grit No. 36, with maximum passing U.S. Standard Sieve No. 40 less than 0.5 percent. When the coating is dry, use a soft bristle broom to sweep up excess grit, which may be reused, and vacuum up remaining residue before application of the topcoat.

3.5.2 Mixing and Thinning of Paints

Reduce paints to proper consistency by adding fresh paint, except when thinning is mandatory to suit surface, temperature, weather conditions, application methods, or for the type of paint being used. Obtain written permission from the Contracting Officer to use thinners. Verify that the written permission includes quantities and types of thinners to use.

When thinning is allowed, thin paints immediately prior to application with not more than one pint of suitable thinner per gallon. The use of thinner does not relieve the Contractor from obtaining complete hiding, full film thickness, or required gloss. Thinning cannot cause the paint to exceed limits on volatile organic compounds. Do not mix paints of different manufacturers.

3.5.3 Two-Component Systems

Mix two-component systems in accordance with manufacturer's instructions. Follow recommendation by the manufacturer for any thinning of the first coat to ensure proper penetration and sealing for each type of substrate.

3.5.4 Coating Systems

a. Systems by Substrates: Apply coatings that conform to the respective specifications listed in the following Tables:

Table for Exterior Applications	
MPI Division	Substrate Application
MPI Division 3	Exterior Concrete Paint Table
MPI Division 4	Exterior Concrete Masonry Units Paint Table
MPI Division 5	Exterior Metal, Ferrous and Non-Ferrous Paint Table
MPI Division 6	Exterior Wood; Dressed Lumber, Paneling, Decking, Shingles Paint Table
MPI Division 9	Exterior Stucco Paint Table

Table for Exterior Applications	
MPI Division 10	Exterior Cloth Coverings and Bituminous Coated Surfaces Paint Table

Table for Interior Applications	
MPI Division	Substrate Application
MPI Division 3	Interior Concrete Paint Table
MPI Division 4	Interior Concrete Masonry Units Paint Table
MPI Division 5	Interior Metal, Ferrous and Non-Ferrous Paint Table
MPI Division 6	Interior Wood Paint Table
MPI Division 9	Interior Plaster, Gypsum Board, Textured Surfaces Paint Table

b. Minimum Dry Film Thickness (DFT): Apply paints, primers, varnishes, enamels, undercoats, and other coatings to a minimum dry film thickness of 1.5 mil each coat unless specified otherwise in the Tables. Coating thickness, where specified, refers to the minimum dry film thickness.

c. Coatings for Surfaces Not Specified Otherwise: Coat unspecified surfaces the same as surfaces having similar conditions of exposure.

d. Existing Surfaces Damaged During Performance of the Work, Including New Patches In Existing Surfaces: Coat surfaces with the following:

(1) One coat of primer.

(2) One coat of undercoat or intermediate coat.

(3) One topcoat to match adjacent surfaces.

e. Existing Coated Surfaces To Be Painted: Apply coatings conforming to the respective specifications listed in the Tables herein, except that pretreatments, sealers and fillers need not be provided on surfaces where existing coatings are soundly adhered and in good condition. Do not omit undercoats or primers.

3.6 COATING SYSTEMS FOR METAL

Apply coatings of Tables in MPI Division 5 for Exterior and Interior.

a. Apply specified ferrous metal primer to steel surfaces on the same day that surface is cleaned, to surfaces that meet all specified surface preparation requirements at time of application.

b. Inaccessible Surfaces: Prior to erection, use one coat of specified primer on metal surfaces that will be inaccessible after erection.

c. Shop-primed Surfaces: Touch up exposed substrates and damaged coatings to protect from rusting prior to applying field primer.

d. Surface Previously Coated with Epoxy or Urethane: Apply MPI 101, 1.5 mils DFT immediately prior to application of epoxy or urethane coatings.

e. Pipes and Tubing: The semitransparent film applied to some pipes and tubing at the mill is not to be considered a shop coat. Overcoat these items with the specified ferrous-metal primer prior to application of finish coats.

f. Exposed Nails, Screws, Fasteners, and Miscellaneous Ferrous Surfaces. On surfaces to be coated with water thinned coatings, spot prime exposed nails and other ferrous metal with latex primer MPI 107.

3.7 COATING SYSTEMS FOR CONCRETE AND CEMENTITIOUS SUBSTRATES

Apply coatings of Tables in MPI Division 3, 4 and 9 for Exterior and Interior.

3.8 COATING SYSTEMS FOR WOOD AND PLYWOOD

a. Apply coatings of Tables in MPI Division 6 for Exterior and Interior.

b. Prior to erection, apply two coats of specified primer to treat and prime wood and plywood surfaces which will be inaccessible after erection.

3.9 INSPECTION AND ACCEPTANCE

In addition to meeting previously specified requirements, demonstrate mobility of moving components, including swinging and sliding doors, cabinets, and windows with operable sash, for inspection by the Contracting Officer. Perform this demonstration after appropriate curing and drying times of coatings have elapsed and prior to invoicing for final payment.

3.10 WASTE MANAGEMENT

As specified in the Waste Management Plan and as follows. Do not use kerosene or any such organic solvents to clean up water based paints. Properly dispose of paints or solvents in designated containers. Close and seal partially used containers of paint to maintain quality as necessary for reuse. Store in protected, well-ventilated, fire-safe area at moderate temperature. Place materials defined as hazardous or toxic waste in designated containers. Set aside extra paint for future color matches or reuse by the Government.

3.11 PAINT TABLES

All DFT's are minimum values. Use only materials with a MPI GPS-1-14 green check mark having a minimum MPI "Environmentally Friendly" E2 rating based on VOC (EPA Method 24) content levels. Acceptable products are listed in the MPI Green Approved Products List, available at https://www.mpi.net/APL/index.asp.

3.11.1 Exterior Paint Tables

3.11.1.1 MPI Division 3: Exterior Concrete Paint Table

A. Concrete; Vertical Surfaces, Undersides of Balconies and Soffits

(1) New and uncoated existing concrete; vertical surfaces, including undersides of balconies and soffits but excluding tops of slabs

Latex					
New and uncoated existing	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI EXT 3.1A-G1 (Flat)	MPI REX 3.1A-G1 (Flat)	MPI 3	MPI 10	MPI 10	3.5 mils
MPI EXT 3.1A-G2 (Velvet)	MPI REX 3.1A-G2 (Velvet)	MPI 3	MPI 214	MPI 214	3.5 mils
MPI EXT 3.1A-G5 (Semigloss)	MPI REX 3.1A-G5 (Semigloss)	MPI 3	MPI 11	MPI 11	3.5 mils
MPI EXT 3.1A-G6 (Gloss)	MPI REX 3.1A-G6 (Gloss)	MPI 3	MPI 119	MPI 119	3.5 mils
Primer as recommended by manufacturer. Topcoat: Coating to match adjacent surfaces.					

(2) New and uncoated existing concrete, textured system; vertical surfaces, including undersides of balconies and soffits but excluding tops of slabs

C. Cementitious Composition Board

(1) New Cementitious composition board (including Asbestos cement board)

Latex					
New and uncoated existing	Existing	Primer	Intermediate	Topcoat	System DFT
MPI EXT 3.3A-G1 (Flat)	MPI REX 3.3A-G1 (Flat)	MPI 10	MPI 10	MPI 10	N/A
MPI EXT 3.3A-G5 (Semigloss)	MPI REX 3.3A-G5 (Semigloss)	MPI 11	MPI 11	MPI 11	N/A
MPI EXT 3.3A -G6 (Gloss)	MPI REX 3.3A-G6 (Gloss)	MPI 119	MPI 119	MPI 119	N/A
Topcoat: Coating to match adjacent surfaces.					

3.11.1.2 MPI Division 4: Exterior Concrete Masonry Units Paint Table

A. New concrete masonry on uncoated surface

Latex						
New	Existing	Block Filler	Primer	Intermediate	Topcoat	System DFT
MPI EXT 4.2A-G1 (Flat)	MPI REX 4.2A-G1 (Flat)	MPI 4	N/A	MPI 10	MPI 10	11 mils
MPI EXT 4.2A-G5 (Semigloss)	MPI REX 4.2A-G5 (Semigloss)	MPI 4	N/A	MPI 11	MPI 11	11 mils
MPI EXT 4.2A-G6 (Gloss)	MPI REX 4.2A-G6 (Gloss)	MPI 4	N/A	MPI 119	MPI 119	11 mils
Topcoat: Coating to match adjacent surfaces.						

3.11.1.3 MPI Division 5: Exterior Metal, Ferrous and Non-Ferrous Paint Table

A. Steel / Ferrous Surfaces

(1) New Steel that has been hand or power tool cleaned to SSPC SP 2 or SSPC SP 3

Alkyd					
New	Existing, uncoated	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1Q-G5 (Semigloss	MPI REX 5.1D-G5 (Semigloss)	MPI 23	MPI 94	MPI 94	5.25 mils
MPI EXT 5.1Q-G6 (Gloss)	MPI REX 5.1D-G6 (Gloss)	MPI 23	MPI 9	MPI 9	5.25 mils
Topcoat: Coating to match adjacent surfaces.					

(2) New Steel that has been blast-cleaned to SSPC SP 6/NACE No.3

Alkyd					
New	Existing, uncoated	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1D-G5 (Semigloss)	MPI REX 5.1D-G5 (Semigloss)	MPI 79	MPI 94	MPI 94	5.25 mils
MPI EXT 5.1D-G6 (Gloss)	MPI REX 5.1D-G6 (Gloss)	MPI 79	MPI 9	MPI 9	5.25 mils

Topcoat: Coating to match adjacent surfaces.

(4) New steel blast cleaned to SSPC SP 10/NACE No. 2

Waterborne Light Industrial					
New	Existing	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1R-G5 (Semigloss)	MPI EXT 5.1R-G5 (Semigloss)	MPI 101	MPI 108	MPI 163	8.5 mils
MPI EXT 5.1R-G6 (Gloss)	MPI EXT 5.1R-G6 (Gloss)	MPI 101	MPI 108	MPI 164	8.5 mils
Topcoat: Coating to match adjacent surfaces.					

Pigmented Polyurethane					
New	Existing	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1J-G6 (Gloss)	MPI EXT 5.1J-G6 (Gloss)	MPI 101	MPI 108	MPI 72	8.5 mils
Topcoat: Coating to match adjacent surfaces.					

(5) Metal floors (non-shop-primed surfaces or non-slip deck surfaces) with non-skid additive (NSA), load at manufacturer's recommendations

Epoxy					
New	Existing	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1S-G5 (Semi Gloss)	MPI EXT 5.1S-G5 (Semi Gloss)	MPI 120	MPI 177	MPI 177	5.25 mils
MPI EXT 5.1S-G6 (Gloss)	MPI EXT 5.1S-G6 (Gloss)	MPI 120	MPI 77	MPI 77	5.25 mils
Topcoat: Coating to match adjacent surfaces. Load Non-Skid Additive at manufacturer's recommendations.					

B. Exterior Galvanized Surfaces

(1) New Galvanized surfaces

Waterborne Primer / Latex				
New Galvanized Surfaces	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.3H-G1 (Flat)	MPI 134	MPI 10	MPI 10	4.5 mils
EXT 5.3H-G5 (Semigloss)	MPI 134	MPI 11	MPI 11	4.5 mils
MPI EXT 5.3H-G6 (Gloss)	MPI 134	MPI 119	MPI 119	4.5 mils
Topcoat: Coating to match adjacent surfaces.				

Waterborne Primer / Waterborne Light Industrial Coating				
New Galvanized Surfaces	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.3J-G5 (Semigloss)	MPI 134	MPI 163	MPI 163	4.5 mils
MPI EXT 5.3J-G6 (Gloss)	MPI 134	MPI 164	MPI 164	4.5 mils
Topcoat: Coating to match adjacent surfaces.				

Epoxy Primer / Waterborne Light Industrial Coating				
New Galvanized Surfaces	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.3K-G5 (Semigloss)	MPI 101	MPI 163	MPI 163	5 mils
MPI EXT 5.3K-G6 (Gloss)	MPI 101	MPI 164	MPI 164	5 mils
Topcoat: Coating to match adjacent surfaces.				

Pigmented Polyurethane				
New Galvanized Surfaces	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.3L-G6 (Gloss)	MPI 101	N/A	MPI 72	5 mils
Topcoat: Coating to match adjacent surfaces.				

C. Exterior Surfaces, Other Metals (Non-Ferrous)

(1) Aluminum, aluminum alloy and other miscellaneous non-ferrous metal

items not otherwise specified except hot metal surfaces, roof surfaces, and new prefinished equipment

Alkyd				
New Galvanized Surfaces	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.4F-G1 (Flat	MPI 95	MPI 8	MPI 8	5 mils
MPI EXT 5.4F-G5 (Semigloss)	MPI 95	MPI 94	MPI 94	5 mils
MPI EXT 5.4F-G6 (Gloss)	MPI 95	MPI 9	MPI 9	5 mils
Topcoat: Coating to match adjacent surfaces.				

Waterborne Light Industrial Coating				
New Galvanized Surfaces	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.4F-G1 (Flat	MPI 95	MPI 161	MPI 161	5 mils
MPI EXT 5.4F-G5 (Semigloss)	MPI 95	MPI 163	MPI 163	5 mils
MPI EXT 5.4F-G6 (Gloss)	MPI 95	MPI 164	MPI 164	5 mils
Topcoat: Coating to match adjacent surfaces.				

(3) Surfaces adjacent to painted surfaces; Mechanical, Electrical, Fire extinguishing sprinkler systems including valves, conduit, hangers, supports,exposed copper piping, and miscellaneous metal items not otherwise specified except floors, hot metal surfaces, and new prefinished equipment

Alkyd				
New	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1D-G1 (Flat)	MPI 79	MPI 8	MPI 8	5.25 mils

MPI EXT 5.1D-G5 (Semigloss)	MPI 79	MPI 94	MPI 94	5.25 mils
MPI EXT 5.1D-G6 (Gloss)	MPI 79	MPI 9	MPI 9	5.25 mils
Topcoat: Coating to match adjacent surfaces.				
Waterborne Light Industrial Coating				
New	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1C-G3(Eggshell)	MPI 79	MPI 161	MPI 161	5 mils
MPI EXT 5.1C-G5(Semigloss)	MPI 79	MPI 163	MPI 163	5 mils
MPI EXT 5.1C-G6(Gloss)	MPI 79	MPI 164	MPI 164	5 mils
Primer as recommended by manufacturer. Topcoat: Coating to match adjacent surfaces.				

3.11.2 Interior Paint Tables

3.11.2.1 MPI Division 3: Interior Concrete Paint Table

A. New and uncoated existing Concrete, vertical surfaces, not specified otherwise

Latex					
New, uncoated Existing	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 3.1A-G2 (Flat)	MPI RIN 3.1A-G2 (Flat)	MPI 3	MPI 44	MPI 44	4 mils
MPI INT 3.1A-G3 (Eggshell)	MPI RIN 3.1A-G3 (Eggshell)	MPI 3	MPI 52	MPI 52	4 mils
MPI INT 3.1A-G5	MPI RIN 3.1A-G5 (Semigloss)	MPI 3	MPI 54	MPI 54	4 mils
Topcoat: Coating to match adjacent surfaces.					

High Performance Architectural Latex

New, uncoated Existing	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 3.1C-G2 (Flat)	MPI RIN 3.1J-G2 (Flat)	MPI 3	MPI 138	MPI 138	4 mils
MPI INT 3.1C-G3 (Eggshell)	MPI RIN 3.1J-G3 (Eggshell)	MPI 3	MPI 139	MPI 139	4 mils
MPI INT 3.1C-G4 (satin)	MPI RIN 3.1J-G4	MPI 3	MPI 140	MPI 140	4 mils
MPI INT 3.1C-G5 (Semigloss)	MPI RIN 3.1J-G5 (Semigloss)	MPI 3	MPI 141	MPI 141	4 mils
Topcoat: Coating to match adjacent surfaces.					
Institutional Low Odor / Low VOC Latex					
New, uncoated Existing	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 3.1M-G2 (Flat)	MPI RIN 3.1L-G2 (Flat)	MPI 149	MPI 144	MPI 144	4 mils
MPI INT 3.1M-G3 (Eggshell)	MPI RIN 3.1L-G3 (Eggshell)	MPI 149	MPI 145	MPI 145	4 mils
MPI INT 3.1M-G4 (satin)	MPI RIN 3.1L-G4	MPI 149	MPI 146	MPI 146	4 mils
MPI INT 3.1M-G5 (Semigloss)	MPI RIN 3.1L-G5 (Semigloss)	MPI 149	MPI 147	MPI 147	4 mils
Topcoat: Coating to match adjacent surfaces.					

B. Concrete Ceilings, Uncoated

Latex Aggregate				
New, uncoated	Primer	Intermediate	Topcoat	System DFT
MPI INT 3.1N-G1 (Flat)	N/A	N/A	MPI 42	Per Manufacturer
Texture - Medium. Surface preparation, number of coats, and primer in accordance with manufacturer's instructions. Topcoat: Coating to match adjacent surfaces.				

C. New and uncoated existing Concrete in restrooms, not otherwise specified except floors

Epoxy					
New, uncoated Existing	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 3.1F-G6 (Gloss)	MPI RIN 3.1E-G6 (Gloss)	MPI 77	MPI 77	MPI 77	4 mils
Note: Primer may be reduced for penetration per manufacturer's instructions.					

3.11.2.2 MPI Division 4: Interior Concrete Masonry Units Paint Table

A. New Concrete Masonry

High Performance Architectural Latex					
New, uncoated Existing	Filler	Primer	Intermediate	Topcoat	System DFT
MPI INT 4.2D-G3 (Eggshell)	MPI 4	N/A	MPI 139	MPI 139	11 mils
Fill all holes in masonry surface					

3.11.2.3 MPI Division 5: Interior Metal, Ferrous and Non-Ferrous Paint Table

A. Interior Steel / Ferrous Surfaces

(1) Metal, and miscellaneous metal items not otherwise specified except floors, hot metal surfaces, and new prefinished equipment

High Performance Architectural Latex				
New, uncoated Existing	Primer	Intermediate	Topcoat	System DFT
MPI INT 5.1R-G2 (Flat)	MPI 76	MPI 138	MPI 138	5 mils
MPI INT 5.1R-G3 (Eggshell)	MPI 76	MPI 139	MPI 139	5 mils
Topcoat: Coating to match adjacent surfaces.				

(5) Miscellaneous non-ferrous metal items not otherwise specified except floors, hot metal surfaces, and new prefinished equipment. Match surrounding finish

High Performance Architectural Latex				
New, uncoated Existing	Primer	Intermediate	Topcoat	System DFT
MPI INT 5.4F-G2 (Flat)	MPI 95	MPI 138	MPI 138	5 mils

MPI INT 5.4F-G3 (Eggshell)	MPI 95	MPI 139	MPI 139	5 mils
MPI INT 5.4F-G4 (Satin)	MPI 95	MPI 140	MPI 140	5 mils
MPI INT 5.4F-G5 (Semigloss)	MPI 95	MPI 141	MPI 141	5 mils
Topcoat: Coating to match adjacent surfaces.				
Alkyd				
New, uncoated Existing	Primer	Intermediate	Topcoat	System DFT
MPI INT 5.4J-G2 (Flat)	MPI 95	MPI 49	MPI 49	5 mils
MPI INT 5.4J-G3 (Eggshell)	MPI 95	MPI 51	MPI 51	5 mils
MPI INT 5.4J-G5 (Semigloss)	MPI 95	MPI 47	MPI 47	5 mils
MPI INT 5.4J-G6 (Gloss)	MPI 95	MPI 48	MPI 48	5 mils
Topcoat: Coating to match adjacent surfaces.				

3.11.2.4 MPI Division 9: Interior Plaster, Gypsum Board, Textured Surfaces Paint Table

A. Interior New Wallboard not otherwise specified

Latex					
New	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 9.2A-G3 (Eggshell)	RIN 9.2A-G3 (Eggshell)	MPI 50	MPI 52	MPI 52	4 mils
Topcoat: Coating to match adjacent surfaces.					

High Performance Architectural Latex - High Traffic Areas					
New	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 9.2B-G2 (Flat)	MPI RIN 9.2B-G2 (Flat)	MPI 50	MPI 138	MPI 138	4 mils

MPI INT 9.2B-G3 (Eggshell)	MPI RIN 9.2B-G3 (Eggshell)	MPI 50	MPI 139	MPI 139	4 mils
MPI INT 9.2B-G5 (Semigloss)	MPI RIN 9.2B-G5 (Semigloss)	MPI 50	MPI 141	MPI 141	4 mils
Topcoat: Coating to match adjacent surfaces.					

Institutional Low Odor / Low VOC Latex, New

Institutional Low Odor / Low VOC Latex				
New	Primer	Intermediate	Topcoat	System DFT
MPI INT 9.2M-G2 (Flat)	MPI 149	MPI 144	MPI 144	4 mils
MPI INT 9.2M-G3 (Eggshell)	MPI 149	MPI 145	MPI 145	4 mils
MPI INT 9.2M-G4 (Satin)	MPI 149	MPI 146	MPI 146	4 mils
MPI INT 9.2M-G5 (Semigloss)	MPI 149	MPI 147	MPI 147	4 mils
Topcoat: Coating to match adjacent surfaces.				

B. Interior New Wallboard in restrooms, and other high humidity areas not otherwise specified

Waterborne Light Industrial Coating					
New, uncoated Existing	Existing, previously painted	Primer	Intermediate	Topcoat	System DFT
MPI INT 9.2L-G5(Semigloss)	MPI RIN 9.2L-G5 (Semigloss)	MPI 50	MPI 153	MPI 153	4 mils
Topcoat: Coating to match adjacent surfaces.					

Epoxy, New, uncoated Existing

Epoxy				
New, uncoated Existing	Primer	Intermediate	Topcoat	System DFT
MPI INT 9.2E-G6 (Gloss)	MPI 50	MPI 77	MPI 77	4 mils

Topcoat: Coating to match adjacent surfaces.

-- End of Section --

SECTION 10 14 00.10

EXTERIOR SIGNAGE

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.

ALUMINUM ASSOCIATION (AA)

AA DAF45	(2003; Reaffirmed 2009) Designation System for Aluminum Finishes

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z97.1	(2015) Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test

AMERICAN WELDING SOCIETY (AWS)

AWS C1.1M/C1.1	(2019) Recommended Practices for Resistance Welding
AWS D1.1/D1.1M	(2025) Structural Welding Code - Steel

ASTM INTERNATIONAL (ASTM)

ASTM A123/A123M	(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A653/A653M	(2025) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A924/A924M	(2022a) Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
ASTM B26/B26M	(2018; E 2018) Standard Specification for Aluminum-Alloy Sand Castings
ASTM B108/B108M	(2019) Standard Specification for Aluminum-Alloy Permanent Mold Castings
ASTM B209	(2014) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM B221	(2021) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

ASTM C1036	(2021) Standard Specification for Flat Glass
ASTM D3841	(2016) Standard Specification for Glass Fiber-Reinforced Polyester Plastic Panels
ASTM E84	(2024) Standard Test Method for Surface Burning Characteristics of Building Materials

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM AMP 500	(2006) Metal Finishes Manual

SOCIETY OF AUTOMOTIVE ENGINEERS INTERNATIONAL (SAE)

SAE AMS3611	(2011; Rev E; Stabilized (S) 2011) Plastic Sheet, Polycarbonate General Purpose

1.2 GENERAL REQUIREMENTS

All exterior signage must be provided by a single manufacturer. Exterior signage must be of the design, detail, sizes, types, and message content shown on the drawings, must conform to the requirements specified, and must be provided at the locations indicated. Submit exterior signage schedule in electronic media with spread sheet format. Spread sheet must include sign location, sign type, and message. Signs must be complete with lettering, framing as detailed, and related components for a complete installation. Each sample must consist of a complete sign panel with letters and symbols. Samples may be installed in the work, provided each sample is identified and location recorded. Submit three color samples for each material requiring color and 12 inch square sample of sign face color sample.

1.2.1 Wind Load Requirements

Exterior signage must be designed to withstand 110 mph windload. Submit design analysis and supporting calculations performed in support of specified signage.

1.2.2 Character Proportions and Heights

Letters and numbers on indicated signs for handicapped-accessible buildings must have a width-to-height ratio between 3:5 and 1:1 and a stroke-width-to-height ratio between 1:5 and 1:10. Characters and numbers on indicated signs must be sized according to the viewing distance from which they are to be read. The minimum height is measured using an upper case letter "X". Lower case characters are permitted.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Approved Detail Drawings; G

SD-03 Product Data

Installation

Exterior Signage; G

Wind Load Requirements

SD-04 Samples

Exterior Signage; G

SD-10 Operation and Maintenance Data

Protection and Cleaning; G

1.4 QUALIFICATIONS

Signs, plaques, and dimensional letters must be the standard product of a manufacturer regularly engaged in the manufacture of the products. Items of equipment must essentially duplicate equipment that has been in satisfactory use at least 2 years prior to bid opening.

1.5 DELIVERY AND STORAGE

Materials must be wrapped for shipment and storage, delivered to the jobsite in manufacturer's original packaging, and stored in a clean, dry area in accordance with manufacturer's instructions.

1.6 WARRANTY

Manufacturer's standard performance guarantees or warranties that extend beyond a one year period must be provided.

PART 2 PRODUCTS

2.1 GRAPHICS FOR EXTERIOR SIGNAGE SYSTEMS

2.1.1 Graphics

Signage graphics must conform to the following:

a. Message must be applied to panel using the silkscreen process. Silkscreened images must be executed with photo screens prepared from original art. Handcut screens will not be accepted. Original art must be defined as artwork that is a first generation pattern of the original specified art. Edges and corners must be clean. Rounded corners, cut or ragged edges, edge buildup, bleeding or surfaces pinholes will not be accepted.

2.1.2 Messages

See drawings and schedule for message content. Type size as indicated.

2.2 ALUMINUM ALLOY PRODUCTS

Aluminum alloy products must conform to ASTM B209 for sheet or plate,

ASTM B221 for extrusions and ASTM B26/B26M or ASTM B108/B108M for castings. Aluminum extrusions must be provided at least 1/8 inch thick and aluminum plate or sheet at least 16 gauge thick. Welding for aluminum products must conform to AWS C1.1M/C1.1.

2.3 ANODIC COATING

Anodized finish must conform to AA DAF45 as follows:

Integrated color anodized designation AA-M10-C22-A32, Architectural Class 0.4 to 0.7 mil.

2.4 ORGANIC COATING

Clean, prime and give surfaces a semi-gloss baked enamel finish in accordance with NAAMM AMP 500, AMP 505, with total dry film thickness not less than 1.2 mils.

2.5 VINYL SHEETING FOR GRAPHICS

Vinyl sheeting must be 5 to 7 year premium type and must be in accordance with the flammability requirements of ASTM E84 and must be a minimum 0.003 inch film thickness. Film must include a precoated pressure sensitive adhesive backing, Class 1, or positionable pressure sensitive adhesive backing, Class 3.

2.6 GLASS

Glass must be in accordance with ASTM C1036, Type I, Class 1, Quality q3 and ANSI Z97.1.

2.7 FIBER-REINFORCED POLYESTER (FRP) PANELS

Fiber-reinforced polyester (FRP) must be in accordance with ASTM D3841, Type II, Grade 1, Class 124.

2.8 ACRYLIC SHEET

Acrylic sheet must be in accordance with the flammability requirements of ASTM E84 and must conform to ANSI Z97.1.

2.9 POLYCARBONATE SHEET

Polycarbonate sheet must conform to SAE AMS3611.

2.10 ANCHORS AND FASTENERS

Exposed anchor and fastener materials must be compatible with metal to which applied and must match in color and finish and must be non-rusting, non-corroding, and non-staining. Exposed fasteners must be tamper-proof.

2.11 SHOP FABRICATION AND MANUFACTURE

2.11.1 Factory Workmanship

Work must be assembled in the shop, as far as practical, ready for installation at the site. Work that cannot be shop assembled must be given a trial fit in the shop to ensure proper field assembly. Holes for bolts and screws must be drilled or punched. Drilling and punching must

produce clean, true lines and surfaces. Welding to or on structural steel must be in accordance with AWS D1.1/D1.1M. Welding must be continuous along the entire area of contact. Exposed welds must be ground smooth. Exposed surfaces of work must have a smooth finish and exposed riveting must be flush. Fastenings must be concealed where practical. Items specified to be galvanized must be by hot-dip process after fabrication if practical. Galvanization must be in accordance with ASTM A123/A123M and ASTM A653/A653M, as applicable. Other metallic coatings of steel sheet must be in accordance with ASTM A924/A924M. Joints exposed to the weather must be formed to exclude water. Drainage and weep holes must be included as required to prevent condensation buildup.

2.11.2 Dissimilar Materials

Where dissimilar metals are in contact, or where aluminum is in contact with concrete, mortar, masonry, wet or pressure-treated wood, or absorptive materials subject to wetting, the surfaces must be protected with a coat of asphalt varnish or a coat of zinc-molybdate primer to prevent galvanic or corrosive action.

2.11.3 Shop Painting

Surfaces of miscellaneous metal work, except nonferrous metal, corrosion resisting steel, and zinc-coated work, must be given one coat of zinc-molybdate primer or an approved rust-resisting treatment and metallic primer in accordance with manufacturer's standard practice. Surfaces of items to be embedded in concrete must not be painted. Upon completion of work, damaged surfaces must be recoated.

2.12 COLOR, FINISH, AND CONTRAST

Color must be as indicated on the drawings. For buildings required to be handicapped-accessible, the characters and background of signs must be eggshell, matte, or other non-glare finish. Characters and symbols must contrast with their background - either light characters on a dark background or dark characters on a light background.

PART 3 EXECUTION

3.1 INSTALLATION

Signs, plaques, or dimensional letters must be installed in accordance with approved manufacturer's instructions at locations shown on the approved detail drawings; submit drawings showing elevations of each type of sign; dimensions, details, and methods of mounting or anchoring; shape and thickness of materials; and details of construction. A schedule showing the location, each sign type, and message must be included. Steel conduits installed underground and illuminated signage mounted directly on buildings must be in conformance with the requirements of Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM. Signs must be installed plumb and true at mounting heights indicated, and by method shown or specified. Signs mounted on other surfaces must not be installed until finishes on such surfaces have been completed. Submit manufacturer's installation instructions and cleaning instructions.

3.1.1 Anchorage

Anchorage and fastener materials must be in accordance with approved manufacturer's instructions for the indicated substrate. Anchorage not

otherwise specified or indicated must include slotted inserts, expansion shields, and powder-driven fasteners when approved for concrete; toggle bolts and through bolts for masonry; machine carriage bolts for steel; lag bolts and screws for wood.

3.1.2 Protection and Cleaning

The work must be protected against damage during construction. Hardware and electrical equipment must be adjusted for proper operation. Glass, frames, and other sign surfaces must be cleaned in accordance with manufacturer's instructions. After signs are completed and inspected, cover all project identification, directional, and other signs which may mislead the public. Covering must be maintained until instructed to be removed by the Contracting Officer or until the facility is to be opened for business. Submit six copies of maintenance instructions listing routine maintenance procedures, possible breakdowns and repairs, and troubleshooting guides. The instructions must include simplified diagrams for the equipment as installed. Signs must be cleaned, as required, at time of cover removal.

3.2 FIELD PAINTED FINISH

Miscellaneous metals and frames must be field painted in accordance with Section 09 90 00 PAINTS AND COATINGS. Anodized metals, masonry, and glass must be protected from paint. Finish must be free of scratches or other blemishes.

-- End of Section --

SECTION 10 14 00.20

INTERIOR SIGNAGE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ALUMINUM ASSOCIATION (AA)

AA DAF45	(2003; Reaffirmed 2009) Designation System for Aluminum Finishes
AA PK-1	(2015) Pink Sheets: Designations and Chemical Composition Limits for Aluminum Alloys in the Form of Castings & Ingot

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

AAMA 2604	(2017a) Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z97.1	(2015) Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test

AMERICAN WELDING SOCIETY (AWS)

AWS D1.2/D1.2M	(2014; Errata 1 2014; Errata 2 2020) Structural Welding Code - Aluminum

ASTM INTERNATIONAL (ASTM)

ASTM B209	(2014) Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
ASTM B221	(2021) Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

INTERNATIONAL CODE COUNCIL (ICC)

ICC/ANSI A117.1	(2009) Accessible and Usable Buildings and Facilities

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 101	(2024) Life Safety Code

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

36 CFR 1191	Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Detail Drawings; G

SD-03 Product Data

Room Identification And Directional Signage System; G

Exit Door Tactile Sign; G

SD-04 Samples

Interior Signage; G

Exit Door Tactile Sign; G

SD-10 Operation and Maintenance Data

Approved Manufacturer's Instructions; G

Protection and Cleaning; G

1.3 QUALITY ASSURANCE

1.3.1 Samples

Submit interior signage samples of each of the following sign types showing typical quality, workmanship and color: all sign types included in project Exit Door Tactile Sign. Approved samples may be installed in the work, provided each sample is identified and location recorded.

1.3.2 Detail Drawings

Submit detail drawings showing elevations of each type of sign, dimensions, details and methods of mounting or anchoring, mounting height, shape and thickness of materials, and details of construction. Include a schedule showing the location, each sign type, and message.

1.3.3 Sign Fabricator

Sign Fabricator to follow room number strategies created by designer. The room numbering system to be reviewed and approved by the Contracting Officer and command end users during the shop drawing phase, and prior to fabrication.

1.4 DELIVERY, STORAGE, AND HANDLING

Package materials to prevent damage and deterioration during shipment, handling, storage and installation. Deliver products to the jobsite in manufacturer's original packaging and store in a clean, dry area in accordance with manufacturer's instructions.

1.5 WARRANTY

Provide manufacturer's warranty to repair or replace defective interior signage materials and workmanship for a period of 2 years from date of final acceptance of the work.

PART 2 PRODUCTS

2.1 ROOM IDENTIFICATION AND DIRECTIONAL SIGNAGE SYSTEM

Provide signs, plaques, directories, and dimensional building letters that are standard products of manufacturers regularly engaged in the manufacture of such products that essentially duplicate signs that have been in satisfactory use at least 2 years prior to bid opening. Obtain signage from a single manufacturer with edges and corners of finished letter forms and graphics true and clean.

2.1.1 Panel Sign Systems

Provide direct print acrylic with applied tactile graphics, sign is fabricated of 0.375 inch acrylic in two layers with smooth edge conforming to ANSI Z97.1. Provide signs that can accept raised copy and Braille.

2.1.2 Standard Room Signs

Provide signs that include tactile letters, symbols and Braille for interior rooms or spaces where the sign is not likely to change over time. Tactile text descriptions are required for pictograms that are provided to identify a permanent room. Examples include interior signs that label restrooms, stairs, room numbers or letters, and room names. These permanent room signs can include paper inserts for updatable information.

2.1.2.1 Tactile Letters, Symbols and Braille

Provide ADA compliant material per 36 CFR 1191 which is raised 1/32 inch from the first surface, has a minimum 5/8 inch in height and is an ADA acceptable font. The color of the tactile letters is required to contrast with the sign face color per ADA standards. The ADA required Braille has a minimum durometer reading of 90. All raised letters, numbers and symbols are to comply.

2.1.3 Type of Mounting for Signs

Provide surface mounted signs mounted with. manufacturer's standard (1/6 inch) 1.59 mm thick closed cell vinyl foam with adhesive backing. Adhesive must be transparent, long aging, high tech formulation on two sides of the vinyl foam. Double-faced tape consisting of acrylic adhesive on polyurethane foam used in conjunction with silicone adhesive magnetic tape.

2.1.4 Character Proportions and Heights

Letters and numbers on signs conform to 36 CFR 1191.

2.2 EXIT DOOR TACTILE SIGN

Provide tactile sign with the message EXIT at each exit door that requires an exit sign to conform with NFPA 101. Sign tactile message is to comply with ICC/ANSI A117.1.

2.3 MATERIALS

2.3.1 Aluminum Alloy Products

Aluminum extrusions are at least 1/8 inch thick, and aluminum plate or sheet are at least 0.0508 inch thick. Extrusions conform to ASTM B221; plate and sheet conforms to ASTM B209. Where anodic coatings are specified, alloy conforms to AA PK-1 alloy designation 514.0. Exposed anodized aluminum finishes are as shown. Welding for aluminum products conforms to AWS D1.2/D1.2M.

2.3.2 Anodic Coating

Anodized finish conforms to AA DAF45 as follows:

a. Integral color anodized designation AA-M10-C22-A32, Architectural Class 0.4 to 0.7 mil.

b. Electrolytically deposited color-anodized designation AA-M10-C22-A34, Architectural Class II 0.4 to 0.7 mil.

2.3.3 Organic Coating

Organic coating conforms to AAMA 2604, with total dry film thickness not less than 1.2 mils.

2.3.4 Acrylic Sheet

Acrylic panel comprised of two layers, 0.375 inch nominal thickness. Edges shall be smooth without chips, burrs, sharp edges or marks. The direct print shall be second surface to prevent scratching, fading or other damage. Acrylic shall be non-glare optically clear.

2.3.5 Fabrication and Manufacture

2.3.5.1 Factory Workmanship

Holes for bolts and screws are drilled or punched. Drilling and punching produces clean, true lines and surfaces. Exposed surfaces of work have a smooth finish; exposed riveting is flush. Conceal fastenings where practicable.

2.3.5.2 Dissimilar Materials

Where dissimilar metals are in contact, protect surfaces prevent galvanic or corrosive action.

2.3.6 Typeface

ADA-ABA compliant font for Room Signs: Helvetica Neue 55 Roman.

2.4 GRAPHICS

Provide signage graphics for modular signs to the following:

2.4.1 Subsurface Copy Acrylic Signs

Copy is transferred to the back face of clear acrylic sheeting forming the panel face to produce precisely formed opaque image. This method bonds all sign elements (color, graphics, lettering, Braille and substrate) into a single unit.

2.4.2 First Surface Copy Direct Print (Non-Tactile)

Message may be applied to panel using a direct print process. Original art is defined as artwork that is a first generation reproduction of the specified art. Provide clean edges and corners.

2.4.3 Photopolymer

Integral graphics and Braille achieved by photomechanical stratification processes. Provide photopolymer used for ADA compliant graphics of the type that has a minimum durometer reading of 90. Tactile graphics are raised 1/32 inch from the first surface of plaque by photomechanical stratification process.

2.5 COLOR, FINISH, AND CONTRAST

Provide color as indicated on drawings; colors listed are not intended to limit the selection of equal colors from other manufacturers. Finish of eggshell, matte, or other non-glare finish for all signs as required in handicapped-accessible buildings.

PART 3 EXECUTION

3.1 INSTALLATION

Install signs plumb and true and in accordance with approved manufacturer's instructions at locations shown on the detail drawings. Submit operating instructions outlining the step-by-step procedures required for system operation. The instructions include simplified diagrams for the system as installed, the manufacturer's name, model number, service manual, parts list, and brief description of all equipment and their basic operating features. Provide each set permanently bound with a hard cover. The following identification must be inscribed on the covers: "OPERATING AND MAINTENANCE INSTRUCTIONS", name and location of the facility, name of the Contractor, and contract number. Mounting height and mounting location complies with 36 CFR 1191. Install required blocking. Do not install signs on doors or other surfaces until finishes on such surfaces have been installed. Signs installed on glass surfaces are installed with matching blank back-up plates in accordance with manufacturer's instructions.

Do not install items that show visual evidence of biological growth.

3.1.1 Anchorage

Provide anchorage in accordance with approved manufacturer's instructions. Anchorage not otherwise specified or shown includes slotted inserts, expansion shields, and powder-driven fasteners when approved for concrete; toggle bolts and through bolts for masonry; machine carriage bolts for steel; lag bolts and screws for wood. Provide exposed anchor and fastener materials compatible with metal to which applied with matching color and finish.

a. Signs mounted to painted gypsum board surfaces must be removable for painting maintenance.

3.1.2 Protection and Cleaning

Protect the work against damage during construction. Adjust hardware and electrical equipment for proper operation. Clean glass, frames, and other sign surfaces at completion of signage installation in accordance with the manufacturer's written instructions.

-- End of Section --

SECTION 21 13 24.00 10

MILSPEC FLUORINE FREE FOAM (MFFF) FIRE PROTECTION SYSTEM

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME A13.1	(2023) Scheme for the Identification of Piping Systems
ASME B16.1	(2020) Gray Iron Pipe Flanges and Flanged Fittings Classes 25, 125, and 250
ASME B16.3	(2021) Malleable Iron Threaded Fittings, Classes 150 and 300
ASME B16.4	(2021) Gray Iron Threaded Fittings; Classes 125 and 250

ASTM INTERNATIONAL (ASTM)

ASTM A47/A47M	(1999; R 2022; E 2022) Standard Specification for Ferritic Malleable Iron Castings
ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A183	(2014; R 2020) Standard Specification for Carbon Steel Track Bolts and Nuts
ASTM A193/A193M	(2025) Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service and Other Special Purpose Applications
ASTM A449	(2014; R 2020) Standard Specification for Hex Cap Screws, Bolts, and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use
ASTM A536	(2024) Standard Specification for Ductile Iron Castings
ASTM A795/A795M	(2021) Standard Specification for Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use

ASTM F436	(2011) Hardened Steel Washers

FM GLOBAL (FM)

FM APP GUIDE	(updated on-line) Approval Guide https://www.approvalguide.com/

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 13	(2025; TIA 24-3) Standard for the Installation of Sprinkler Systems

NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET)

NICET 1014-7	(2012) Program Detail Manual for Certification in the Field of Fire Protection Engineering Technology (Field Code 003) Subfield of Automatic Sprinkler System Layout

UL SOLUTIONS (UL)

UL Fire Prot Dir	UL Product IQ (updated online) at https://productiq.ulprospector.com/en

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Scope of Work Letter; G

SD-03 Product Data

Installer's Qualifications; G

SD-11 Closeout Submittals

As-Built Drawings; G

1.3 QUALITY ASSURANCE

In the event of a conflict between referenced NFPA standards and this specification, this specification governs. Interpret reference to "authority having jurisdiction" to mean the Contracting Officer.

1.3.1 Submittal Preparer's Qualifications

Prepare fire protection system submittals, including as-built drawings, by an individual who is either a registered professional engineer with ten years experience designing AFFF systems or who is certified as a Level IV

Technician by National Institute for Certification in Engineering Technologies (NICET) in the Automatic Sprinkler System Layout subfield of Fire Protection Engineering Technology in accordance with NICET 1014-7. Submit one set of reproducibles and six copies, within 14 calendar days after successful completion of required testing. Maintain a separate set of approved submittal drawings of the overall system, marked up to indicate as-built conditions, onsite in a current condition at all times and make available for review immediately upon request during normal working hours. Indicate variations from the approved drawings, for whatever reason, including those occasioned by modifications, change orders, optional materials, and/or required for coordination between trades in sufficient detail to accurately reflect the as-built conditions.

1.3.2 Installer's Qualifications

Provide a statement attesting that the proposed installer is regularly engaged in the installation of the type and complexity of system included in this project. Submit, in addition, data identifying the locations of at least three systems recently installed by the proposed installer which are comparable to the system specified. Certify that each system has performed satisfactorily, in the manner intended, for a period of not less than 6 months.

1.3.3 Scope of Work Letter

Submit scope of work letter in lieu of detailed drawings. The scope of work letter shall be a single document that fully describes the sprinkler contractor's complete scope of work for the project. Scope of work letter shall include a brief narrative describing the contractor's full scope including installation, testing, commisioning, and closeout of the fire suppression system(s) and associated piping, hangers, valves, and required documentation.

PART 2 PRODUCTS

2.1 SYSTEM REQUIREMENTS

a. Provide supplemental sprinkler protection for the areas indicated on the drawings.

2.2 PRESSURE RATINGS

Provide valves, fittings, couplings, and similar devices rated for the maximum working pressures that can be experienced in the system, but in no case less than 175 psi.

2.3 ABOVEGROUND PIPING SYSTEMS FOR WATER OR MFFF SOLUTION

2.3.1 Pipe

Provide standard weight pipe conforming to ASTM A795/A795M or ASTM A53/A53M. Pipe 6 inch diameter and smaller must be Schedule 40. Mark pipe as to the brand or name of the manufacturer, kind of pipe and the ASTM designation in accordance with the "Product Marking" provisions of the ASTM standard.

2.3.2 Grooved Fittings and Couplings

Provide grooved fittings, couplings and bolts by the same manufacturer. Provide malleable iron fittings and couplings complying with ASTM A47/A47M

or ductile iron complying with ASTM A536. Provide rigid type couplings except provide flexible type where flexible joints are specifically required by NFPA 13. Ensure coupling gaskets are Grade E (EPDM) approved for dry pipe fire protection service. Provide flush type gasket that fills the entire cavity between the coupling and the pipe. Provide heat-treated, cadmium plated or zinc electroplated steel nuts and bolts conforming to ASTM A183.

2.3.3 Non-Grooved Fittings

Provide threaded or flanged non-grooved fittings. Ensure threaded fittings are cast iron conforming to ASME B16.4 or malleable iron conforming to ASME B16.3. Ensure flanged fittings are cast iron conforming to ASME B16.1. Fittings into which sprinklers, drop nipples or riser nipples (sprigs) are screwed must be threaded type. Do not use plain-end fittings with mechanical couplings, fittings which require drilling a hole in the pipe, and fittings which use steel gripping devices to bite into the pipe.

2.3.4 Flanges and Gaskets

Provide flanges conforming to NFPA 13 and ASME B16.1 that are welded or threaded to the pipe. Flanges which are bolted to grooved pipe will not be permitted. Provide gaskets that are full face type EPDM or other approved material.

2.3.4.1 Bolts

Ensure bolts are ASTM A449, Type 1. Extend bolts no less than three full threads beyond the nut with bolts tightened to the required torque.

2.3.4.2 Nuts

Provide ASTM A193/A193M, Grade 5 nuts.

2.3.4.3 Washers

Meet the requirements of ASTM F436. Provide flat circular washers under all bolt heads and nuts.

2.3.5 Pipe Hangers

Provide hangers listed in UL Fire Prot Dir or FM APP GUIDE and suitable for the application, construction and size pipe involved.

2.3.6 Control Valve

Unless otherwise indicated, valves must be indicating type in accordance with NFPA 13. Valves 2-1/2 inch and larger must be flanged outside screw and yoke (OS&Y) type.

2.4 DISCHARGE DEVICES

2.4.1 Sprinkler

Sprinkler must be 1/2 inch orifice spray type. For deluge systems, provide open type sprinkler without heat responsive and actuating elements. For wet-pipe or preaction systems, provide upright type sprinkler to match existing sprinkler response type glass bulb heat

responsive and actuating element having a temperature rating to match existing sprinkler temperature rating. Provide spare sprinklers in accordance with NFPA 13 housed in metal or plastic containers.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Aboveground Piping

Install piping straight and bear evenly on hangers and supports. Pitch preaction sprinkler system piping as if it were being installed in areas subject to freezing. Conceal piping in areas with suspended ceiling and inspect, test and approve before concealing.

3.1.1.1 Joints

Provide pipe joints conforming to NFPA 13. Do not show more than four threads after joint is made up. Apply joint compound to male threads only. Ensure joints are faced true, provided with gaskets and made square and tight. Provide flanged joints or mechanical groove couplings where indicated or required by NFPA 13. Prepare grooved pipe and fittings in accordance with the manufacturer's latest published installation instructions. Provide grooved couplings and fittings from the same manufacturer. Do not use grooved joints in concealed locations, such as behind solid walls or ceilings, unless an access panel is shown on the drawings for servicing or adjusting the joint.

3.1.1.2 Reducers

Make reductions in pipe sizes with one-piece tapered reducing fittings. The use of grooved-end or rubber-gasketed reducing couplings will not be permitted. When standard fittings of the required size are not manufactured, single bushings of the face type will be permitted. Where used, install face bushings with the outer face flush with the face of the fitting opening being reduced. Do not use bushings in elbow fittings, in more than one outlet of a tee, in more than two outlets of a cross, or where the reduction in size is less than 1/2 inch.

3.1.1.3 Sprinkler Riser Nipples (Sprigs)

Do not use riser nipples (sprigs) 1 inch in size between sprinkler branch lines and individual sprinklers unless necessitated by roof or ceiling conditions. In such cases, do not installfittings between the branch line tee and the reducing coupling below the sprinkler.

3.1.1.4 Sprinkler Deflectors

Install sprinkler deflectors parallel to the roof or ceiling. Ensure deflector distances from the underside of the roof or ceiling are in accordance with NFPA 13 except do not exceed, in no case, a distance of 12 inches. Sprinkler clearances from obstructions must be in accordance with NFPA 13.

3.1.1.5 Pipe Supports and Hangers

Installation methods outlined in NFPA 13 are mandatory. Protect piping against damage from earthquakes. Provide longitudinal and lateral sway bracing for piping 2-1/2 inch diameter and larger.

3.1.1.6 Pipe Penetrations

Cutting structural members for passage of pipes or for pipe-hanger fastenings will not be permitted. Provide pipes penetrating concrete or masonry walls or concrete floors with pipe sleeves fitted into place at the time of construction through its respective wall or floor, and cut flush with each surface. Provide sleeve sizes and clearance between pipe and sleeve in accordance with NFPA 13. Where pipes pass through fire walls, fire partitions, or floors, place a fire seal between the pipe and sleeve.

3.1.1.7 Piping Pitch

Pitch piping to the main drain or to auxiliary drains provided as required to facilitate draining. Pitch branch lines at least 1/2 inch in 10 feet and pitch crossmains and feedmains to at least 1/4 inch in 10 feet.

3.1.1.8 Escutcheons

Provide escutcheons at finished surfaces where exposed piping passes through floors, walls, or ceilings except in boiler, utility, or equipment rooms. Fasten chromium-plated iron or chromium-plated brass, either one-piece or split-pattern, escutcheons securely to pipe and hold in place by internal spring tension or setscrew.

3.1.1.9 Drains

Provide main drain piping to discharge at safe points outside each building. Provide drains of adequate size to readily receive the full flow from each drain under maximum pressure. Provide auxiliary drains as required by NFPA 13 except use drain valves where drain plugs are otherwise permitted. Where branch lines terminate at low points and form trapped sections, manifold such branch lines to a common drain line. Provide each drain valve with a metal sign identifying the type of drain connection or function of the valve.

3.1.1.10 Identification Signs

Provide signs in accordance with NFPA 13. Affix properly lettered and approved metal signs to each control valve, inspector test valve, main drain, auxiliary drain, test valve, and similar valves as appropriate.

3.2 PIPE PAINTING AND LABELING

3.2.1 Painting

Paint black steel pipe in accordance with the requirements specified under SECTION 09 90 00 PAINTS AND COATINGS. Paint pipe in equipment rooms red. Paint pipe in other areas to match finishes in those areas. Do not paint stainless steel pipe.

3.2.2 Pipe Identification

Identify aboveground pipe 2 inch diameter and larger with legends. Include FOAM CONCENTRATE, FOAM-WATER SPRINKLER, FOAM-WATER NOZZLE, and FIRE PROTECTION WATER. Utilize WHITE letters on a RED color field and include arrows to indicate the direction of flow. Use length of color field, letter size and locations on piping as recommended in ASME A13.1.

3.3 PRELIMINARY TESTS

Perform tests to make adjustments in the fire protection system operation and to verify that the system will function as intended and that it is ready for service. Include all components and subsystems in such tests. Clearly document and include test reports with the written request for Final Test.

3.3.1 Hydrostatic Tests

Hydrostatically test the underground and aboveground piping systems, including AFFF concentrate, in accordance with NFPA 13 at no less than 200 psi, or 50 psi in excess of maximum system operating pressure, for 2 hours. There must be no visible leakage from the piping when the system is subjected to the hydrostatic test.

3.3.2 Alarm Check and Automatic Water Control Valves

Test each valve to verify operation in accordance with manufacturer's published operating instructions. This includes tests of valves and switches connected thereto.

3.4 FINAL TEST

3.4.1 Requirements

The Final Test is a repeat of Preliminary Tests, except do not repeat flushing and hydrostatic tests. In addition, actuate the system automatically and allow to discharge for a period of at least one minute prior to shutting the system off. Correct system failures and other deficiencies identified during testing and retest portions of the system affected by the required corrections.

3.4.1.1 Pretest Requirements

The system will be considered ready for final testing only after the following have been accomplished.

a. The required test plan has been submitted and approved.

b. Preliminary tests have been made and deficiencies determined to have been corrected to the satisfaction of the equipment manufacturer's technical representatives and the Contracting Officer.

c. Test reports, including the required videotape of the preliminary tests, have been submitted and approved.

d. The control panels and detection systems have been in service for a break-in period of at least 14 consecutive days prior to the final test.

e. The Contractor has provided written notification to the Contracting Officer, at least 21 days prior to date of Final Test, that preliminary tests have been successfully completed.

3.4.1.2 Videotaping

Videotape the tests in VHS format and record the date and time-lapse, in

seconds, from start to finish of each portion of the test as directed by the Contracting Officer. Submit four copies of the tape before the system will be considered accepted.

3.4.1.3 Manufacturer's Services

Experienced technicians regularly employed by the Contractor in the installation of the system and manufacturer's representative referred to elsewhere in this specification must conduct the testing.

3.4.1.4 Materials and Equipment

Provide AFFF concentrate, gauges, AFFF sample collection apparatus, instruments, hose, personnel, elevating platforms, scaffolding, ladders, appliances and any other equipment necessary to fulfill testing requirements specified.

3.4.1.5 Facility and Environmental Protection

Provide protection for the facility, including electrical and mechanical equipment exposed to possible damage during discharge tests. Include provision of sandbags or similar means for preventing migration of foam solution into adjacent areas. Provide temporary measures to prevent AFFF solution from entering storm drains, sanitary sewers, drainage ditches, streams and other water sources. Contain discharged AFFF on paved surfaces and do not allow to come in contact with the earth.

3.4.2 Control System Tests

Test and demonstrate operational features of the control system. Include testing of control panels and each input and output circuit. Tests of circuits include actuation and simulated circuit fault at each initiating, notification, supervisory and actuation device or appliance. As a practical matter, these tests are a repeat of preliminary tests required under paragraph PRELIMINARY TESTS.

3.5 POSTED INSTRUCTIONS

Post framed description of system operation, instructions and schematic diagrams of the overall AFFF system and each subsystem, where directed. Include condensed operating instructions explaining the system for normal operation, refilling the AFFF storage tank, and routine testing.

-- End of Section --

SECTION 22 00 00

PLUMBING, GENERAL PURPOSE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z21.22/CSA 4.4	(2015; R 2025) Relief Valves for Hot Water Supply Systems

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME A112.6.1M	(1997; R 2017) Floor Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use
ASME A112.36.2M	(2022) Cleanouts
ASME B1.20.1	(2013; R 2018) Pipe Threads, General Purpose (Inch)
ASME B16.5	(2020) Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/Inch Standard
ASME B16.15	(2024) Cast Copper Alloy Threaded Fittings Classes 125 and 250
ASME B16.18	(2021) Cast Copper Alloy Solder Joint Pressure Fittings
ASME B16.21	(2021) Nonmetallic Flat Gaskets for Pipe Flanges
ASME B16.22	(2021) Wrought Copper and Copper Alloy Solder Joint Pressure Fittings
ASME B16.24	(2022) Cast Copper Alloy Pipe Flanges, Flanged Fittings, and Valves Classes 150, 300, 600, 900, 1500, and 2500
ASME B16.34	(2021) Valves - Flanged, Threaded and Welding End
ASME B16.39	(2025) Malleable Iron Threaded Pipe Unions; Classes 150, 250, and 300
ASME B16.50	(2021) Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings
ASME B31.1	(2024) Power Piping

ASME B31.5	(2022) Refrigeration Piping and Heat Transfer Components
ASME B40.100	(2022) Pressure Gauges and Gauge Attachments

AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE)

ASSE 1010	(2021) Performance Requirements for Water Hammer Arresters
ASSE 1019	(2023) Performance Requirements for Wall Hydrant with Backflow Protection and Freeze Resistance

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA B300	(2024) Hypochlorites
AWWA B301	(2024) Liquid Chlorine
AWWA C203	(2025) Coal-Tar Protective Coatings and Linings for Steel Water Pipe and Fittings
AWWA C606	(2022) Grooved and Shouldered Joints
AWWA C651	(2023) Standard for Disinfecting Water Mains
AWWA C652	(2019) Disinfection of Water-Storage Facilities

AMERICAN WELDING SOCIETY (AWS)

AWS A5.8/A5.8M	(2019) Specification for Filler Metals for Brazing and Braze Welding
AWS B2.2/B2.2M	(2026) Specification for Brazing Procedure and Performance Qualification

ASTM INTERNATIONAL (ASTM)

ASTM A47/A47M	(1999; R 2022; E 2022) Standard Specification for Ferritic Malleable Iron Castings
ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A74	(2025) Standard Specification for Cast Iron Soil Pipe and Fittings
ASTM A105/A105M	(2023) Standard Specification for Carbon Steel Forgings for Piping Applications
ASTM A183	(2014; R 2020) Standard Specification for Carbon Steel Track Bolts and Nuts

ASTM A193/A193M	(2025) Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service and Other Special Purpose Applications
ASTM A515/A515M	(2017; R2022) Standard Specification for Pressure Vessel Plates, Carbon Steel, for Intermediate- and Higher-Temperature Service
ASTM A516/A516M	(2017) Standard Specification for Pressure Vessel Plates, Carbon Steel, for Moderate- and Lower-Temperature Service
ASTM A536	(2024) Standard Specification for Ductile Iron Castings
ASTM A733	(2025) Standard Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples
ASTM B32	(2020) Standard Specification for Solder Metal
ASTM B42	(2025) Standard Specification for Seamless Copper Pipe, Standard Sizes
ASTM B43	(2020) Standard Specification for Seamless Red Brass Pipe, Standard Sizes
ASTM B88	(2022) Standard Specification for Seamless Copper Water Tube
ASTM B88M	(2020) Standard Specification for Seamless Copper Water Tube (Metric)
ASTM B117	(2025) Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM B370	(2022) Standard Specification for Copper Sheet and Strip for Building Construction
ASTM B584	(2022) Standard Specification for Copper Alloy Sand Castings for General Applications
ASTM B813	(2024) Standard Specification for Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube
ASTM B828	(2023) Standard Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings
ASTM C564	(2020a) Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings

ASTM C920	(2018; R 2024) Standard Specification for Elastomeric Joint Sealants
ASTM D1785	(2021) Standard Specification for Poly(Vinyl Chloride) (PVC), Plastic Pipe, Schedules 40, 80, and 120
ASTM D2000	(2018; R 2024) Standard Classification System for Rubber Products in Automotive Applications
ASTM D2235	(2004; R 2016) Standard Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings
ASTM D2239	(2025) Standard Specification for Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter
ASTM D2241	(2020) Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)
ASTM D2464	(2015) Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80
ASTM D2466	(2023) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40
ASTM D2467	(2020) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80
ASTM D2564	(2020) Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems
ASTM D2672	(2014) Joints for IPS PVC Pipe Using Solvent Cement
ASTM D2683	(2020) Standard Specification for Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing
ASTM D2737	(2012a) Polyethylene (PE) Plastic Tubing
ASTM D2846/D2846M	(2019) Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems
ASTM D2855	(2020) Standard Practice for the Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC)

	Pipe and Piping Components with Tapered Sockets
ASTM D3035	(2022) Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter
ASTM D3138	(2004; R 2016) Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Components
ASTM D3139	(2019) Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals
ASTM D3212	(2020) Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
ASTM D3261	(2016) Standard Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
ASTM D4586/D4586M	(2025) Standard Specification for Asphalt Roof Cement
ASTM E1	(2014; R 2025) Standard Specification for ASTM Liquid-in-Glass Thermometers
ASTM F437	(2024) Standard Specification for Threaded Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80
ASTM F438	(2023) Standard Specification for Socket-Type Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40
ASTM F439	(2024) Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80
ASTM F441/F441M	(2023) Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80
ASTM F442/F442M	(2023) Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR)
ASTM F477	(2014; R 2021) Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F493	(2022) Standard Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings

ASTM F877	(2025) Standard Specification for Crosslinked Polyethylene (PEX) Plastic Hot- and Cold-Water Distribution Systems
ASTM F2389	(2024a) Standard Specification for Pressure-rated Polypropylene (PP) Piping Systems

CAST IRON SOIL PIPE INSTITUTE (CISPI)

CISPI 310	(2012) Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

COPPER DEVELOPMENT ASSOCIATION (CDA)

CDA A4015	(2024) Copper Tube Handbook

INTERNATIONAL CODE COUNCIL (ICC)

ICC IPC	(2024) International Plumbing Code

MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY (MSS)

MSS SP-25	(2018) Standard Marking System for Valves, Fittings, Flanges and Unions
MSS SP-44	(2019) Steel Pipeline Flanges
MSS SP-58	(2025) Pipe Hangers and Supports - Materials, Design and Manufacture, Selection, Application, and Installation
MSS SP-67	(2022) Butterfly Valves
MSS SP-70	(2011) Gray Iron Gate Valves, Flanged and Threaded Ends
MSS SP-71	(2018) Gray Iron Swing Check Valves, Flanged and Threaded Ends
MSS SP-72	(2010a) Ball Valves with Flanged or Butt-Welding Ends for General Service
MSS SP-78	(2011) Cast Iron Plug Valves, Flanged and Threaded Ends
MSS SP-80	(2019) Bronze Gate, Globe, Angle, and Check Valves
MSS SP-83	(2025) Class 3000 Steel Pipe Unions Socket Welding and Threaded
MSS SP-85	(2011) Gray Iron Globe & Angle Valves Flanged and Threaded Ends

MSS SP-110	(2010) Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 90A	(2024) Standard for the Installation of Air Conditioning and Ventilating Systems

NSF INTERNATIONAL (NSF)

NSF 372	(2022) Drinking Water System Components - Lead Content
NSF/ANSI 14	(2024) Plastics Piping System Components and Related Materials
NSF/ANSI/CAN 61	(2024) Drinking Water System Components - Health Effects

PLASTIC PIPE AND FITTINGS ASSOCIATION (PPFA)

PPFA Fire Man	(2016) Firestopping: Plastic Pipe in Fire Resistive Construction

PLUMBING AND DRAINAGE INSTITUTE (PDI)

PDI WH 201	(2010) Water Hammer Arresters Standard

SOCIETY OF AUTOMOTIVE ENGINEERS INTERNATIONAL (SAE)

SAE J1508	(2023) Hose Clamp Specifications

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA SM 9223	(2004) Enzyme Substrate Coliform Test
PL 93-523	(1974; A 1999) Safe Drinking Water Act

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 141.80	National Primary Drinking Water Regulations; Control of Lead and Copper; General Requirements

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Plumbing System; G

SD-03 Product Data

Plumbing System

SD-06 Test Reports

Tests, Flushing and Disinfection

SD-07 Certificates

Materials and Equipment

Bolts

SD-10 Operation and Maintenance Data

Plumbing System; G

1.3 SHOP DRAWINGS

Submit Plumbing System Detail drawings consisting of schedules, performance charts, instructions, diagrams, and other information to illustrate the requirements and operations of systems that are not covered by the Plumbing Code. Submit Plumbing System Detail drawings for the complete plumbing system including piping layouts and locations of connections; dimensions for roughing-in, foundation, and support points; schematic diagrams and wiring diagrams or connection and interconnection diagrams. Detail drawings must indicate clearances required for maintenance and operation. Where piping and equipment are to be supported other than as indicated, details must include loadings and proposed support methods. Mechanical drawing plans, elevations, views, and details, must be drawn to scale.

1.4 STANDARD PRODUCTS

Specified materials and equipment must be standard products of a manufacturer regularly engaged in the manufacture of such products. Specified equipment must essentially duplicate equipment that has performed satisfactorily at least 2 years prior to bid opening. Standard products must have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year use must include applications of equipment and materials under similar circumstances and of similar size. The product must have been for sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2 year period.

Where equipment is specified to conform to requirements of the ASME Boiler and Pressure Vessel Code, the design, fabrication, and installation must conform to the code and a certificate must be submitted for the equipment.

1.4.1 Alternative Qualifications

Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturer's factory or laboratory tests, can be shown.

1.4.2 Service Support

The equipment items must be supported by service organizations. Submit a

certified list of qualified permanent service organizations for support of the equipment which includes their addresses and qualifications. These service organizations must be reasonably convenient to the equipment installation and able to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

1.4.3 Manufacturer's Nameplate

Each item of equipment must have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

1.4.4 Modification of References

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "must" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction", or words of similar meaning, to mean the Contracting Officer.

1.4.4.1 Definitions

For the International Code Council (ICC) Codes referenced in the contract documents, advisory provisions must be considered mandatory, the word "should" must be interpreted as "must." Reference to the "code official" must be interpreted to mean the "Contracting Officer." For Navy owned property, references to the "owner" must be interpreted to mean the "Contracting Officer." For leased facilities, references to the "owner" must be interpreted to mean the "lessor." References to the "permit holder" must be interpreted to mean the "Contractor."

1.4.4.2 Administrative Interpretations

For ICC Codes referenced in the contract documents, the provisions of Chapter 1, "Administrator," do not apply. These administrative requirements are covered by the applicable Federal Acquisition Regulations (FAR) included in this contract and by the authority granted to the Officer in Charge of Construction to administer the construction of this project. References in the ICC Codes to sections of Chapter 1, must be applied appropriately by the Contracting Officer as authorized by his administrative cognizance and the FAR.

1.5 DELIVERY, STORAGE, AND HANDLING

Handle, store, and protect equipment and materials to prevent damage before and during installation in accordance with the manufacturer's recommendations, and as approved by the Contracting Officer. Replace damaged or defective items.

1.6 REGULATORY REQUIREMENTS

Unless otherwise required herein, plumbing work must be in accordance with ICC IPC.

1.7 PROJECT/SITE CONDITIONS

The Contractor must become familiar with details of the work, verify dimensions in the field, and advise the Contracting Officer of any

discrepancy before performing any work.

1.8 INSTRUCTION TO GOVERNMENT PERSONNEL

Furnish the services of competent instructors to give full instruction to the designated Government personnel in the adjustment, operation, and maintenance, including pertinent safety requirements, of the specified equipment or system. Instructors must be thoroughly familiar with all parts of the installation and must be trained in operating theory as well as practical operation and maintenance work. Submit Plumbing System Operation and Maintenance Data in accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA.

Instruction must be given during the first regular work week after the equipment or system has been accepted and turned over to the Government for regular operation. The number of man-days (8 hours per day) of instruction furnished must be as specified in the individual section. When more than 4 man-days of instruction are specified, use approximately half of the time for classroom instruction. Use other time for instruction with the equipment or system. When significant changes or modifications in the equipment or system are made under the terms of the contract, provide additional instruction to acquaint the operating personnel with the changes or modifications.

1.9 ACCESSIBILITY OF EQUIPMENT

Install all work so that parts requiring periodic inspection, operation, maintenance, and repair are readily accessible. Install concealed valves, expansion joints, controls, dampers, and equipment requiring access, in locations freely accessible through access doors.

PART 2 PRODUCTS

2.1 MATERIALS

Materials for various services must be in accordance with TABLES I and II. Cement pipe must contain recycled content. Pipe schedules must be selected based on service requirements. Pipe fittings must be compatible with the applicable pipe materials. Plastic pipe, fittings, and solvent cement must meet NSF/ANSI 14 and must be NSF listed for the service intended. Plastic pipe, fittings, and solvent cement used for potable hot and cold water service must bear the NSF seal "NSF-PW." Polypropylene pipe and fittings must conform to dimensional requirements of Schedule 40, Iron Pipe size and must comply with NSF/ANSI 14, NSF/ANSI/CAN 61 and ASTM F2389. Polypropylene piping that will be exposed to UV light must be provided with a Factory applied UV resistant coating. Pipe threads (except dry seal) must conform to ASME B1.20.1. Grooved pipe couplings and fittings must be from the same manufacturer. Material or used in any potable water system intended for human consumption be certified in accordance with NSF 372 with the exception of brazing materials. In line devices such as water meters, building valves, check valves, meter stops, valves, fittings and back flow preventers must comply with PL 93-523 and NSF/ANSI/CAN 61, Section 8. End point devices such as drinking water fountains, lavatory faucets, kitchen and bar faucets, residential ice makers, supply stops and end point control valves used to dispense water for drinking must meet the requirements of NSF/ANSI/CAN 61, Section 9. Hubless cast-iron soil pipe must not be installed underground, under concrete floor slabs, or in crawl spaces below kitchen floors (for Air Force/Army/Navy projects). Plastic pipe must not be installed in air

plenums. Plastic pipe must not be installed in a pressure piping system in buildings greater than three stories including any basement levels.

2.1.1 Pipe Joint Materials

Grooved pipe and hubless cast-iron soil pipe must not be used underground. Solder containing lead must not be used with copper pipe. Cast iron soil pipe and fittings must be marked with the collective trademark of the Cast Iron Soil Institute. Joints and gasket materials must conform to the following:

a. Coupling for Cast-Iron Pipe: for hub and spigot type ASTM A74, AWWA C606. For hubless type: CISPI 310.

b. Coupling for Steel Pipe: AWWA C606.

c. Couplings for Grooved Pipe: Ductile Iron ASTM A536 (Grade 65-45-12).

d. Flange Gaskets: Gaskets must be made of non-asbestos material in accordance with ASME B16.21. Gaskets must be flat, 1/16 inch thick, and contain Aramid fibers bonded with Styrene Butadiene Rubber (SBR) or Nitro Butadiene Rubber (NBR). Gaskets must be the full face or self centering flat ring type. Gaskets used for hydrocarbon service must be bonded with NBR.

e. Brazing Material: Brazing material must conform to AWS A5.8/A5.8M, BCuP-5.

f. Brazing Flux: Flux must be in paste or liquid form appropriate for use with brazing material. Flux must be as follows: lead-free; have a 100 percent flushable residue; contain slightly acidic reagents; contain potassium borides; and contain fluorides.

g. Solder Material: Solder metal must conform to ASTM B32.

h. Solder Flux: Flux must be liquid form, non-corrosive, and conform to ASTM B813, Standard Test 1.

i. PTFE Tape: PTFE Tape, for use with Threaded Metal or Plastic Pipe.

j. Rubber Gaskets for Cast-Iron Soil-Pipe and Fittings (hub and spigot type and hubless type): ASTM C564.

k. Rubber Gaskets for Grooved Pipe: ASTM D2000, maximum temperature 230 degrees F.

l. Flexible Elastomeric Seals: ASTM D3139, ASTM D3212 or ASTM F477.

m. Bolts and Nuts for Grooved Pipe Couplings: Heat-treated carbon steel, ASTM A183.

n. Solvent Cement for Transition Joints between ABS and PVC Nonpressure Piping Components: ASTM D3138.

o. Plastic Solvent Cement for ABS Plastic Pipe: ASTM D2235.

p. Plastic Solvent Cement for PVC Plastic Pipe: ASTM D2564 and ASTM D2855.

q. Plastic Solvent Cement for CPVC Plastic Pipe: ASTM F493.

r. Flanged fittings including, but not limited to, flanges, bolts, nuts and bolt patterns must be in accordance with ASME B16.5 class 150 and must have the manufacturer's trademark affixed in accordance with MSS SP-25. Flange material must conform to ASTM A105/A105M. Blind flange material must conform to ASTM A516/A516M cold service and ASTM A515/A515M for hot service. Bolts must be high strength or intermediate strength with material conforming to ASTM A193/A193M. Submit written certification by the bolt manufacturer that the bolts furnished comply with the specified requirements.

s. Copper tubing must conform to ASTM B88, Type K, L or M.

t. Heat-fusion joints for polypropylene piping: ASTM F2389.

2.1.2 Miscellaneous Materials

Miscellaneous materials must conform to the following:

a. Water Hammer Arrester: PDI WH 201.

b. Copper, Sheet and Strip for Building Construction: ASTM B370.

c. Asphalt Roof Cement: ASTM D4586/D4586M.

d. Hose Clamps: SAE J1508.

e. Supports for Off-The-Floor Plumbing Fixtures: ASME A112.6.1M.

f. Metallic Cleanouts: ASME A112.36.2M.

g. Plumbing Fixture Setting Compound: A preformed flexible ring seal molded from hydrocarbon wax material. The seal material must be nonvolatile nonasphaltic and contain germicide and provide watertight, gastight, odorproof and verminproof properties.

h. Coal-Tar Protective Coatings and Linings for Steel Water Pipelines: AWWA C203.

i. Hypochlorites: AWWA B300.

j. Liquid Chlorine: AWWA B301.

k. Gauges - Pressure and Vacuum Indicating Dial Type - Elastic Element: ASME B40.100.

l. Thermometers: ASTM E1. Mercury must not be used in thermometers.

2.2 PIPE HANGERS, INSERTS, AND SUPPORTS

Pipe hangers, inserts, and supports must conform to MSS SP-58.

2.3 VALVES

Valves must be provided on supplies to equipment and fixtures. Valves 2-1/2 inches and smaller must be bronze with threaded bodies for pipe and solder-type connections for tubing. Valves 3 inches and larger must have flanged iron bodies and bronze trim. Pressure ratings must be based upon the application. Grooved end valves may be provided if the manufacturer

certifies that the valves meet the performance requirements of applicable MSS standard. Valves must conform to the following standards:

Description	Standard
Butterfly Valves	MSS SP-67
Cast-Iron Gate Valves, Flanged and Threaded Ends	MSS SP-70
Cast-Iron Swing Check Valves, Flanged and Threaded Ends	MSS SP-71
Ball Valves with Flanged Butt-Welding Ends for General Service	MSS SP-72
Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends	MSS SP-110
Cast-Iron Plug Valves, Flanged and Threaded Ends	MSS SP-78
Bronze Gate, Globe, Angle, and Check Valves	MSS SP-80
Steel Valves, Socket Welding and Threaded Ends	ASME B16.34
Cast-Iron Globe and Angle Valves, Flanged and Threaded Ends	MSS SP-85
Temperature and Pressure Relief Valves for Hot Water Supply Systems	ANSI Z21.22/CSA 4.4

2.3.1 Wall Hydrants (Frostproof)

ASSE 1019 with vacuum-breaker backflow preventer must have a recessed box, with locking cover. A brass or bronze operating rod must be provided within a galvanized iron casing of sufficient length to extend through the wall so that the valve is inside the building, and the portion of the hydrant between the outlet and valve is self-draining. A brass or bronze valve with coupling and union elbow having metal-to-metal seat must be provided. Valve rod and seat washer must be removable through the face of the hydrant. The hydrant must have 3/4 inch exposed hose thread on spout and 3/4 inch male pipe thread on inlet.

2.4 MISCELLANEOUS PIPING ITEMS

2.4.1 Escutcheon Plates

Provide one piece or split hinge metal plates for piping entering floors, walls, and ceilings in exposed spaces. Provide chromium-plated on copper alloy plates or polished stainless steel finish in finished spaces. Provide paint finish on plates in unfinished spaces.

2.4.2 Pipe Sleeves

Provide where piping passes entirely through walls, ceilings, roofs, and

floors. Sleeves are not required where drain, waste, and vent (DWV) piping passes through concrete floor slabs located on grade, except where penetrating a membrane waterproof floor. For multiple pipe penetrations through load bearing masonry or concrete walls, minimum spacing must be 6 inches center of pipe to center of pipe.

2.4.2.1 Sleeves Not in Masonry and Concrete

Provide 26 gage galvanized steel sheet or PVC plastic pipe sleeves.

2.4.3 Pipe Hangers (Supports)

Provide MSS SP-58 Type 1 with adjustable type steel support rods, except as specified or indicated otherwise. Attach to steel joists with Type 19 or 23 clamps and retaining straps. Attach to Steel W or S beams with Type 21, 28, 29, or 30 clamps. Attach to steel angles and vertical web steel channels with Type 20 clamp with beam clamp channel adapter. Attach to horizontal web steel channel and wood with drilled hole on centerline and double nut and washer. Attach to concrete with Type 18 insert or drilled expansion anchor. Provide Type 40 insulation protection shield for insulated piping.

2.4.4 Nameplates

Provide 0.125 inch thick melamine laminated plastic nameplates, black matte finish with white center core, for equipment, gages, thermometers, and valves; valves in supplies to faucets will not require nameplates. Accurately align lettering and engrave minimum of 0.25 inch high normal block lettering into the white core. Minimum size of nameplates must be 1.0 by 2.5 inches. Key nameplates to a chart and schedule for each system. Frame charts and schedules under glass and place where directed near each system. Furnish two copies of each chart and schedule.

PART 3 EXECUTION

3.1 GENERAL INSTALLATION REQUIREMENTS

Piping located in air plenums must conform to NFPA 90A requirements. Piping located in shafts that constitute air ducts or that enclose air ducts must be noncombustible in accordance with NFPA 90A. Installation of plastic pipe where in compliance with NFPA may be installed in accordance with PPFA Fire Man. The plumbing system must be installed complete with necessary fixtures, fittings, traps, valves, and accessories. Submit diagrams, instructions, and other sheets proposed for posting for Plumbing System. Submit for Plumbing System manufacturer's recommendations for the installation of bell and spigot and hubless joints for cast iron soil pipe. Water and drainage piping must be extended 5 feet outside the building, unless otherwise indicated. A ball valve and drain must be installed on the water service line inside the building approximately 6 inches above the floor from point of entry. Piping must be connected to the exterior service lines or capped or plugged if the exterior service is not in place. Sewer and water pipes must be laid in separate trenches, except when otherwise shown. Exterior underground utilities must be at least 12 inches below the average local frost depth or as indicated on the drawings. If trenches are closed or the pipes are otherwise covered before being connected to the service lines, the location of the end of each plumbing utility must be marked with a stake or other acceptable means. Valves must be installed with control no lower than the valve body. Avoid the use of combination double wye and one-eighth bend

fittings in the horizontal orientation below grade or below slab.

3.1.1 Water Pipe, Fittings, and Connections

3.1.1.1 Utilities

The piping must be extended to fixtures, outlets, and equipment. The hot-water and cold-water piping system must be arranged and installed to permit draining. The supply line to each item of equipment or fixture, except faucets, flush valves, or other control valves which are supplied with integral stops, must be equipped with a shutoff valve to enable isolation of the item for repair and maintenance without interfering with operation of other equipment or fixtures. Supply piping to fixtures, faucets, hydrants, shower heads, and flushing devices must be anchored to prevent movement.

3.1.1.2 Cutting and Repairing

The work must be carefully laid out in advance, and unnecessary cutting of construction must be avoided. Damage to building, piping, wiring, or equipment as a result of cutting must be repaired by mechanics skilled in the trade involved.

3.1.1.3 Protection of Fixtures, Materials, and Equipment

Pipe openings must be closed with caps or plugs during installation. Fixtures and equipment must be tightly covered and protected against dirt, water, chemicals, and mechanical injury. Upon completion of the work, the fixtures, materials, and equipment must be thoroughly cleaned, adjusted, and operated. Safety guards must be provided for exposed rotating equipment.

3.1.1.4 Mains, Branches, and Runouts

Piping must be installed as indicated. Pipe must be accurately cut and worked into place without springing or forcing. Structural portions of the building must not be weakened. Aboveground piping must run parallel with the lines of the building, unless otherwise indicated. Branch pipes from service lines may be taken from top, bottom, or side of main, using crossover fittings required by structural or installation conditions. Supply pipes, valves, and fittings must be kept a sufficient distance from other work and other services to permit not less than 1/2 inch between finished covering on the different services. Bare and insulated water lines must not bear directly against building structural elements so as to transmit sound to the structure or to prevent flexible movement of the lines. Water pipe must not be buried in or under floors unless specifically indicated or approved. Buried domestic waste vent piping must not be less than 2 inch diameter. Changes in pipe sizes must be made with reducing fittings. Use of bushings will not be permitted except for use in situations in which standard factory fabricated components are furnished to accommodate specific accepted installation practice. Change in direction must be made with fittings, except that bending of pipe 4 inches and smaller will be permitted, provided a pipe bender is used and wide sweep bends are formed. The center-line radius of bends must be not less than six diameters of the pipe. Bent pipe showing kinks, wrinkles, flattening, or other malformations will not be acceptable.

3.1.1.5 Pipe Drains

Pipe drains indicated must consist of 3/4 inch hose bibb with renewable seat and ball valve ahead of hose bibb. At other low points, 3/4 inch brass plugs or caps must be provided. Disconnection of the supply piping at the fixture is an acceptable drain.

3.1.1.6 Expansion and Contraction of Piping

Allowance must be made throughout for expansion and contraction of water pipe. Each hot-water and hot-water circulation riser must have expansion loops or other provisions such as offsets and changes in direction where indicated and required. Risers must be securely anchored as required or where indicated to force expansion to loops. Branch connections from risers must be made with ample swing or offset to avoid undue strain on fittings or short pipe lengths. Horizontal runs of pipe over 50 feet in length must be anchored to the wall or the supporting construction about midway on the run to force expansion, evenly divided, toward the ends. Sufficient flexibility must be provided on branch runouts from mains and risers to provide for expansion and contraction of piping. Flexibility must be provided by installing one or more turns in the line so that piping will spring enough to allow for expansion without straining. If mechanical grooved pipe coupling systems are provided, the deviation from design requirements for expansion and contraction may be allowed pending approval of Contracting Officer.

3.1.1.7 Thrust Restraint

Plugs, caps, tees, valves and bends deflecting 11.25 degrees or more, either vertically or horizontally, in waterlines 4 inches in diameter or larger must be provided with thrust blocks, where indicated, to prevent movement. Thrust blocking must be concrete of a mix not leaner than: 1 cement, 2-1/2 sand, 5 gravel; and having a compressive strength of not less than 2000 psi after 28 days. Blocking must be placed between solid ground and the fitting to be anchored. Unless otherwise indicated or directed on drawings, the base and thrust bearing sides of the thrust block must be poured against undisturbed earth. The side of the thrust block not subject to thrust must be poured against forms. The area of bearing will be as indicated on drawings. Blocking must be placed so that the joints of the fitting are accessible for repair. Steel rods and clamps, protected by galvanizing or by coating with bituminous paint, must be used to anchor vertical down bends into gravity thrust blocks.

3.1.1.8 Commercial-Type Water Hammer Arresters

Commercial-type water hammer arresters must be provided on hot- and cold-water supplies and must be located as generally indicated, with precise location and sizing to be in accordance with PDI WH 201. Water hammer arresters, where concealed, must be accessible by means of access doors or removable panels. Commercial-type water hammer arresters must conform to ASSE 1010. Vertical capped pipe columns will not be permitted.

3.1.2 Compressed Air Piping (Non-Oil Free)

Compressed air piping must have supply lines and discharge terminals legibly and permanently marked at both ends with the name of the system and the direction of flow.

3.1.3 Joints

Installation of pipe and fittings must be made in accordance with the manufacturer's recommendations. Mitering of joints for elbows and notching of straight runs of pipe for tees will not be permitted. Joints must be made up with fittings of compatible material and made for the specific purpose intended.

3.1.3.1 Threaded

Threaded joints must have American Standard taper pipe threads conforming to ASME B1.20.1. Only male pipe threads must be coated with graphite or with an approved graphite compound, or with an inert filler and oil, or must have a polytetrafluoroethylene tape applied.

3.1.3.2 Unions and Flanges

Unions, flanges and mechanical couplings must not be concealed in walls, ceilings, or partitions. Unions must be used on pipe sizes 2-1/2 inches and smaller; flanges must be used on pipe sizes 3 inches and larger.

3.1.3.3 Copper Tube and Pipe

a. Brazed. Brazed joints must be made in conformance with AWS B2.2/B2.2M, ASME B16.50, and CDA A4015 with flux and are acceptable for all pipe sizes. Copper to copper joints must include the use of copper-phosphorus or copper-phosphorus-silver brazing metal without flux. Brazing of dissimilar metals (copper to bronze or brass) must include the use of flux with either a copper-phosphorus, copper-phosphorus-silver or a silver brazing filler metal.

b. Soldered. Soldered joints must be made with flux and are only acceptable for piping 2 inches and smaller. Soldered joints must conform to ASME B31.5 and CDA A4015. Soldered joints must not be used in compressed air piping between the air compressor and the receiver.

c. Copper Tube Extracted Joint. Mechanically extracted joints must be made in accordance with ICC IPC.

3.1.4 Dissimilar Pipe Materials

Connections between ferrous and non-ferrous copper water pipe must be made with dielectric unions or flange waterways. Dielectric waterways must have temperature and pressure rating equal to or greater than that specified for the connecting piping. Waterways must have metal connections on both ends suited to match connecting piping. Dielectric waterways must be internally lined with an insulator specifically designed to prevent current flow between dissimilar metals. Dielectric flanges must meet the performance requirements described herein for dielectric waterways. Connecting joints between plastic and metallic pipe must be made with transition fitting for the specific purpose.

3.1.5 Pipe Sleeves and Flashing

Pipe sleeves must be furnished and set in their proper and permanent location.

3.1.5.1 Sleeve Requirements

Unless indicated otherwise, provide pipe sleeves meeting the following requirements:

a. Secure sleeves in position and location during construction. Provide sleeves of sufficient length to pass through entire thickness of walls, ceilings, roofs, and floors.

b. A modular mechanical type sealing assembly may be installed in lieu of a waterproofing clamping flange and caulking and sealing of annular space between pipe and sleeve. The seals must consist of interlocking synthetic rubber links shaped to continuously fill the annular space between the pipe and sleeve using galvanized steel bolts, nuts, and pressure plates. The links must be loosely assembled with bolts to form a continuous rubber belt around the pipe with a pressure plate under each bolt head and each nut. After the seal assembly is properly positioned in the sleeve, tightening of the bolt must cause the rubber sealing elements to expand and provide a watertight seal between the pipe and the sleeve. Each seal assembly must be sized as recommended by the manufacturer to fit the pipe and sleeve involved.

c. Sleeves must not be installed in structural members, except where indicated or approved. Rectangular and square openings must be as detailed. Each sleeve must extend through its respective floor, or roof, and must be cut flush with each surface, except for special circumstances. Pipe sleeves passing through floors in wet areas such as mechanical equipment rooms, lavatories, kitchens, and other plumbing fixture areas must extend a minimum of 4 inches above the finished floor.

d. Unless otherwise indicated, sleeves must be of a size to provide a minimum of 1 inch clearance between bare pipe or insulation and inside of sleeve or between insulation and inside of sleeve. Sleeves in bearing walls and concrete slab on grade floors must be steel pipe or cast-iron pipe. Sleeves in nonbearing walls or ceilings may be steel pipe, cast-iron pipe, galvanized sheet metal with lock-type longitudinal seam, or plastic.

e. Except as otherwise specified, the annular space between pipe and sleeve, or between jacket over insulation and sleeve, must be sealed as indicated with sealants conforming to ASTM C920 and with a primer, backstop material and surface preparation as specified in Section 07 92 00 JOINT SEALANTS. The annular space between pipe and sleeve, between bare insulation and sleeve or between jacket over insulation and sleeve must not be sealed for interior walls which are not designated as fire rated.

3.1.5.2 Flashing Requirements

Pipes passing through roof must be installed through a 16 ounce copper flashing, each within an integral skirt or flange. Flashing must be suitably formed, and the skirt or flange must extend not less than 8 inches from the pipe and must be set over the roof or floor membrane in a solid coating of bituminous cement. The flashing must extend up the pipe a minimum of 10 inches. For cleanouts, the flashing must be turned down into the hub and caulked after placing the ferrule. Pipes passing through pitched roofs must be flashed, using lead or copper flashing, with an adjustable integral flange of adequate size to extend not less than 8

inchesfrom the pipe in all directions and lapped into the roofing to provide a watertight seal. The annular space between the flashing and the bare pipe or between the flashing and the metal-jacket-covered insulation must be sealed as indicated. Flashing for dry vents must be turned down into the pipe to form a waterproof joint. Pipes, up to and including 10 inches in diameter, passing through roof or floor waterproofing membrane may be installed through a cast-iron sleeve with caulking recess, anchor lugs, flashing-clamp device, and pressure ring with brass bolts. Flashing shield must be fitted into the sleeve clamping device. Pipes passing through wall waterproofing membrane must be sleeved as described above. A waterproofing clamping flange must be installed.

3.1.5.3 Waterproofing

Waterproofing at floor-mounted water closets must be accomplished by forming a flashing guard from soft-tempered sheet copper. The center of the sheet must be perforated and turned down approximately 1-1/2 inches to fit between the outside diameter of the drainpipe and the inside diameter of the cast-iron or steel pipe sleeve. The turned-down portion of the flashing guard must be embedded in sealant to a depth of approximately 1-1/2 inches; then the sealant must be finished off flush to floor level between the flashing guard and drainpipe. The flashing guard of sheet copper must extend not less than 8 inches from the drainpipe and must be lapped between the floor membrane in a solid coating of bituminous cement. If cast-iron water closet floor flanges are used, the space between the pipe sleeve and drainpipe must be sealed with sealant and the flashing guard must be upturned approximately 1-1/2 inches to fit the outside diameter of the drainpipe and the inside diameter of the water closet floor flange. The upturned portion of the sheet fitted into the floor flange must be sealed.

3.1.5.4 Optional Counterflashing

Instead of turning the flashing down into a dry vent pipe, or caulking and sealing the annular space between the pipe and flashing or metal-jacket-covered insulation and flashing, counterflashing may be accomplished by utilizing the following:

a. A standard roof coupling for threaded pipe up to 6 inches in diameter.

b. A tack-welded or banded-metal rain shield around the pipe.

3.1.5.5 Pipe Penetrations

Provide sealants for all pipe penetrations. All pipe penetrations must be sealed to prevent infiltration of air, insects, and vermin.

3.1.6 Fire Seal

Where pipes pass through fire walls, fire-partitions, fire-rated pipe chase walls or floors above grade, a fire seal must be provided.

3.1.7 Supports

3.1.7.1 General

Hangers used to support piping 2 inches and larger must be fabricated to permit adequate adjustment after erection while still supporting the load. Pipe guides and anchors must be installed to keep pipes in accurate

alignment, to direct the expansion movement, and to prevent buckling, swaying, and undue strain. Piping subjected to vertical movement when operating temperatures exceed ambient temperatures must be supported by variable spring hangers and supports or by constant support hangers. In the support of multiple pipe runs on a common base member, a clip or clamp must be used where each pipe crosses the base support member. Spacing of the base support members must not exceed the hanger and support spacing required for an individual pipe in the multiple pipe run. Threaded sections of rods must not be formed or bent.

3.1.7.2 Pipe Supports and Structural Bracing, Seismic Requirements

Piping and attached valves must be supported and braced to resist seismic loads. Structural steel required for reinforcement to properly support piping, headers, and equipment, but not shown, must be provided. Material used for supports must be as specified in Section 05 50 13 MISCELLANEOUS METAL FABRICATIONS.

3.1.7.3 Pipe Hangers, Inserts, and Supports

Installation of pipe hangers, inserts and supports must conform to MSS SP-58except as modified herein.

a. Types 5, 12, and 26 must not be used.

b. Type 3 must not be used on insulated pipe.

c. Type 18 inserts must be secured to concrete forms before concrete is placed. Continuous inserts which allow more adjustment may be used if they otherwise meet the requirements for type 18 inserts.

d. Type 19 and 23 C-clamps must be torqued per MSS SP-58 and must have both locknuts and retaining devices furnished by the manufacturer. Field-fabricated C-clamp bodies or retaining devices are not acceptable.

e. Type 20 attachments used on angles and channels must be furnished with an added malleable-iron heel plate or adapter.

f. Type 24 may be used only on trapeze hanger systems or on fabricated frames.

g. Type 39 saddles must be used on insulated pipe 4 inches and larger when the temperature of the medium is 60 degrees F or higher. Type 39 saddles must be welded to the pipe.

h. Type 40 shields must:

(1) Be used on insulated pipe less than 4 inches.

(2) Be used on insulated pipe 4 inches and larger when the temperature of the medium is 60 degrees F or less.

(3) Have a high density insert for all pipe sizes. High density inserts must have a density of 8 pcf or greater.

i. Horizontal pipe supports must be spaced as specified in MSS SP-58 and a support must be installed not over 1 foot from the pipe fitting joint at each change in direction of the piping. Pipe supports must

be spaced not over 5 feet apart at valves. Operating temperatures in determining hanger spacing for PVC or CPVC pipe must be 120 degrees F for PVC and 180 degrees F for CPVC. Horizontal pipe runs must include allowances for expansion and contraction.

j. Vertical pipe must be supported at each floor, except at slab-on-grade, at intervals of not more than 15 feet nor more than 8 feet from end of risers, and at vent terminations. Vertical pipe risers must include allowances for expansion and contraction.

k. Type 35 guides using steel, reinforced polytetrafluoroethylene (PTFE) or graphite slides must be provided to allow longitudinal pipe movement. Slide materials must be suitable for the system operating temperatures, atmospheric conditions, and bearing loads encountered. Lateral restraints must be provided as needed. Where steel slides do not require provisions for lateral restraint the following may be used:

(1) On pipe 4 inches and larger when the temperature of the medium is 60 degrees F or higher, a Type 39 saddle, welded to the pipe, may freely rest on a steel plate.

(2) On pipe less than 4 inches a Type 40 shield, attached to the pipe or insulation, may freely rest on a steel plate.

(3) On pipe 4 inches and larger carrying medium less that 60 degrees F a Type 40 shield, attached to the pipe or insulation, may freely rest on a steel plate.

l. Pipe hangers on horizontal insulated pipe must be the size of the outside diameter of the insulation. The insulation must be continuous through the hanger on all pipe sizes and applications.

m. Where there are high system temperatures and welding to piping is not desirable, the type 35 guide must include a pipe cradle, welded to the guide structure and strapped securely to the pipe. The pipe must be separated from the slide material by at least 4 inches or by an amount adequate for the insulation, whichever is greater.

n. Hangers and supports for plastic pipe must not compress, distort, cut or abrade the piping, and must allow free movement of pipe except where otherwise required in the control of expansion/contraction.

3.1.7.4 Structural Attachments

Attachment to building structure concrete and masonry must be by cast-in concrete inserts, built-in anchors, or masonry anchor devices. Inserts and anchors must be applied with a safety factor not less than 5. Supports must not be attached to metal decking. Supports must not be attached to the underside of concrete filled floor or concrete roof decks unless approved by the Contracting Officer. Masonry anchors for overhead applications must be constructed of ferrous materials only.

3.1.8 Welded Installation

Plumbing pipe weldments must be as indicated. Changes in direction of piping must be made with welding fittings only; mitering or notching pipe to form elbows and tees or other similar type construction will not be permitted. Branch connection may be made with either welding tees or forged branch outlet fittings. Branch outlet fittings must be forged,

flared for improvement of flow where attached to the run, and reinforced against external strains. Beveling, alignment, heat treatment, and inspection of weld must conform to ASME B31.1. Weld defects must be removed and repairs made to the weld, or the weld joints must be entirely removed and rewelded. After filler metal has been removed from its original package, it must be protected or stored so that its characteristics or welding properties are not affected. Electrodes that have been wetted or that have lost any of their coating must not be used.

3.1.9 Pipe Cleanouts

Pipe cleanouts must be the same size as the pipe except that cleanout plugs larger than 4 inches will not be required. A cleanout installed in connection with cast-iron soil pipe must consist of a long-sweep 1/4 bend or one or two 1/8 bends extended to the place shown. An extra-heavy cast-brass or cast-iron ferrule with countersunk cast-brass head screw plug must be caulked into the hub of the fitting and must be flush with the floor. Cleanouts in connection with other pipe, where indicated, must be T-pattern, 90-degree branch drainage fittings with cast-brass screw plugs, except plastic plugs must be installed in plastic pipe. Plugs must be the same size as the pipe up to and including 4 inches. Cleanout tee branches with screw plug must be installed at the foot of soil and waste stacks, at the foot of interior downspouts, on each connection to building storm drain where interior downspouts are indicated, and on each building drain outside the building. Cleanout tee branches may be omitted on stacks in single story buildings with slab-on-grade construction or where less than 18 inches of crawl space is provided under the floor. Cleanouts on pipe concealed in partitions must be provided with chromium plated bronze, nickel bronze, nickel brass or stainless steel flush type access cover plates. Round access covers must be provided and secured to plugs with securing screw. Square access covers may be provided with matching frames, anchoring lugs and cover screws. Cleanouts in finished walls must have access covers and frames installed flush with the finished wall. Cleanouts installed in finished floors subject to foot traffic must be provided with a chrome-plated cast brass, nickel brass, or nickel bronze cover secured to the plug or cover frame and set flush with the finished floor. Heads of fastening screws must not project above the cover surface. Where cleanouts are provided with adjustable heads, the heads must be cast iron.

3.2 IDENTIFICATION SYSTEMS

3.2.1 Identification Tags

Identification tags made of brass, engraved laminated plastic, or engraved anodized aluminum, indicating service and valve number must be installed on valves, except those valves installed on supplies at plumbing fixtures. Tags must be 1-3/8 inch minimum diameter, and marking must be stamped or engraved. Indentations must be black, for reading clarity. Tags must be attached to valves with No. 12 AWG, copper wire, chrome-plated beaded chain, or plastic straps designed for that purpose.

3.2.2 Pipe Color Code Marking

Color code marking of piping must be as specified in Section 09 90 00 PAINTS AND COATINGS.

3.2.3 Color Coding Scheme for Locating Hidden Utility Components

Scheme must be provided in buildings having suspended grid ceilings. The color coding scheme must identify points of access for maintenance and operation of operable components which are not visible from the finished space and installed in the space directly above the suspended grid ceiling. The operable components must include valves, dampers, switches, linkages and thermostats. The color coding scheme must consist of a color code board and colored metal disks. Each colored metal disk must be approximately 3/8 inch in diameter and secured to removable ceiling panels with fasteners. The fasteners must be inserted into the ceiling panels so that the fasteners will be concealed from view. The fasteners must be manually removable without tools and must not separate from the ceiling panels when panels are dropped from ceiling height. Installation of colored metal disks must follow completion of the finished surface on which the disks are to be fastened. The color code board must have the approximate dimensions of 3 foot width, 30 inches height, and 1/2 inch thickness. The board must be made of wood fiberboard and framed under glass or 1/16 inch transparent plastic cover. Unless otherwise directed, the color code symbols must be approximately 3/4 inch in diameter and the related lettering in 1/2 inch high capital letters. The color code board must be mounted and located in the mechanical or equipment room. The color code system must be as indicated below:

Color	System	Item	Location
Match existing	Match existing	Match existing	Match existing

3.3 ESCUTCHEONS

Escutcheons must be provided at finished surfaces where bare or insulated piping, exposed to view, passes through floors, walls, or ceilings, except in boiler, utility, or equipment rooms. Escutcheons must be fastened securely to pipe or pipe covering and must be satin-finish, corrosion-resisting steel, polished chromium-plated zinc alloy, or polished chromium-plated copper alloy. Escutcheons must be either one-piece or split-pattern, held in place by internal spring tension or setscrew.

3.4 PAINTING

Painting of pipes, hangers, supports, and other iron work, either in concealed spaces or exposed spaces, is specified in Section 09 90 00 PAINTS AND COATINGS.

3.4.1 Painting of New Equipment

New equipment painting must be factory applied or shop applied, and must be as specified herein, and provided under each individual section.

3.4.1.1 Factory Painting Systems

Manufacturer's standard factory painting systems may be provided subject to certification that the factory painting system applied will withstand 125 hours in a salt-spray fog test, except that equipment located outdoors must withstand 500 hours in a salt-spray fog test. Salt-spray fog test must be in accordance with ASTM B117, and for that test the acceptance criteria must be as follows: immediately after completion of the test,

the paint must show no signs of blistering, wrinkling, or cracking, and no loss of adhesion; and the specimen must show no signs of rust creepage beyond 0.125 inch on either side of the scratch mark.

The film thickness of the factory painting system applied on the equipment must not be less than the film thickness used on the test specimen. If manufacturer's standard factory painting system is being proposed for use on surfaces subject to temperatures above 120 degrees F, the factory painting system must be designed for the temperature service.

3.4.1.2 Shop Painting Systems for Metal Surfaces

Clean, pretreat, prime and paint metal surfaces; except aluminum surfaces need not be painted. Apply coatings to clean dry surfaces. Clean the surfaces to remove dust, dirt, rust, oil and grease by wire brushing and solvent degreasing prior to application of paint, except metal surfaces subject to temperatures in excess of 120 degrees F must be cleaned to bare metal.

Where more than one coat of paint is specified, apply the second coat after the preceding coat is thoroughly dry. Lightly sand damaged painting and retouch before applying the succeeding coat. Color of finish coat must be aluminum or light gray.

a. Temperatures Less Than 120 Degrees F: Immediately after cleaning, the metal surfaces subject to temperatures less than 120 degrees F must receive one coat of pretreatment primer applied to a minimum dry film thickness of 0.3 mil, one coat of primer applied to a minimum dry film thickness of one mil; and two coats of enamel applied to a minimum dry film thickness of one mil per coat.

b. Temperatures Between 120 and 400 Degrees F: Metal surfaces subject to temperatures between 120 and 400 degrees F must receive two coats of 400 degrees F heat-resisting enamel applied to a total minimum thickness of 2 mils.

c. Temperatures Greater Than 400 Degrees F: Metal surfaces subject to temperatures greater than 400 degrees F must receive two coats of 600 degrees F heat-resisting paint applied to a total minimum dry film thickness of 2 mils.

3.5 TESTS, FLUSHING AND DISINFECTION

Submit test reports in booklet form showing all field tests performed to adjust each component and all field tests performed to prove compliance with the specified performance criteria, completion and testing of the installed system. Each test report must indicate the final position of controls.

3.5.1 Plumbing System

The following tests must be performed on the plumbing system in accordance with ICC IPC, except that the drainage and vent system final test must include the smoke test. The Contractor has the option to perform a peppermint test in lieu of the smoke test. If a peppermint test is chosen, the Contractor must submit a testing procedure and reasons for choosing this option in lieu of the smoke test to the Contracting Officer for approval.

a. Water Supply Systems Tests.

3.5.1.1 Compressed Air Piping (Nonoil-Free)

Piping systems must be filled with oil-free dry air or gaseous nitrogen to 150 psig and hold this pressure for 2 hours with no drop in pressure.

3.5.2 Defective Work

If inspection or test shows defects, such defective work or material must be replaced or repaired as necessary and inspection and tests must be repeated. Repairs to piping must be made with new materials. Caulking of screwed joints or holes will not be acceptable.

3.5.3 System Flushing

3.5.3.1 During Flushing

Before operational tests or disinfection, potable water piping system must be flushed with potable water. Sufficient water must be used to produce a water velocity that is capable of entraining and removing debris in all portions of the piping system. This requires simultaneous operation of all fixtures on a common branch or main in order to produce a flushing velocity of approximately 4 fps through all portions of the piping system. In the event that this is impossible due to size of system, the Contracting Officer (or the designated representative) must specify the number of fixtures to be operated during flushing. Contractor must provide adequate personnel to monitor the flushing operation and to ensure that drain lines are unobstructed in order to prevent flooding of the facility. Contractor must be responsible for any flood damage resulting from flushing of the system. Flushing must be continued until entrained dirt and other foreign materials have been removed and until discharge water shows no discoloration. All faucets and drinking water fountains, to include any device considered as an end point device by NSF/ANSI/CAN 61, Section 9, must be flushed a minimum of 0.25 gallons per 24 hour period, ten times over a 14 day period.

3.5.3.2 After Flushing

System must be drained at low points. Strainer screens must be removed, cleaned, and replaced. After flushing and cleaning, systems must be prepared for testing by immediately filling water piping with clean, fresh potable water. Any stoppage, discoloration, or other damage to the finish, furnishings, or parts of the building due to the Contractor's failure to properly clean the piping system must be repaired by the Contractor. When the system flushing is complete, the hot-water system must be adjusted for uniform circulation. Flushing devices and automatic control systems must be adjusted for proper operation according to manufacturer's instructions. Flow rates on fixtures must not exceed those stated in PART 2 of this Section. Unless more stringent local requirements exist, lead levels must not exceed limits established by 40 CFR 141.80 (c)(1). The water supply to the building must be tested separately to ensure that any lead contamination found during potable water system testing is due to work being performed inside the building.

3.5.4 Operational Test

Upon completion of flushing and prior to disinfection procedures, the Contractor must subject the plumbing system to operating tests to

demonstrate satisfactory installation, connections, adjustments, and functional and operational efficiency. Such operating tests must cover a period of not less than 8 hours for each system and must include the following information in a report with conclusion as to the adequacy of the system:

a. Time, date, and duration of test.

b. Water pressures at the most remote and the highest fixtures.

c. Operation of each fixture and fixture trim.

d. Operation of each valve, hydrant, and faucet.

e. Pump suction and discharge pressures.

f. Temperature of each domestic hot-water supply.

g. Operation of each floor and roof drain by flooding with water.

h. Operation of each vacuum breaker and backflow preventer.

i. Complete operation of each water pressure booster system, including pump start pressure and stop pressure.

j. Compressed air readings at each compressor and at each outlet. Each indicating instrument must be read at 1/2 hour intervals. The report of the test must be submitted in quadruplicate. The Contractor must furnish instruments, equipment, and personnel required for the tests; the Government will furnish the necessary water and electricity.

3.5.5 Disinfection

After all system components are provided and operational tests are complete, the entire domestic hot- and cold-water distribution system must be disinfected. Before introducing disinfecting chlorination material, entire system must be flushed with potable water until any entrained dirt and other foreign materials have been removed.

Water chlorination procedure must be in accordance with AWWA C651 and AWWA C652 as modified and supplemented by this specification. The chlorinating material must be hypochlorites or liquid chlorine. The chlorinating material must be fed into the water piping system at a constant rate at a concentration of at least 50 parts per million (ppm). Feed a properly adjusted hypochlorite solution injected into the system with a hypochlorinator, or inject liquid chlorine into the system through a solution-feed chlorinator and booster pump until the entire system is completely filled.

3.5.5.1 Water Chlorination Monitoring

Test the chlorine residual level in the water at 6 hour intervals for a continuous period of 24 hours. If at the end of a 6 hour interval, the chlorine residual has dropped to less than 25 ppm, flush the piping including tanks with potable water, and repeat the above chlorination procedures. During the chlorination period, each valve and faucet must be opened and closed several times. After the second 24 hour period, verify that no less than 25 ppm chlorine residual remains in the treated system. The 24 hour chlorination procedure must be repeated until no less than 25

ppm chlorine residual remains in the treated system.

3.5.5.2 Water Chlorination Flushing

Upon the specified verification, the system including tanks must then be flushed with potable water until the residual chlorine level is reduced to less than one part per million. During the flushing period, each valve and faucet must be opened and closed several times.

3.5.5.3 Sample Testing

Take additional samples of water in disinfected containers, for bacterial examination, at locations specified by the Contracting Officer. Test these samples for total coliform organisms (coliform bacteria, fecal coliform, streptococcal, and other bacteria) in accordance with EPA SM 9223. The testing method used must be EPA approved for drinking water systems and must comply with applicable local and state requirements.

3.5.5.4 Disinfection Acceptance

Disinfection must be repeated until bacterial tests indicate the absence of coliform organisms (zero mean coliform density per 100 milliliters) in the samples for at least 2 full days. The system will not be accepted until satisfactory bacteriological results have been obtained.

3.6 TABLES

TABLE II					
PIPE AND FITTING MATERIALS FOR PRESSURE PIPING SYSTEMS					
Item #	Pipe and Fitting Materials	SERVICE A	SERVICE B	SERVICE C	SERVICE D
1	Malleable-iron threaded fittings:				
	a. Not galvanized for use with Item 4b			X	
2	Grooved pipe couplings, ferrous pipe ASTM A536 and ASTM A47/A47M, non-ferrous pipe, ASTM A536 and ASTM A47/A47M	X	X	X	
3	Ductile iron grooved joint fittings for ferrous pipe ASTM A536 and ASTM A47/A47M, for use with Item 2	X	X	X	

TABLE II					
PIPE AND FITTING MATERIALS FOR PRESSURE PIPING SYSTEMS					
Item #	Pipe and Fitting Materials	SERVICE A	SERVICE B	SERVICE C	SERVICE D
4	Steel pipe:				
	a. Seamless, black, ASTM A53/A53M, Type S, Grade B			X	
5	Seamless red brass pipe, ASTM B43	X	X		X
6	Bronze flanged fittings, ASME B16.24 for use with Items 5 and 7	X	X		X
7	Seamless copper pipe, ASTM B42	X	X		X
8	Seamless copper water tube, ASTM B88, ASTM B88M	X**	X**	X**	X***
9	Cast bronze threaded fittings, ASME B16.15 for use with Items 5 and 7	X	X		X
10	Wrought copper and bronze solder-joint pressure fittings, ASME B16.22 for use with Items 5, 7 and 8	X	X	X	X
11	Cast copper alloy solder-joint pressure fittings, ASME B16.18 for use with Item 8	X	X	X	X
12	Bronze and sand castings grooved joint pressure fittings for non-ferrous pipe ASTM B584, for use with Item 2	X	X	X	
13	Polyethylene (PE) plastic pipe, Schedules 40 and 80, based on outside diameter	X			X
14	Polyethylene (PE) plastic pipe (SDR-PR), based on controlled outside diameter, ASTM D3035	X			X
15	Polyethylene (PE) plastic pipe (SIDR-PR), based on controlled inside diameter, ASTM D2239	X			X

TABLE II					
PIPE AND FITTING MATERIALS FOR PRESSURE PIPING SYSTEMS					
Item #	Pipe and Fitting Materials	SERVICE A	SERVICE B	SERVICE C	SERVICE D
16	Butt fusion polyethylene (PE) plastic pipe fittings, ASTM D3261 for use with Items 14, 15, and 16	X			X
17	Socket-type polyethylene fittings for outside diameter-controlled polyethylene pipe, ASTM D2683 for use with Item 15	X			X
18	Polyethylene (PE) plastic tubing, ASTM D2737	X			X
19	Chlorinated polyvinyl chloride (CPVC) plastic hot and cold water distribution system, ASTM D2846/D2846M	X	X		X
20	Chlorinated polyvinyl chloride (CPVC) plastic pipe, Schedule 40 and 80, ASTM F441/F441M	X	X		X
21	Chlorinated polyvinyl chloride (CPVC) plastic pipe (SDR-PR) ASTM F442/F442M	X	X		X
22	Threaded chlorinated polyvinyl chloride (chloride CPVC) plastic pipe fittings, Schedule 80, ASTM F437, for use with Items 20, and 21	X	X		X
23	Socket-type chlorinated polyvinyl chloride (CPVC) plastic pipe fittings, Schedule 40, ASTM F438 for use with Items 20, 21, and 22	X	X		X
24	Socket-type chlorinated polyvinyl chloride (CPVC) plastic pipe fittings Schedule 80, ASTM F439 for use with Items 20, 21, and 22	X	X		X
25	Polyvinyl chloride (PVC) plastic pipe, Schedules 40, 80, and 120, ASTM D1785	X			X

TABLE II					
PIPE AND FITTING MATERIALS FOR PRESSURE PIPING SYSTEMS					
Item #	Pipe and Fitting Materials	SERVICE A	SERVICE B	SERVICE C	SERVICE D
26	Polyvinyl chloride (PVC) pressure-rated pipe (SDR Series), ASTM D2241	X			X
27	Polyvinyl chloride (PVC) plastic pipe fittings, Schedule 40, ASTM D2466	X			X
28	Socket-type polyvinyl chloride (PVC) plastic pipe fittings, schedule 80, ASTM D2467 for use with Items 26 and 27	X			X
29	Threaded polyvinyl chloride (PVC) plastic pipe fittings, schedule 80, ASTM D2464	X			X
30	Joints for IPS PVC pipe using solvent cement, ASTM D2672	X			X
31	Polypropylene (PP) plastic pipe and fittings; ASTM F2389	X	X		X
32	Steel pipeline flanges, MSS SP-44	X	X		
33	Fittings: brass or bronze; ASME B16.15, and ASME B16.18 ASTM B828	X	X		
34	Carbon steel pipe unions, socket-welding and threaded, MSS SP-83	X	X	X	
35	Malleable-iron threaded pipe unions ASME B16.39	X	X		
36	Nipples, pipe threaded ASTM A733	X	X	X	
37	Crosslinked Polyethylene (PEX) Plastic Pipe ASTM F877	X	X		X
38	Press Fittings	X	X		

TABLE II					
PIPE AND FITTING MATERIALS FOR PRESSURE PIPING SYSTEMS					
Item #	Pipe and Fitting Materials	SERVICE A	SERVICE B	SERVICE C	SERVICE D
	SERVICE: A - Cold Water Service Aboveground B - Hot and Cold Water Distribution 180 degrees F Maximum Aboveground C - Compressed Air Lubricated D - Cold Water Service Belowground Indicated types are minimum wall thicknesses. ** - Type L - Hard *** - Type K - Hard temper with brazed joints only or type K-soft temper without joints in or under floors **** - In or under slab floors only brazed joints				

-- End of Section --

SECTION 22 15 26

COMPRESSED AIR PIPING SYSTEMS (UP TO 5000 PSI)

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME A13.1	(2023) Scheme for the Identification of Piping Systems
ASME B1.20.1	(2013; R 2018) Pipe Threads, General Purpose (Inch)
ASME B16.20	(2023) Metallic Gaskets for Pipe Flanges
ASME B16.39	(2025) Malleable Iron Threaded Pipe Unions; Classes 150, 250, and 300
ASME B31.1	(2024) Power Piping
ASME B46.1	(2020) Surface Texture, Surface Roughness, Waviness and Lay
ASME BPVC SEC IX	(2017; Errata 2018) BPVC Section IX-Welding, Brazing and Fusing Qualifications
ASME BPVC SEC VIII D1	(2023) BPVC Section VIII-Rules for Construction of Pressure Vessels Division 1

ASTM INTERNATIONAL (ASTM)

ASTM A53/A53M	(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
ASTM A182/A182M	(2024) Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
ASTM A193/A193M	(2025) Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service and Other Special Purpose Applications
ASTM A194/A194M	(2024) Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High-Pressure or High-Temperature Service, or Both

ASTM A380/A380M	(2025) Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems
ASTM B127	(2025) Standard Specification for Nickel-Copper Alloy (UNS N04400) Plate, Sheet, and Strip
ASTM B164	(2003; R 2014) Standard Specification for Nickel-Copper Alloy Rod, Bar, and Wire
ASTM E11	(2024) Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves

MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY (MSS)

MSS SP-58	(2025) Pipe Hangers and Supports - Materials, Design and Manufacture, Selection, Application, and Installation

U.S. DEPARTMENT OF DEFENSE (DOD)

MIL-C-15726	(1988; Rev F; Am 1 1991; Notice 1 2020) Copper-Nickel Alloy, Sheet, Plate, Strip, Bar, Rod, and Wire

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

CID A-A-1689	(Rev B) Tape, Pressure-Sensitive Adhesive, (Plastic Film)
CID A-A-58092	(Basic; Notice 1; Notice 2) Tape, Antiseize, Polytetrafluoroethylene

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Fittings

Identification Labels For Piping

SD-06 Test Reports

Leak Tightness Test

SD-10 Operation and Maintenance Data

Cleaning Procedures; G

SD-11 Closeout Submittals

Posted Operating Instructions for Compressed Air Systems

1.3 QUALITY ASSURANCE

Provide all work specified in this section, including design, materials, fabrication, assembly, erection, installation, and examination, inspection and testing of compressed air systems in conformance with ASME B31.1, ASME BPVC SEC VIII D1, as modified and supplemented by this specification section and accompanying drawings. In ASME B31.1, ASME BPVC SEC VIII D1 and ASME BPVC SEC IX, the advisory provisions must be considered mandatory, as though the word "must" had been substituted for "should" wherever it appears; reference to the "authority having jurisdiction" and "owner" must be interpreted to mean the Contracting Officer.

PART 2 PRODUCTS

2.1 MEDIUM PRESSURE COMPRESSED AIR PIPING AND ACCESSORIES

Medium pressure compressed air piping and accessories from 126 to 399 psig at 150 degrees F.

2.1.1 Pipe

Pipe must conform to ASTM A53/A53M and be seamless carbon steel, Schedule 40, and black.

2.1.2 Fittings, Size 2 Inches and Larger

Fittings 2-inches and greater must conform to ASME B46.1, flanged fittings, carbon steel, Class 300, gaskets ASME B16.20, spiral wound metallic, Class 300, bolts ASTM A193/A193M Grade B7, and nuts conforming to ASTM A194/A194M Grade 7. Butt welded joints must be full penetration consumable insert or backing ring type.

2.1.3 Flat-faced Steel Flanges

Where connections are made to Class 250 cast iron flanges with steel flanges, use only flat-faced Class 300 steel flanges.

2.1.4 Unions

Unions must conform to ASME B16.39, Class 2 (500 psig WOG, cold, non-shock).

2.1.5 Pipe Hangers and Supports

Hangars and supports must conform to MSS SP-58 and ASME B31.1, unless indicated otherwise. Provide zinc plated pipe hangers and supports. Provide tubing supports of U-shaped steel bolts and nuts firmly secured to adequately support structures such as walls, columns, floors, or brackets. Clips must fit closely around piping but must have sufficient clearance to permit longitudinal movement of piping during normal expansion and contraction. Provide supports at valves, fittings, branch lines, outlets, changes in direction, equipment, and accessories.

2.1.6 Polytetrafluoroethylene (PTFE) Tape

PTFE Tape must conform to CID A-A-58092 for screw-jointed pipe.

2.2 IDENTIFICATION LABELS FOR PIPING

Labels for pipes 3/4 inch O.D. and larger must bear printed legends to identify the contents of pipes and arrows to show the direction of flow. Pipes smaller than 3/4 inch O.D., must have labels with color coded backgrounds to signify levels of hazard in accordance with ASME A13.1. Legends and type and size or characters must also conform to ASME A13.1. Labels must be made of plastic sheet in conformance with CID A-A-1689 with pressure-sensitive adhesive suitable for the intended applications. For pipes smaller than 3/4 inch O.D., provide brass identification tags 1 1/2 inches in diameter with legends in depressed black-filled characters.

2.3 FRESH WATER

Fresh water for cleaning, flushing, and testing must be clean and potable.

2.4 BASIC PIPING AND COMPONENT MATERIALS

Conform to the following where material is specified by generic type and no specification is listed.

2.4.1 Stainless Steel

Austenitic type, annealed, ASTM A182/A182M.

2.4.2 Nickel-Copper

70-30 nickel-copper, annealed, ASTM B164, alloy N04400, ASTM B127.

2.4.3 Copper-Nickel

70-30 copper-nickel, soft temper, MIL-C-15726.

2.4.4 Other Materials

For materials where no specification is listed above, conform to material specifications listed in ASME B31.1 or ASME BPVC SEC VIII D1.

PART 3 EXECUTION

3.1 INSTALLATION

Install materials and equipment as indicated and in accordance with manufacturer's recommendations.

3.1.1 Piping

Provide Non-Destructive Examination (NDE) report for welding of piping. Unless specifically stated to the contrary, fabrication, assembly, welding, and brazing must conform to ASME B31.1 for all piping of the air system. Piping must follow the general arrangement shown. Cut piping accurately to measurements established for the work. Work piping into place without springing or forcing. Piping and equipment within buildings must be entirely out of the way of lighting fixtures and doors, windows, and other openings. Locate overhead piping in buildings in the most

inconspicuous positions. Do not bury or conceal piping until it has been inspected, tested, and approved. Where pipe passes through building structure, pipe joints must not be concealed, but must be located where they may be readily inspected and building structure must not be weakened. Avoid interference with other piping, conduit, or equipment. Except where specifically shown otherwise, vertical piping must run plumb and straight and parallel to walls. Piping connected to equipment must be installed to provide flexibility for vibration. Adequately support and anchor piping so that strain from weight of piping is not imposed on the equipment.

3.1.1.1 Fittings

Use long radius ells where appropriate to reduce pressure drops. Mitering of pipe to form elbows, notching straight runs to form full sized tees, or any similar construction must not be used. Make branch connections with welding tees, except factory made forged welding branch outlets or nozzles having integral reinforcements conforming to ASME B31.1 may be used.

3.1.1.1.1 Bending of Medium Pressure Pipe

Prior to bending pipe for medium pressure systems, the Contractor must submit for approval written fabrication and inspection procedures and calculations by a licensed professional engineer showing the required minimum wall thickness of pipe after bending. Only cold bending must be permitted. The fabrication procedure must indicate the required pipe wall thickness prior to bending, equipment to be used, set up and bending procedures, and inspection and acceptance criteria. Inspection must include verification of minimum wall thickness by ultrasonic or other approved methods. No wrinkles or other contour irregularities will be permitted in the bent pipe. Check flattening in accordance with ASME B31.1. Include required dimensional checks in inspection procedures and acceptable values tabulated for each pipe size to be bent. Qualified personnel must perform nondestructive examinations required in accordance with qualified procedures. Bend pipe sections accurately so that they can be installed without springing or forcing the piping they are installed in.

3.1.1.2 Cleaning

Before jointing and erection of piping or tubing, thoroughly clean interiors of pipe sections, tube, and components. In steel pipe, loosen scale and other foreign matter by rapping sharply and expel by wire brush and swab. Blow out both steel pipe and copper tube and components with clean, dry, oil free compressed air at 100 psig or more. Maintain cleanliness by closure of pipe/tube openings with caps or plugs. Before making final terminal connections, blow out complete system with compressed air at 100 psig or more. Cleaning and cleanness of medium pressure systems over 250 psig and high pressure systems must be in accorddance with paragraph CLEANING AND CLEANNESS REQUIREMENTS.

3.1.1.3 Changes in Pipe Size

Use reducing fittings for changes in pipe size. The use of bushings will not be permitted. In horizontal lines, 2 1/2 inches and larger, reducing fittings must be of the eccentric type to maintain the bottom of the lines in the same plane.

3.1.1.4 Drainage and Flexibility

Compressed air piping must be free of unnecessary pockets and pitched approximately 3 inches per 100 feet in the direction of flow to low points. Where pipes must be sloped so that condensate flows in opposite direction to air flow, slope 6 inches per 100 feet or greater. Provide flexibility by use of fittings, loops, and offsets in piping. Install branches at top of a main to prevent carryover of condensate and foreign matter.

3.1.2 Threaded Joints

Where possible use pipe with factory cut threads, otherwise cut pipe ends square, remove fins and burrs, and cut taper pipe threads in accordance with ASME B1.20.1. Threads must be smooth, clean, and full cut. Apply thread tape to male threads only. Work piping into place without springing or forcing. Backing off to permit alignment of threaded joints will not be permitted. Engage threads so that not more than three threads remain exposed.

3.1.3 Hangers and Supports

Selection, fabrication, and installation of piping hangers and supports must conform to MSS SP-58.

3.1.4 Cleaning of System

Clean the various system components before final closing as the installations are completed. Remove foreign matter from equipment and surrounding areas. Preliminary or final tests will not be permitted until the cleaning is approved by the Contracting Officer.

3.1.5 Unions and Flanges

Provide unions and flanges to permit disconnection of piping and apparatus without disassembly, springing or straining the adjacent piping, and as indicated. Provide a union for each connection having a screwed-end valve. Provide unions on piping under 2 inches in diameter, and provide flanges on piping 2 inches and over in diameter. Install dielectric unions or flanges between ferrous and non-ferrous piping, equipment, and fittings; except that bronze valves and fittings may be used without dielectric couplings for ferrous-to-ferrous or non-ferrous to non-ferrous connections.

3.1.6 Painting of Piping and Equipment

Paint piping and equipment in accordance with Section 09 90 00 PAINTS AND COATINGS.

3.1.7 Identification of Piping

Identify piping in accordance with ASME A13.1. Use commercially manufactured piping identification labels. Space identification marking on runs not farther apart than 50 feet. Provide two copies of the piping identification code framed under glass and install where directed.

3.2 CLEANING AND CLEANNESS REQUIREMENTS

Cleaning and cleanness requirements must conform to ASTM A380/A380M and the following.

3.2.1 Substitution

The word "must" must be substituted for "should" in ASTM A380/A380M.

3.2.2 Prohibited Methods and Processes

The following methods and processes must not be used.

a. Chemical descaling (acid pickling).

b. Abrasive blasting and vapor blasting.

c. Alkaline cleaning.

d. Emulsion cleaning.

e. Chelate cleaning.

f. Acid cleaning.

g. Passivation.

h. Corrosion inhibitors must not be used.

3.2.3 Approval of Methods and Procedures

Prepare and submit written cleaning procedures for approval. Perform production cleaning in accordance with approved procedures.

3.2.4 Tools Used on Corrosion-Resistant Alloys

Tools used on corrosion-resistant alloys such as grinding, polishing, filing, deburring, and brushing tools must be visually clean and must not have been used on carbon or low alloy steels, aluminum, lead or materials containing lead or lead components, or other low melting point materials. Wire brushes must be 300 series stainless steel. Unless otherwise approved, each tool must be used on only one type of corrosion-resistant metal.

3.2.5 Cleaning Before Installation

Clean piping, components, and equipment before installation.

3.2.6 Cleaning Requirements

Clean surfaces containing no crevices or inaccessible areas by any of the procedures described herein. Clean surfaces containing crevices by immersion in unused or redistilled acetone, ethanol, or isopropanol only.

3.2.6.1 Vapor Degreasing

Vapor degreasing may be used on surfaces containing no crevices or inaccessible areas and must be accomplished by the following procedures:

a. Dry all parts entering degreaser.

b. Load parts onto racks in the condensing zone so that they do not touch each other, and in such a manner to insure complete draining of

solvents.

c. Use perchloroethylene bath. Maintain bath at 250 to 260 degrees F. The bath must contain a neutral inhibitor to prevent acid formation due to hydrolysis. Other types of inhibitors are not permitted.

d. Change solvent when boiling point of perchloroethylene exceeds 260 degrees F. Dump solvent earlier if cleanliness standards are not attained.

e. Lower or raise parts in the degreaser at a rate not to exceed 12 inches per minute and immerse in vapor phase. Spray with clean solvent during immersion time. Keep the spray nozzle at least one foot below the vapor line during spraying. Allow part to remain in vapor until condensation ceases (3 to 5 minutes). Dry parts completely before removing from degreaser.

3.2.6.2 Degreasing by Immersion or Wiping

Degreasing of parts having no inaccessible areas or crevices may be performed by immersion in solvent or by wiping with a clean lintless wiping cloth saturated with the solvent perchloroethylene, unused or redistilled acetone, ethanol, or isopropanol, or Stoddard solvent for preliminary degreasing. Dry in accordance with paragraph DRYING REQUIREMENTS.

3.2.6.3 Trisodium-Phosphate Detergent Cleaning (Degreasing)

Trisodium-phosphate detergent cleaning may be used on surfaces containing no crevices or inaccessible areas and must be accomplished as follows:

a. Remove heavy dirt by either scrubbing with a non-shedding bristle brush using a solution of up to one fluid ounce of nonionic detergent per gallon of tap water or immersing the parts in a hot (approximately 160 - 190 degrees F) solution consisting of 7 to 10 ounces of trisodium phosphate and up to one fluid ounce of the nonionic detergent per gallon of tap water for about 20 minutes. Agitate and use brush as necessary.

b. Rinse parts thoroughly in hot water at a minimum of 120 degree F.

c. Dry the parts in accordance with paragraph DRYING REQUIREMENTS.

3.2.6.4 Ultrasonic Cleaning

Cleaning methods using ultrasonic equipment may be used.

3.2.7 Drying Requirements

Accomplish drying by still or forced clean air or inert gas, drying oven, or by evacuation. When using evacuation, exercise care to prevent evacuating-pump lubricant from entering the equipment. Check compressed air used for drying to ensure cleanliness by blowing through a clean, white, cotton filter cloth for about 5 minutes at full drying velocity.

3.2.8 Inspection and Acceptance Criteria for Cleanliness

Conform to ASTM A380/A380M and the following:

3.2.8.1 Cleanness Criteria

All surfaces of piping material, equipment, instruments, and other components which will come in contact with compressed air must be clean to the extent that no contamination is visible to a person with normal visual acuity (natural or corrected) under a lighting level of at least 100 footcandles on the surface being inspected. Cleanness of surface which cannot be visually inspected due to inaccessibility or geometry must be determined by an interpretation of the discoloration or dirt obtained by wiping with a clean, white, wet or dry cloth. Free of contamination must mean free of oil, dirt, metallic flakes, preservatives, paint, and any other substances which may present a safety hazard or impair the quality of the compressed air.

3.2.8.2 Critical Surfaces

No rust must be allowed on valve seats, orifice plates or other critical surfaces. Thin films of rust are acceptable on other corrosion-resistant material surfaces provided there is no visible thickness or evidence of pitting and the total area involved does not exceed one percent of the total surface area of the component in contact with compressed air.

3.2.8.3 Carbon and Low Alloy Steels

A uniform light rust that can be removed by brushing or wiping is acceptable.

3.2.9 Maintaining Cleanness During Installation

Maintain cleanness of piping, components, and equipment during installation. Dirt and debris producing operations must be performed so that dirt and debris fall away from system openings; otherwise, provide covers over openings to preclude contamination. Cap, plug, cover, or bag openings and pipe ends and secure with tape when they are not required to be open for the performance of work. Metal caps, plugs, and covers must be austenitic stainless steel. Plastic items and tape must be free of substances that can have a harmful effect on stainless steel and other corrosion-resistant metals in the system.

3.2.10 Cleanness Verification Flushes

After installation, check the systems for cleanness by flushing with water. Perform flushing so that the minimum velocity through any part of the system is not less than 3.6 feet per second. Pass flush water through a filter for cleanness evaluation. Filter element must be corrosion-resistant wire cloth with mesh size conforming to ASTM E11 No. 20 (850 micrometers). Filter area must be sufficient to limit pressure drop so that required flushing velocity can be attained.

3.2.10.1 Recleaning of Systems

Systems which fail to meet acceptance flush criteria after flushing for more than 4 hours must be recleaned by the Contractor at no additional cost to the Government. Prepare recleaning procedures and submit to the Contracting Officer for approval. Remove instruments, components, and any other items that may be damaged by recleaning. Perform recleaning by flushing with hot water at not less than 140 degrees F.

3.3 CLEANING SILVERBRAZED PIPING

Clean silverbrazed piping to remove residual flux remaining in the system after fabrication. Use one of the procedures below. The hot flush and hot recirculating flush are preferred. Minimum flow rate through any part of the system in gallons per minute must be 1.5 times the inside diameter of the pipe in inches. For any flushing method used, the system must be full of water so that joints are completely submerged at all times.

3.3.1 Hot Flushing Method

Hot flush the system for one hour using heated fresh water. No part of the system must go below 110 degrees F.

3.3.2 Hot Recirculating Flush Method

Perform hot recirculating flush for one hour. Heat water during flushing so that no part of the system falls below 110 degrees F. After completing the hot recirculating flush, flush the system with cold fresh water for 15 minutes.

3.3.3 Cold Soak Method

Cold soak the system using fresh water at not less than 60 degrees F for 12 hours. Following the 12 hour soak, flush the system with fresh water at not less than 60 degrees F for 4 hours.

3.4 FIELD QUALITY CONTROL

3.4.1 Testing

3.4.1.1 General Requirements, Testing

Perform testing after cleaning and acceptance of cleanness. Contractor must provide everything required for tests. Tests must be subject to the approval of the Contracting Officer. Calibrate the test pressure gage with a dead weight tester within 15 days before use and certify by initial and date on a sticker applied to dial face.

Supervision of Testing

For medium pressure system, an experienced registered professional engineer responsible for safety and employed by the Contractor must be present during testing.

3.4.1.2 Hydrostatic and Leak Tightness Tests

a. Preliminary Preparation

Remove or isolate from the system the compressor, air dryer, filters, instruments, and equipment which would be damaged by water during hydrostatic tests and reinstall after successful completion of tests.

b. Performance of Hydrostatic Tests

Hydrostatically test piping systems in accordance with ASME B31.1. Vent or flush air from the piping system. Pressurize system for 10 minutes with water at one and one-half times design working pressure, then reduce to design working pressure and check for leaks and weeps.

c. Compressed Air Leak Tightness Test

After satisfactory completion of hydrostatic pressure test, blow systems dry with clean, oil-free compressed air, and test with clean, dry air at design working pressure. Brush joints with soapy water solution to check for leaks. Install a calibrated test pressure gage in piping system to observe any loss in pressure. Maintain required test pressure for a sufficient length of time to enable an inspection of joints and connections.

3.4.1.3 Operational Tests

Test equipment as in service to determine compliance with contract requirements and warranty. During the tests, test equipment under every condition of operation. Test safety controls to demonstrate performance of their required function. Completely test system for compliance with specifications.

-- End of Section --

SECTION 26 20 00

INTERIOR DISTRIBUTION SYSTEM

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 B1	(2013) Standard Specification for Hard-Drawn Copper Wire
ASTM B8	(2023) Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft
ASTM D709	(2017) Standard Specification for Laminated Thermosetting Materials

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE 81	(2012) Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System
IEEE Stds Dictionary	(2009) IEEE Standards Dictionary: Glossary of Terms & Definitions

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)

NETA ATS	(2025) Standard for Acceptance Testing Specifications for Electrical Power Equipment and Systems

NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION (NECA)

NECA NEIS 1	(2015) Standard for Good Workmanship in Electrical Construction

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

ANSI C80.1	(2020) American National Standard for Electrical Rigid Steel Conduit (ERSC)
ANSI C80.3	(2020) American National Standard for Electrical Metallic Tubing (EMT)
ANSI C80.5	(2020) American National Standard for Electrical Rigid Aluminum Conduit
NEMA 250	(2020) Enclosures for Electrical Equipment (1000 Volts Maximum)

NEMA FU 1	(2012) Low Voltage Cartridge Fuses
NEMA ICS 1	(2022) Standard for Industrial Control and Systems: General Requirements
NEMA ICS 2	(2000; R 2020) Industrial Control and Systems Controllers, Contactors, and Overload Relays Rated 600 V
NEMA ICS 4	(2015) Application Guideline for Terminal Blocks
NEMA ICS 6	(1993; R 2016) Industrial Control and Systems: Enclosures
NEMA KS 1	(2013) Enclosed and Miscellaneous Distribution Equipment Switches (600 V Maximum)
NEMA MG 00001	(2024) Motors and Generators
NEMA MG 10	(2017) Energy Management Guide for Selection and Use of Fixed Frequency Medium AC Squirrel-Cage Polyphase Induction Motors
NEMA MG 11	(1977; R 2012) Energy Management Guide for Selection and Use of Single Phase Motors
NEMA RN 1	(2018) Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit
NEMA TC 2	(2020) Standard for Electrical Polyvinyl Chloride (PVC) Conduit
NEMA TC 3	(2021) Polyvinyl Chloride (PVC) Fittings for Use With Rigid PVC Conduit and Tubing
NEMA WD 1	(1999; R 2020) Standard for General Color Requirements for Wiring Devices
NEMA WD 6	(2021) Wiring Devices Dimensions Specifications
NEMA Z535.4	(2023) Product Safety Signs and Labels

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2026; TIA 26-1; ERTA 26-1; TIA 26-2; TIA 26-3; TIA 26-4; TIA 26-5; TIA 26-6; TIA 26-7; ERTA 26-2; ERTA 26-3) National Electrical Code
NFPA 70E	(2024) Standard for Electrical Safety in the Workplace
NFPA 780	(2026) Standard for the Installation of

	Lightning Protection Systems

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.147	The Control of Hazardous Energy (Lock Out/Tag Out)
29 CFR 1910.303	Electrical, General

UL SOLUTIONS (UL)

UL 1	(2005; Reprint Jan 2022) UL Standard for Safety Flexible Metal Conduit
UL 6	(2022) UL Standard for Safety Electrical Rigid Metal Conduit-Steel
UL 6A	(2008; Reprint Nov 2024) UL Standard for Safety Electrical Rigid Metal Conduit - Aluminum, Red Brass, and Stainless Steel
UL 20	(2025) UL Standard for Safety General-Use Snap Switches
UL 44	(2018; Reprint May 2021) UL Standard for Safety Thermoset-Insulated Wires and Cables
UL 50	(2024) UL Standard for Safety Enclosures for Electrical Equipment, Non-Environmental Considerations
UL 67	(2018; Reprint Aug 2025) UL Standard for Safety Panelboards
UL 83	(2017; Reprint Mar 2020) UL Standard for Safety Thermoplastic-Insulated Wires and Cables
UL 248-4	(2010; Reprint Apr 2019) Low-Voltage Fuses - Part 4: Class CC Fuses
UL 248-8	(2011; Reprint Aug 2020) Low-Voltage Fuses - Part 8: Class J Fuses
UL 248-10	(2011; Reprint Aug 2020) Low-Voltage Fuses - Part 10: Class L Fuses
UL 248-12	(2011; Reprint Aug 2020) Low Voltage Fuses - Part 12: Class R Fuses
UL 248-15	(2018) Low-Voltage Fuses - Part 15: Class T Fuses
UL 360	(2013; Reprint Jan 2024) UL Standard for Safety Liquid-Tight Flexible Metal Conduit
UL 467	(2022) UL Standard for Safety Grounding and Bonding Equipment

UL 486A-486B	(2025) UL Standard for Safety Wire Connectors
UL 486C	(2023; Reprint Feb 2025) UL Standard for Safety Splicing Wire Connectors
UL 489	(2025) UL Standard for Safety Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures
UL 498	(2017; Reprint Jun 2024) UL Standard for Safety Attachment Plugs and Receptacles
UL 506	(2017; Reprint Jan 2022) UL Standard for Safety Specialty Transformers
UL 508	(2018; Reprint Jul 2021) UL Standard for Safety Industrial Control Equipment
UL 510	(2020; Dec 2022) UL Standard for Safety Polyvinyl Chloride, Polyethylene and Rubber Insulating Tape
UL 514A	(2024) UL Standard for Safety Metallic Outlet Boxes
UL 514B	(2012; Reprint Mar 2024) UL Standard for Safety Conduit, Tubing and Cable Fittings
UL 514C	(2014; Reprint Apr 2024) UL Standard for Safety Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers
UL 651	(2011; Reprint May 2022) UL Standard for Safety Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings
UL 797	(2007; Reprint Apr 2023) UL Standard for Safety Electrical Metallic Tubing -- Steel
UL 869A	(2006; Reprint Jun 2020) Reference Standard for Service Equipment
UL 943	(2016; Reprint Aug 2025) UL Standard for Safety Ground-Fault Circuit-Interrupters
UL 984	(1996; Reprint Sep 2005) Hermetic Refrigerant Motor-Compressors
UL 1004-1	(2012; Reprint Nov 2020) UL Standard for Safety Rotating Electrical Machines - General Requirements
UL 1063	(2017; Reprint Jun 2022) UL Standard for Safety Machine-Tool Wires and Cables
UL 1242	(2006; Reprint Apr 2022) UL Standard for Safety Electrical Intermediate Metal Conduit -- Steel

UL 1569	(2018; Reprint Apr 2024) UL Standard for Safety Metal-Clad Cables
UL 1660	(2019; Reprint May 2024) Liquid-Tight Flexible Nonmetallic Conduit
UL 4248-1	(2022; Reprint Jun 2025) UL Standard for Safety Fuseholders - Part 1: General Requirements
UL 4248-12	(2025) UL Standard for Safety Fuseholders - Part 12: Class R

1.2 DEFINITIONS

Unless otherwise specified or indicated, electrical and electronics terms used in these specifications, and on the drawings, are as defined in IEEE Stds Dictionary.

1.3 RELATED REQUIREMENTS

1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

SD-03 Product Data

Switches; G

Receptacles; G

Circuit Breakers; G

Fuses; G

Enclosed Circuit Breakers; G

Motor Controllers; G

SD-06 Test Reports

600-volt Wiring Test; G

Grounding System Test; G

SD-07 Certificates

Fuses; G

SD-10 Operation and Maintenance Data

Electrical Systems, Data Package 5; G

1.5 QUALITY ASSURANCE

1.5.1 Electrician Qualifications

Electrical work must be performed by qualified persons 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.

1.5.2 Fuses

Submit coordination data as specified in paragraph, FUSES of this section.

1.5.3 Regulatory Requirements

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "must" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the Contracting Officer. Provide equipment, materials, installation, and workmanship in accordance with NFPA 70 unless more stringent requirements are specified or indicated. NECA NEIS 1 is the minimum standard for workmanship.

1.5.4 Standard Products

Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship and:

a. Have been in satisfactory commercial or industrial use for 2 years prior to bid opening including applications of equipment and materials under similar circumstances and of similar size.

b. Have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period.

c. Where two or more items of the same class of equipment are required, provide products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in this section.

1.5.4.1 Alternative Qualifications

Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 consecutive hours, exclusive of the manufacturers' factory or laboratory tests, is furnished.

1.5.4.2 Material and Equipment Manufacturing Date

Products manufactured more than 3 years prior to date of delivery to site are not acceptable.

1.6 MAINTENANCE

1.6.1 Electrical Systems

Submit operation and maintenance data in accordance with Section 01 78 23, OPERATION AND MAINTENANCE DATA and as specified herein. Submit operation and maintenance manuals for electrical systems that provide basic data relating to the design, operation, and maintenance of the electrical distribution system for the building. Include the following:

a. Single line diagram of the "as-built" building electrical system.

b. Schematic diagram of electrical control system (other than HVAC, covered elsewhere).

c. Manufacturers' operating and maintenance manuals on active electrical equipment.

1.7 WARRANTY

Provide equipment items supported by service organizations that are located within 250 miles of the equipment installation in order to render service to the equipment on a regular and emergency basis during the warranty period of the contract.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

As a minimum, meet requirements of UL, where UL standards are established for those items, and requirements of NFPA 70 for all materials, equipment, and devices.

2.2 CONDUIT AND FITTINGS

Conform to the following:

2.2.1 Rigid Metallic Conduit

2.2.1.1 Rigid, Threaded Zinc-Coated Steel Conduit

ANSI C80.1, UL 6.

2.2.1.2 Rigid Aluminum Conduit

ANSI C80.5, UL 6A.

2.2.2 Rigid Nonmetallic Conduit

PVC Type EPC-40, and EPC-80 in accordance with NEMA TC 2,UL 651.

2.2.3 Intermediate Metal Conduit (IMC)

UL 1242, zinc-coated steel only.

2.2.4 Electrical, Zinc-Coated Steel Metallic Tubing (EMT)

UL 797, ANSI C80.3.

2.2.5 Plastic-Coated Rigid Steel and IMC Conduit

NEMA RN 1, Type 40(40 mils thick).

2.2.6 Flexible Metal Conduit

UL 1, limited to 6 feet in areas where not accessible or below a raised floor installation.

2.2.6.1 Liquid-Tight Flexible Metal Conduit, Steel

UL 360, limited to 6 feet in areas where not accessible or below a raised floor installation. The use of flexible metal conduit for bends or transitions in RMC, IMC, or EMT is prohibited.

2.2.7 Liquid-Tight Flexible Nonmetallic Conduit

UL 1660. The use of liquid-tight flexible metal conduit for bends or transitions in RMC, IMC, or EMT is prohibited.

2.2.8 Fittings for Metal Conduit, EMT, and Flexible Metal Conduit

UL 514B. Ferrous fittings: cadmium- or zinc-coated in accordance with UL 514B.

2.2.8.1 Fittings for Rigid Metal Conduit and IMC

Threaded-type. Split couplings unacceptable.

2.2.8.2 Fittings for EMT

Die Cast compression type.

2.2.9 Fittings for Rigid Nonmetallic Conduit

NEMA TC 3 for PVC, and UL 514B.

2.3 OUTLET BOXES AND COVERS

UL 514A, cadmium- or zinc-coated, if ferrous metal. UL 514C, if nonmetallic.

2.4 CABINETS, JUNCTION BOXES, AND PULL BOXES

UL 50; volume greater than 100 cubic inches, NEMA Type 1 enclosure; sheet steel, hot-dip, zinc-coated. Where exposed to wet, damp, or corrosive environments, NEMA Type 3R.

2.5 WIRES AND CABLES

Provide wires and cables in accordance with applicable requirements of NFPA 70 and UL for type of insulation, jacket, and conductor specified or indicated. Do not use wires and cables manufactured more than 24 months prior to date of delivery to site.

2.5.1 Conductors

Provide the following:

a. Conductor sizes and capacities shown are based on copper, unless indicated otherwise.

b. Conductors No. 10 AWG and larger diameter: stranded.

c. Conductors No. 12 AWG and smaller diameter: solid.

d. Conductors for remote control, alarm, and signal circuits, classes 1, 2, and 3: stranded unless specifically indicated otherwise.

e. All conductors: copper.

2.5.1.1 Equipment Manufacturer Requirements

When manufacturer's equipment requires copper conductors at the terminations or requires copper conductors to be provided between components of equipment, provide copper conductors or splices, splice boxes, and other work required to satisfy manufacturer's requirements.

2.5.1.2 Minimum Conductor Sizes

Provide minimum conductor size in accordance with the following:

a. Branch circuits: No. 12 AWG.

b. Class 1 remote-control and signal circuits: No. 14 AWG.

c. Class 2 low-energy, remote-control and signal circuits: No. 16 AWG.

d. Class 3 low-energy, remote-control, alarm and signal circuits: No. 22 AWG.

2.5.2 Color Coding

Provide color coding for service, feeder, branch, control, and signaling circuit conductors.

2.5.2.1 Ground and Neutral Conductors

Provide color coding of ground and neutral conductors as follows:

a. Grounding conductors: Green.

b. Neutral conductors: White.

c. Exception, where neutrals of more than one system are installed in same raceway or box, other neutrals color coding: white with a different colored (not green) stripe for each.

2.5.2.2 Ungrounded Conductors

Provide color coding of ungrounded conductors in different voltage systems as follows:

a. 208/120 volt, three-phase

(1) Phase A - black

(2) Phase B - red

(3) Phase C - blue

b. 480/277 volt, three-phase

(1) Phase A - brown

(2) Phase B - orange

(3) Phase C - yellow

c. 120/240 volt, single phase: Black and red

2.5.3 Insulation

Unless specified or indicated otherwise or required by NFPA 70, provide power and lighting wires rated for 600-volts, Type THWN/THHN conforming to UL 83 or Type XHHW or RHW conforming to UL 44, except that grounding wire may be type TW conforming to UL 83; remote-control and signal circuits: Type TW or TF, conforming to UL 83. Where equipment or devices require 90-degree Centigrade (C) conductors, provide only conductors with 90-degree C insulation or better.

2.5.4 Bonding Conductors

ASTM B1, solid bare copper wire for sizes No. 8 AWG and smaller diameter; ASTM B8, Class B, stranded bare copper wire for sizes No. 6 AWG and larger diameter.

2.5.5 Metal-Clad Cable

UL 1569; NFPA 70, Type MC cable.

2.6 SPLICES AND TERMINATION COMPONENTS

UL 486A-486B for wire connectors and UL 510 for insulating tapes. Connectors for No. 10 AWG and smaller diameter wires: insulated, pressure-type in accordance with UL 486A-486B or UL 486C (twist-on splicing connector). Provide solderless terminal lugs on stranded conductors.

2.7 DEVICE PLATES

Provide the following:

a. UL listed, one-piece device plates for outlets to suit the devices installed.

b. For metal outlet boxes, plates on unfinished walls: zinc-coated sheet steel or cast metal having round or beveled edges.

c. For nonmetallic boxes and fittings, other suitable plates may be provided.

d. Plates on finished walls: nylon or lexan, minimum 0.03 inch wall thickness and same color as receptacle or toggle switch with which they are mounted.

e. Plates on finished walls: satin finish stainless steel or

brushed-finish aluminum, minimum 0.03 inch thick.

f. Screws: machine-type with countersunk heads in color to match finish of plate.

g. Sectional type device plates are not be permitted.

h. Plates installed in wet locations: gasketed and UL listed for "wet locations."

2.8 SWITCHES

2.8.1 Toggle Switches

NEMA WD 1, UL 20, single pole, double pole, three-way, and four-way, totally enclosed with bodies of thermoplastic or thermoset plastic and mounting strap with grounding screw. Include the following:

a. Handles: white thermoplastic.

b. Wiring terminals: screw-type, side-wired. Do not use back-stabbed conductor terminals.

c. Contacts: silver-cadmium and contact arm - one-piece copper alloy.

d. Switches: rated quiet-type ac only, 120/277 volts, with current rating and number of poles indicated.

2.8.2 Disconnect Switches

NEMA KS 1. Provide heavy duty-type switches where indicated, where switches are rated higher than 240 volts, and for double-throw switches. Utilize Class R fuseholders and fuses for fused switches, unless indicated otherwise. Provide horsepower rated for switches serving as the motor-disconnect means. Provide switches in NEMA 1 or NEMA 3R, enclosure as indicated per NEMA ICS 6.

2.9 FUSES

NEMA FU 1. Provide complete set of fuses for each fusible. Coordinate time-current characteristics curves of fuses serving motors or connected in series with circuit breakers for proper operation. Submit coordination data for approval. Provide fuses with a voltage rating not less than circuit voltage.

2.9.1 Fuseholders

Provide in accordance with UL 4248-1.

2.9.2 Cartridge Fuses, Current Limiting Type (Class R)

UL 248-12, Class RK-5. Provide only Class R associated fuseholders in accordance with UL 4248-12.

2.9.3 Cartridge Fuses, High-Interrupting Capacity, Current Limiting Type (Classes J, L, and CC)

UL 248-8, UL 248-10, UL 248-4, Class J for zero to 600 amperes, Class L for 601 to 6,000 amperes, and Class CC for zero to 30 amperes.

2.9.4 Cartridge Fuses, Current Limiting Type (Class T)

UL 248-15, Class T for zero to 1,200 amperes, 300 volts; and zero to 800 amperes, 600 volts.

2.10 RECEPTACLES

Provide the following:

a. UL 498, general purpose specification grade, grounding-type. Residential grade receptacles are not acceptable.

b. Ratings and configurations: as indicated.

c. Bodies: ivory as per NEMA WD 1.

d. Face and body: thermoplastic supported on a metal mounting strap.

e. Dimensional requirements: per NEMA WD 6.

f. Screw-type, side-wired wiring terminals. Do not use back-stabbed conductor terminals.

g. Grounding pole connected to mounting strap.

h. The receptacle: containing triple-wipe power contacts and double or triple-wipe ground contacts.

2.10.1 Split Duplex Receptacles2.10.2 Weather Resistant Receptacles

Provide receptacles, UL listed for use in "wet locations" with integral GFCI protection. Include cast metal box with gasketed, hinged, lockable and weather resistant while-in-use, die-cast metal/aluminum extra-duty rated hood.

2.10.3 Ground-Fault Circuit Interrupter Receptacles

UL 943, duplex type for mounting in standard outlet box. Provide device capable of detecting current leak when the current to ground is 6 milliamperes or higher, and tripping per requirements of UL 943 for Class A ground-fault circuit interrupter devices. Provide screw-type, side-wired wiring terminals or pre-wired (pigtail) leads.

2.11 PANELBOARDS

Provide panelboards in accordance with the following:

a. UL 67 and UL 50 having a short-circuit current rating as indicated of 10,000 amperes symmetrical minimum for voltages 240 V and below of 14,000 amperes symmetrical minimum for 480 V.

b. Panelboards for use as service disconnecting means: additionally conform to UL 869A.

c. Panelboards: circuit breaker-equipped.

d. Designed such that individual breakers can be removed without disturbing adjacent units or without loosening or removing supplemental insulation supplied as means of obtaining clearances as

required by UL.

e. "Specific breaker placement" is required in panelboards to match the breaker placement indicated in the panelboard schedule on the design drawings. If it is not possible to match "specific breaker placement" during construction, obtain Government approval prior to device installation.

f. Use of "Subfeed Breakers" is not acceptable.

g. Main breaker: "separately" mounted "above" or "below" branch breakers.

h. Where "space only" is indicated, make provisions for future installation of breakers.

i. Directories: indicate load served by each circuit in panelboard.

j. Directories: indicate source of service to panelboard (e.g., Panel PA served from Panel MDP).

k. Provide new directories for existing panels modified by this project as indicated.

l. Type directories and mount in holder behind transparent protective covering.

m. Panelboards: listed and labeled for their intended use.

2.11.1 Enclosure

Provide panelboard enclosure in accordance with the following:

a. UL 50.

b. Cabinets mounted outdoors or flush-mounted: hot-dipped galvanized after fabrication.

c. Cabinets: painted in accordance with paragraph FIELD APPLIED PAINTING.

d. Outdoor cabinets: NEMA 3R raintight with conduit hubs welded to the cabinet.

e. Front edges of cabinets: form-flanged or fitted with structural shapes welded or riveted to the sheet steel, for supporting the panelboard front.

f. All cabinets: fabricated such that no part of any surface on the finished cabinet deviates from a true plane by more than 1/8 inch.

g. Holes: provided in the back of indoor surface-mounted cabinets, with outside spacers and inside stiffeners, for mounting the cabinets with a 1/2 inch clear space between the back of the cabinet and the wall surface.

h. Flush doors: mounted on hinges that expose only the hinge roll to view when the door is closed.

i. Each door: fitted with a combined catch and lock latch.

j. Keys: two provided with each lock, with all locks keyed alike.

k. Finished-head cap screws: provided for mounting the panelboard fronts on the cabinets.

2.11.2 Panelboard Buses

Support bus bars on bases independent of circuit breakers. Design main buses and back pans so that breakers may be changed without machining, drilling, or tapping. Provide isolated neutral bus in each panel for connection of circuit neutral conductors. Provide separate ground bus identified as equipment grounding bus per UL 67 for connecting grounding conductors; bond to steel cabinet.

2.11.2.1 Panelboard Neutrals for Non-Linear Loads

Provide in accordance with the following:.

a. UL listed, with panelboard type specifically UL heat rise tested for use on non-linear loads.

b. Panelboard: heat rise tested in accordance with UL 67, except with the neutral assembly installed and carrying 200 percent of the phase bus current during testing.

c. Verification of the testing procedure: provided upon request.

d. Two neutral assemblies paralleled together with cable is not acceptable.

e. Nameplates for panelboard rated for use on non-linear loads: marked "SUITABLE FOR NON-LINEAR LOADS" and in accordance with paragraph FIELD FABRICATED NAMEPLATES.

f. Provide a neutral label with instructions for wiring the neutral of panelboards rated for use on non-linear loads.

2.11.3 Circuit Breakers

UL 489, thermal magnetic-type having a minimum short-circuit current rating equal to the short-circuit current rating of the panelboard in which the circuit breaker will be mounted. Breaker terminals: UL listed as suitable for type of conductor provided. Series rated circuit breakers and plug-in circuit breakers that do not use a retaining bolt are unacceptable.

2.11.3.1 Multipole Breakers

Provide common trip-type with single operating handle. Design breaker such that overload in one pole automatically causes all poles to open. Maintain phase sequence throughout each panel so that any three adjacent breaker poles are connected to Phases A, B, and C, respectively.

2.11.3.2 Circuit Breaker With Ground-Fault Circuit Interrupter

UL 943 and NFPA 70. Provide with auto-monitoring (self-test) and lockout features, "push-to-test" button, visible indication of tripped condition, and ability to detect and trip when current imbalance is 6 milliamperes or higher per requirements of UL 943 for Class A ground-fault circuit

interrupter devices.

2.11.3.3 LSIG Type Circuit Breakers

Provide circuit breaker rated for the appropriate current and voltage level as indicated by the system design and a short circuit current capacity as indicated for the system's fault levels. The circuit breaker must have a reliable operating mechanism for manual and automatic operation. Provide circuit breaker with a suitable enclosure for the installation environment (e.g., indoor, outdoor, hazardous locations) and be suitable for the specified environmental conditions (e.g., temperature, humidity, altitude).

2.11.3.3.1 Long-Time Protection (L)

Provide adjustable long-time current protection with a time delay measured in seconds to safeguard against sustained, moderate levels of overcurrent.

2.11.3.3.2 Short-Time Protection (S)

Provide adjustable short-time current protection with a time delay measured in seconds to respond to temporary overcurrent conditions.

2.11.3.3.3 Instantaneous Protection (I)

Provide adjustable instantaneous current protection with no intentional delay to interrupt severe short circuits.

2.11.3.3.4 Ground Fault Protection (G)

Provide ground fault protection with adjustable settings to detect and interrupt ground fault conditions.

2.12 ENCLOSED CIRCUIT BREAKERS

UL 489. Individual molded case circuit breakers with voltage and continuous current ratings, number of poles, overload trip setting, and short circuit current interrupting rating as indicated. Enclosure type as indicated.

2.13 MOTORS

Provide motors in accordance with the following:

a. Hermetic-type sealed motor compressors: Also comply with UL 984.

b. Provide the size in terms of HP, or kVA, or full-load current, or a combination of these characteristics, and other characteristics, of each motor as indicated or specified.

c. Determine specific motor characteristics to ensure provision of correctly sized starters and overload heaters.

d. Rate motors for operation on 208-volt, 3-phase circuits with a terminal voltage rating of 200 volts, and those for operation on 480-volt, 3-phase circuits with a terminal voltage rating of 460 volts.

e. Use motors designed to operate at full capacity with voltage variation

of plus or minus 10 percent of motor voltage rating.

f. Unless otherwise indicated, use continuous duty type motors if rated 1 HP and above.

g. Where fuse protection is specifically recommended by the equipment manufacturer, provide fused switches in lieu of non-fused switches indicated.

h. Use Inverter-Rated motors designed to operate with adjustable speed drive (ASD).

2.13.1 High Efficiency Single-Phase Motors

Single-phase fractional-horsepower alternating-current motors: high efficiency types are not acceptable. In exception, for special purpose motors and motor-driven equipment with a minimum seasonal or overall efficiency rating, such as a SEER rating, provide equipment with motor to meet the overall system rating indicated.

2.13.2 Premium Efficiency Polyphase and Single-Phase Motors

Select polyphase and continuous-duty single phase motors based on high efficiency characteristics relative to typical characteristics and applications as listed in NEMA MG 10 and NEMA MG 11. In addition, continuous rated, polyphase squirrel-cage medium induction motors must meet the requirements for premium efficiency electric motors in accordance with NEMA MG 00001, including the NEMA full load efficiency ratings. In exception, for motor-driven equipment with a minimum seasonal or overall efficiency rating, such as a SEER rating, provide equipment with motor to meet the overall system rating indicated. The rotor must be of a permanent magnet type supported by ball bearings to increase motor efficiency and longevity. The motor must maintain 70 percent or greater efficiency for its design application. ECM motors to comply with UL 1004-1.

2.13.3 Electronically Commutated Motors

Provide Electronically Commutated Motor (ECM) designed as a DC brushless motor for variable speed or constant speed motor control. ECM will be complete with and be operated by a single-phase or three-phase integrated controller/inverter. The integrated controller must sense rotor position and electronically commutate the stator windings to provide synchronous rotation. AC power must be rectified, filtered and then converted to DC power. ECM controller must be capable of accepting a 0-10VDC or a 4-20mA signal for manual/automatic control. Ensure efficiency is a minimum of 70 percent over the motors entire operating range.

2.13.4 Motor Sizes

Provide size for duty to be performed, not exceeding the full-load nameplate current rating when driven equipment is operated at specified capacity under most severe conditions likely to be encountered. When motor size provided differs from size indicated or specified, make adjustments to wiring, disconnect devices, and branch circuit protection to accommodate equipment actually provided. Provide controllers for motors rated 1-hp and above with electronic phase-voltage monitors designed to protect motors from phase-loss, undervoltage, and overvoltage. Provide protection for motors from immediate restart by a time adjustable restart relay.

2.13.5 Wiring and Conduit

Provide internal wiring for components of packaged equipment as an integral part of the equipment. Provide power wiring and conduit for field-installed equipment using adjustable speed drive (ASD) manufacturer required wiring type and length as specified herein. Power wiring and conduit: conform to the requirements specified herein. Control wiring: provided under, and conform to, the requirements of the section specifying the associated equipment.

2.14 MOTOR CONTROLLERS

Provide motor controllers in accordance with the following:

a. UL 508, NEMA ICS 1, and NEMA ICS 2.

b. Provide controllers with thermal overload protection in each phase, and one spare normally open auxiliary contact, and one spare normally closed auxiliary contact.

c. Provide controllers for motors rated 1-hp 746 watts and above with electronic phase-voltage monitors designed to protect motors from phase-loss, undervoltage, and overvoltage.

d. Provide protection for motors from immediate restart by a time adjustable restart relay.

e. When used with pressure, float, or similar automatic-type or maintained-contact switch, provide a hand/off/automatic selector switch with the controller.

f. Connections to selector switch: wired such that only normal automatic regulatory control devices are bypassed when switch is in "hand" position.

g. Safety control devices, such as low and high pressure cutouts, high temperature cutouts, and motor overload protective devices: connected in motor control circuit in "hand" and "automatic" positions.

h. Control circuit connections to hand/off/automatic selector switch or to more than one automatic regulatory control device: made in accordance with indicated or manufacturer's approved wiring diagram.

i. Provide selector switch with the means for locking in any position.

j. Provide a disconnecting means, capable of being locked in the open position, for the motor that is located in sight from the motor location and the driven machinery location. As an alternative, provide a motor controller disconnect, capable of being locked in the open position, to serve as the disconnecting means for the motor if it is in sight from the motor location and the driven machinery location.

k. Overload protective devices: provide adequate protection to motor windings; be thermal inverse-time-limit type; and include manual reset-type pushbutton on outside of motor controller case.

l. Cover of combination motor controller and manual switch or circuit breaker: interlocked with operating handle of switch or circuit

breaker so that cover cannot be opened unless handle of switch or circuit breaker is in "off" position.

2.14.1 Control Wiring

Provide control wiring in accordance with the following:

a. All control wire: stranded tinned copper switchboard wire with 600-volt flame-retardant insulation Type SIS meeting UL 44, or Type MTW meeting UL 1063, and passing the VW-1 flame tests included in those standards.

b. Hinge wire: Class K stranding.

c. Current transformer secondary leads: not smaller than No. 10 AWG.

d. Control wire minimum size: No. 14 AWG.

e. Power wiring for 480-volt circuits and below: the same type as control wiring with No. 12 AWG minimum size.

f. Provide wiring and terminal arrangement on the terminal blocks to permit the individual conductors of each external cable to be terminated on adjacent terminal points.

2.14.2 Control Circuit Terminal Blocks

Provide control circuit terminal blocks in accordance with the following:

a. NEMA ICS 4.

b. Control circuit terminal blocks for control wiring: molded or fabricated type with barriers, rated not less than 600 volts.

c. Provide terminals with removable binding, fillister or washer head screw type, or of the stud type with contact and locking nuts.

d. Terminals: not less than No. 10 in size with sufficient length and space for connecting at least two indented terminals for 10 AWG conductors to each terminal.

e. Terminal arrangement: subject to the approval of the Contracting Officer with not less than four spare terminals or 10 percent, whichever is greater, provided on each block or group of blocks.

f. Modular, pull apart, terminal blocks are acceptable provided they are of the channel or rail-mounted type.

g. Submit data showing that any proposed alternate will accommodate the specified number of wires, are of adequate current-carrying capacity, and are constructed to assure positive contact between current-carrying parts.

2.14.2.1 Types of Terminal Blocks

a. Short-Circuiting Type: Short-circuiting type terminal blocks: furnished for all current transformer secondary leads with provision for shorting together all leads from each current transformer without first opening any circuit. Terminal blocks: comply with the

requirements of paragraph CONTROL CIRCUIT TERMINAL BLOCKS above.

b. Load Type: Load terminal blocks rated not less than 600 volts and of adequate capacity: provided for the conductors for NEMA Size 3 and smaller motor controllers and for other power circuits, except those for feeder tap units. Provide terminals of either the stud type with contact nuts and locking nuts or of the removable screw type, having length and space for at least two indented terminals of the size required on the conductors to be terminated. For conductors rated more than 50 amperes, provide screws with hexagonal heads. Conducting parts between connected terminals must have adequate contact surface and cross-section to operate without overheating. Provide each connected terminal with the circuit designation or wire number placed on or near the terminal in permanent contrasting color.

2.14.3 Control Circuits

Control circuits: maximum voltage of 120 volts derived from control transformer in same enclosure. Transformers: conform to UL 506, as applicable. Transformers, other than transformers in bridge circuits: provide primaries wound for voltage available and secondaries wound for correct control circuit voltage. Size transformers so that 80 percent of rated capacity equals connected load. Provide disconnect switch on primary side.

Control circuits: maximum voltage of 120 volts derived from a separate control source. Provide terminals and terminal boards. Provide separate control disconnect switch within controller. Provide one fused secondary lead with the other lead grounded.

2.14.4 Enclosures for Motor Controllers

NEMA ICS 6.

2.14.5 Multiple-Speed Motor Controllers and Reversible Motor Controllers

Across-the-line-type, electrically and mechanically interlocked. Multiple-speed controllers: include compelling relays and multiple-button, station-type with pilot lights for each speed.

2.14.6 Pushbutton Stations

Provide with "start/stop" momentary contacts having one normally open and one normally closed set of contacts, and red lights to indicate when motor is running. Stations: heavy duty, oil-tight design.

2.15 LOCKOUT REQUIREMENTS

Provide circuit breakers, disconnecting means, and other devices that are electrical energy-isolating capable of being locked out for machines and other equipment to prevent unexpected startup or release of stored energy in accordance with 29 CFR 1910.147, NFPA 70E and 29 CFR 1910.303. Comply with requirements of Division 23, "Heating, Ventilating, and Air Conditioning (HVAC)" for mechanical isolation of machines and other equipment.

2.16 GROUNDING AND BONDING EQUIPMENT

2.16.1 Ground Rods

UL 467. Ground rods: cone pointed copper-clad steel, with minimum diameter of 3/4 inch and minimum length 10 feet. Sectional type rods may be used for rods 20 feet or longer.

2.17 NAMEPLATES AND SIGNS

2.17.1 Manufacturer's Nameplate

Provide on each item of equipment a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

2.17.2 Field Fabricated Nameplates

Provide field fabricated nameplates in accordance with the following:

a. ASTM D709.

b. Provide laminated plastic nameplates for each equipment enclosure, relay, switch, and device; as specified or as indicated on the drawings.

c. Each nameplate inscription: identify the function and, when applicable, the position.

d. Nameplates: melamine plastic, 0.125 inch thick, white with black center core.

e. Provide red laminated plastic label with white center core where indicated.

f. Surface: matte finish. Corners: square. Accurately align lettering and engrave into the core.

g. Minimum size of nameplates: one by 2.5 inches.

h. Lettering size and style: a minimum of 0.25 inch high normal block style.

2.17.3 Warning Signs

Provide warning signs for flash protection in accordance with NFPA 70E and NEMA Z535.4 for switchboards, panelboards, industrial control panels, and motor control centers that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing, or maintenance while energized. Provide field installed signs to warn qualified persons of potential electric arc flash hazards when warning signs are not provided by the manufacturer. Provide marking that is clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment.

2.18 FIRESTOPPING MATERIALS

2.19 FACTORY APPLIED FINISH

Provide factory-applied finish on electrical equipment in accordance with the following:

a. NEMA 250 corrosion-resistance test and the additional requirements as specified herein.

b. Interior and exterior steel surfaces of equipment enclosures: thoroughly cleaned followed by a rust-inhibitive phosphatizing or equivalent treatment prior to painting.

c. Exterior surfaces: free from holes, seams, dents, weld marks, loose scale or other imperfections.

d. Interior surfaces: receive not less than one coat of corrosion-resisting paint in accordance with the manufacturer's standard practice.

e. Exterior surfaces: primed, filled where necessary, and given not less than two coats baked enamel with semigloss finish.

f. Equipment located indoors: ANSI Light Gray, and equipment located outdoors: ANSI Dark Gray.

g. Provide manufacturer's coatings for touch-up work and as specified in paragraph FIELD APPLIED PAINTING.

PART 3 EXECUTION

3.1 INSTALLATION

Electrical installations, including weatherproof and hazardous locations and ducts, plenums and other air-handling spaces: conform to requirements of NFPA 703.1.1 Service Entrance Identification

3.1.1.1 Labels

Wherever work results in service entrance disconnect devices in more than one enclosure, as permitted by NFPA 70, label each enclosure, new and existing, as one of several enclosures containing service entrance disconnect devices. Label, at minimum: indicate number of service disconnect devices housed by enclosure and indicate total number of enclosures that contain service disconnect devices. Provide laminated plastic labels conforming to paragraph FIELD FABRICATED NAMEPLATES. Use lettering of at least 0.25 inch in height, and engrave on black-on-white matte finish. Service entrance disconnect devices in more than one enclosure: provided only as permitted by NFPA 70.

3.1.2 Wiring Methods

Provide insulated conductors installed in rigid steel conduit, IMC, rigid nonmetallic conduit, or EMT, except where specifically indicated or specified otherwise or required by NFPA 70 to be installed otherwise. Grounding conductor: separate from electrical system neutral conductor. Provide insulated green equipment grounding conductor for circuit(s) installed in conduit and raceways. Minimum conduit size: 1/2 inch in diameter for low voltage lighting and power circuits. Vertical

distribution in multiple story buildings: made with metal conduit in fire-rated shafts, with metal conduit extending through shafts for minimum distance of 6 inches. Firestop conduit which penetrates fire-rated walls, fire-rated partitions, or fire-rated floors.

3.1.2.1 Pull Wire

Install pull wires in empty conduits. Pull wire: plastic having minimum 200-pound force tensile strength. Leave minimum 36 inches of slack at each end of pull wire.

3.1.2.2 Metal-Clad Cable

Install in accordance with NFPA 70, Type MC cable. MC Cable is also allowed for branch circuits in the following locations:

a. New construction in exposed locations.

b. Renovations in exposed locations.

c. Concealed in renovations in existing areas where walls and ceilings are not disturbed.

d. Cable trays.

MC Cable is prohibited in the following locations:

a. Feeder circuits other than feeder circuits for aerial messengers between buildings.

b. Embedded or direct buried locations.

c. Concealed locations, except as allowed above.

3.1.2.3 Armored Cable

Install in accordance with NFPA 70, Type AC cable.

3.1.3 Conduit Installation

Unless indicated otherwise, conceal conduit under floor slabs and within finished walls, ceilings, and floors. Keep conduit minimum 6 inches away from parallel runs of flues and steam or hot water pipes. Install conduit parallel with or at right angles to ceilings, walls, and structural members where located above accessible ceilings and where conduit will be visible after completion of project.

3.1.3.1 Restrictions Applicable to Aluminum Conduit

a. Do not install underground or encase in concrete or masonry.

b. Do not use brass or bronze fittings.

c. Do not use when the enclosed conductors must be shielded from the effects of High-altitude Electromagnetic Pulse (HEMP).

3.1.3.2 Restrictions Applicable to EMT

a. Do not install underground.

b. Do not encase in concrete, mortar, grout, or other cementitious materials.

c. Do not use in areas subject to physical damage including but not limited to equipment rooms where moving or replacing equipment could physically damage the EMT.

d. Do not use in hazardous areas.

e. Do not use outdoors.

f. Do not use in fire pump rooms.

g. Do not use when the enclosed conductors must be shielded from the effects of High-altitude Electromagnetic Pulse (HEMP).

3.1.3.3 Restrictions Applicable to Nonmetallic Conduit

a. PVC Schedule 40.

(1) Do not use where subject to physical damage, including but not limited to, mechanical equipment rooms, electrical equipment rooms, fire pump rooms, and where restrictions are applying to both PVC Schedule 40 and PVC Schedule 80.

(2) Do not use above grade, except where allowed in this section for rising through floor slab or indicated otherwise.

b. PVC Schedule 80.

(1) Do not use where subject to physical damage, including but not limited to, hospitals, power plant, missile magazines, and other such areas.

(2) Do not use in hazardous (classified) areas.

(3) Do not use in penetrating fire-rated walls or partitions, or fire-rated floors.

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3.1.3.4 Restrictions Applicable to Flexible Conduit

Use only as specified in paragraph FLEXIBLE CONNECTIONS. Do not use when the enclosed conductors must be shielded from the effects of High-altitude Electromagnetic Pulse (HEMP).

3.1.3.5 Underground Conduit

Plastic-coated rigid steel; plastic-coated steel IMC; PVC, Type EPC-40. Plastic coating: extend minimum 6 inches above floor.

3.1.3.6 Conduit Installed Under Floor Slabs

Conduit run under floor slab: located a minimum of 12 inches below the vapor barrier. Seal around conduits at penetrations thru vapor barrier. Use NECA NEIS 1 Table 2a (Minimum Raceway Spacing) to determine under floor slab conduit spacing unless greater spacing is required elsewhere in this section.

3.1.3.7 Conduit Through Floor Slabs

Where conduits rise through floor slabs, do not allow curved portion of bends to be visible above finished slab. Where conduit rises through slab-on grade, seal all electrical penetrations to address radon mitigation and prevent infiltration of air, insects, and vermin.

3.1.3.8 Conduit Installed in Concrete Floor Slabs or Concrete Walls

Rigid steel; steel IMC; fiberglass, or PVC, Type EPC-40. Locate so as not to adversely affect structural strength of slabs. Install conduit within middle one-third of concrete slab. Do not stack conduits. Space conduits horizontally not closer than three diameters, except at cabinet locations. Curved portions of bends must not be visible above finish slab. Increase slab thickness as necessary to provide minimum one inch cover over conduit. Where embedded conduits cross building expansion joints, provide suitable watertight expansion/deflection fittings and bonding jumpers. Expansion/deflection fittings must allow horizontal and vertical movement of raceway. Conduit larger than one inch trade size: installed parallel with or at right angles to main reinforcement; when at right angles to reinforcement, install conduit close to one of supports of slab.

3.1.3.9 Stub-Ups

Provide conduits stubbed up through concrete floor for connection to free-standing equipment with adjustable top or coupling threaded inside for plugs, set flush with finished floor. Extend conductors to equipment in rigid steel conduit, except that flexible metal conduit may be used 6 inches above floor. Where no equipment connections are made, install screwdriver-operated threaded flush plugs in conduit end.

3.1.3.10 Conduit Support

Support conduit by pipe straps, wall brackets, threaded rod conduit hangers, or ceiling trapeze. Plastic cable ties are not acceptable. Fasten by wood screws to wood; by toggle bolts on hollow masonry units; by concrete inserts or expansion bolts on concrete or brick; and by machine screws, welded threaded studs, or spring-tension clamps on steel work. Threaded C-clamps may be used on rigid steel conduit only. Do not weld conduits or pipe straps to steel structures. Do not exceed one-fourth proof test load for load applied to fasteners. Provide vibration resistant and shock-resistant fasteners attached to concrete ceiling. Do not cut main reinforcing bars for any holes cut to depth of more than 1 1/2 inches in reinforced concrete beams or to depth of more than 3/4 inch in concrete joints. Fill unused holes. In partitions of light steel construction, use sheet metal screws. In suspended-ceiling construction, run conduit above ceiling. Do not support conduit by ceiling support system. Conduit and box systems: supported independently of both (a) tie wires supporting ceiling grid system, and (b) ceiling grid system into which ceiling panels are placed. Do not share supporting means between electrical raceways and mechanical piping or ducts. Identify independent conduit support in both fire and non-fire rated assemblies per NFPA 70. Coordinate installation with above-ceiling mechanical systems to assure maximum accessibility to all systems. Spring-steel fasteners may be used for lighting branch circuit conduit supports in suspended ceilings in dry locations. Where conduit crosses building expansion joints, provide suitable expansion fitting that maintains conduit electrical continuity by bonding jumpers or other means. For conduits greater than 2 1/2 inches

inside diameter, provide supports to resist forces of 0.5 times the equipment weight in any direction and 1.5 times the equipment weight in the downward direction.

3.1.3.11 Directional Changes in Conduit Runs

Make changes in direction of runs with symmetrical bends or cast-metal fittings. Make field-made bends and offsets with hickey or conduit-bending machine. Do not install crushed or deformed conduits. Avoid trapped conduits. Prevent plaster, dirt, or trash from lodging in conduits, boxes, fittings, and equipment during construction. Free clogged conduits of obstructions.

3.1.3.12 Locknuts and Bushings

Fasten conduits to sheet metal boxes and cabinets with two locknuts where required by NFPA 70, where insulated bushings are used, and where bushings cannot be brought into firm contact with the box; otherwise, use at least minimum single locknut and bushing. Provide locknuts with sharp edges for digging into wall of metal enclosures. Install bushings on ends of conduits, and provide insulating type where required by NFPA 70.

3.1.3.13 Flexible Connections

Provide flexible steel conduit between 3 and 6 feet in length for recessed and semirecessed lighting fixtures; for equipment subject to vibration, noise transmission, or movement; and for motors. Install flexible conduit to allow 20 percent slack. Minimum flexible steel conduit size: 1/2 inch diameter. Provide liquid tight flexible conduit in wet and damp locations for equipment subject to vibration, noise transmission, movement or motors. Provide separate ground conductor across flexible connections. Plastic cable ties are not acceptable as a support method.

3.1.4 Boxes, Outlets, and Supports

Provide boxes in wiring and raceway systems wherever required for pulling of wires, making connections, and mounting of devices or fixtures. Boxes for metallic raceways: cast-metal, hub-type when located in wet locations, when surface mounted on outside of exterior surfaces, and when specifically indicated. Boxes in other locations: sheet steel, except that aluminum boxes may be used with aluminum conduit, and nonmetallic boxes may be used with nonmetallic conduit system. Provide each box with volume required by NFPA 70 for number of conductors enclosed in box. Boxes for mounting lighting fixtures: minimum 4 inches square, or octagonal, except that smaller boxes may be installed as required by fixture configurations, as approved. Boxes for use in masonry-block or tile walls: square-cornered, tile-type, or standard boxes having square-cornered, tile-type covers. Provide gaskets for cast-metal boxes installed in wet locations and boxes installed flush with outside of exterior surfaces. Provide separate boxes for flush or recessed fixtures when required by fixture terminal operating temperature; provide readily removable fixtures for access to boxes unless ceiling access panels are provided. Support boxes and pendants for surface-mounted fixtures on suspended ceilings independently of ceiling supports. Fasten boxes and supports with wood screws on wood, with bolts and expansion shields on concrete or brick, with toggle bolts on hollow masonry units, and with machine screws or welded studs on steel. In open overhead spaces, cast boxes threaded to raceways need not be separately supported except where used for fixture support; support sheet metal boxes directly from building

structure or by bar hangers. Where bar hangers are used, attach bar to raceways on opposite sides of box, and support raceway with approved-type fastener maximum 24 inches from box. When penetrating reinforced concrete members, avoid cutting reinforcing steel.

3.1.4.1 Boxes

Boxes for use with raceway systems: minimum 1 1/2 inches deep, except where shallower boxes required by structural conditions are approved. Boxes for other than lighting fixture outlets: minimum 4 inches square, except that 4 by 2 inch boxes may be used where only one raceway enters outlet.

3.1.4.2 Pull Boxes

Construct of at least minimum size required by NFPA 70 of code-gauge aluminum or galvanized sheet steel, except where cast-metal boxes are required in locations specified herein. Provide boxes with screw-fastened covers. Where several feeders pass through common pull box, tag feeders to indicate clearly electrical characteristics, circuit number, and panel designation.

3.1.4.3 Extension Rings

Extension rings are not permitted for new construction. Use only on existing boxes in concealed conduit systems where wall is furred out for new finish.3.1.5 Mounting Heights

Mount panelboards, enclosed circuit breakers, motor controller and disconnecting switches so height of center of grip of the operating handle of the switch or circuit breaker at its highest position is maximum 79 inches above floor or working platform or as allowed in Section 404.8 per NFPA 70. Mount lighting switches 48 inches above finished floor. Mount receptacles 18 inches above finished floor, unless otherwise indicated. Mount other devices as indicated. Measure mounting heights of wiring devices and outlets in non-hazardous areas to center of device or outlet.

3.1.6 Conductor Identification

Provide conductor identification within each enclosure where tap, splice, or termination is made. For conductors No. 6 AWG and smaller diameter, provide color coding by factory-applied, color-impregnated insulation. For conductors No. 4 AWG and larger diameter, provide color coding by plastic-coated, self-sticking markers; colored nylon cable ties and plates; or heat shrink-type sleeves.

3.1.6.1 Marking Strips

Provide marking strips for identification of power distribution, control, data, and communications cables in accordance with the following:

a. Provide white or other light-colored plastic marking strips, fastened by screws to each terminal block, for wire designations.

b. Use permanent ink for the wire numbers

c. Provide reversible marking strips to permit marking both sides, or provide two marking strips with each block.

d. Size marking strips to accommodate the two sets of wire numbers.

e. Assign a device designation in accordance with NEMA ICS 1 to each device to which a connection is made. Mark each device terminal to which a connection is made with a distinct terminal marking corresponding to the wire designation used on the Contractor's schematic and connection diagrams.

f. The wire (terminal point) designations used on the Contractor's wiring diagrams and printed on terminal block marking strips may be according to the Contractor's standard practice; however, provide additional wire and cable designations for identification of remote (external) circuits for the Government's wire designations.

g. Prints of the marking strips drawings submitted for approval will be so marked and returned to the Contractor for addition of the designations to the terminal strips and tracings, along with any rearrangement of points required.

3.1.7 Splices

Make splices in accessible locations. Make splices in conductors No. 10 AWGand smaller diameter with insulated, pressure-type connector. Make splices in conductors No. 8 AWG and larger diameter with solderless connector, and cover with insulation material equivalent to conductor insulation.

3.1.8 Covers and Device Plates

Install with edges in continuous contact with finished wall surfaces without use of mats or similar devices. Plaster fillings are not permitted. Install plates with alignment tolerance of 1/16 inch. Use of sectional-type device plates are not permitted. Provide gasket for plates installed in wet locations.

3.1.8.1 Circuit Identification

Indicate the electrical source(s) for the conductors supplying the receptacles or light switches at a given cover/device plate using a 'Panel-Circuit Number' naming convention (e.g., L1-23 for a circuit supplied from Panel L1, Pole Number 23). Labels must be black on a white field. Labels must be digitally printed; handwritten lables are unacceptable. Stenciled lettering must be provided using thermal ink transfer process.

3.1.9 Electrical Penetrations

Seal openings around electrical penetrations through fire resistance-rated walls, partitions, floors, or ceilings.

3.1.10 Grounding and Bonding

Provide in accordance with NFPA 70 and NFPA 780. Ground exposed, non-current-carrying metallic parts of electrical equipment, metallic raceway systems, grounding conductor in metallic and nonmetallic raceways, telecommunications system grounds, and neutral conductor of wiring systems. Make ground connection to driven ground rods on exterior of building. Bond additional driven rods together with a minimum of 4 AWG soft bare copper wire buried to a depth of at least 12 inches. Interconnect all

grounding media in or on the structure to provide a common ground potential. This includes lightning protection, electrical service, telecommunications system grounds, as well as underground metallic piping systems. Make interconnection to the gas line on the customer's side of the meter. Use main size lightning conductors for interconnecting these grounding systems to the lightning protection system. Where ground fault protection is employed, ensure that connection of ground and neutral does not interfere with correct operation of fault protection.

3.1.10.1 Ground Rods

Provide ground rods and measure the resistance to ground using the fall-of-potential method described in IEEE 81. Do not exceed 25 ohms under normally dry conditions for the maximum resistance of a driven ground. If this resistance cannot be obtained, provide one additional rods, spaced on center. Spacing for additional rods must be a minimum of 10 feet In high-ground-resistance, UL listed chemically charged ground rods may be used. If the resultant resistance exceeds 25 ohms measured not less than 48 hours after rainfall, notify the Contracting Officer who will decide on the number of ground rods to add.

3.1.10.2 Grounding Connections

Make grounding connections which are buried or otherwise normally inaccessible, excepting specifically those connections for which access for periodic testing is required, by exothermic weld or high compression connector.

a. Make exothermic welds strictly in accordance with the weld manufacturer's written recommendations. Welds which are "puffed up" or which show convex surfaces indicating improper cleaning are not acceptable. Mechanical connectors are not required at exothermic welds.

b. Make high compression connections using a hydraulic or electric compression tool to provide the correct circumferential pressure. Provide tools and dies as recommended by the manufacturer. Use an embossing die code or other standard method to provide visible indication that a connector has been adequately compressed on the ground wire.

3.1.10.3 Resistance

Maximum resistance-to-ground of grounding system: do not exceed 5 ohms under dry conditions. Where resistance obtained exceeds 5 ohms, contact Contracting Officer for further instructions.

3.1.11 Equipment Connections

Provide power wiring and connections to motors and equipment. Except as otherwise specifically noted or specified, automatic control wiring, control devices, and protective devices within the control circuitry are not included in this section of the specifications and are provided under the section specifying the associated equipment.

3.1.12 Government-Furnished Equipment

Contractor make connections to Government-furnished equipment to make equipment operate as intended, including providing miscellaneous items

such as plugs, receptacles, wire, cable, conduit, flexible conduit, and outlet boxes or fittings.

3.1.13 Repair of Existing Work

Perform repair of existing work, demolition, and modification of existing electrical distribution systems as follows:

3.1.13.1 Workmanship

Lay out work in advance. Exercise care where cutting, channeling, chasing, or drilling of floors, walls, partitions, ceilings, or other surfaces is necessary for proper installation, support, or anchorage of conduit, raceways, or other electrical work. Repair damage to buildings, piping, and equipment using skilled craftsmen of trades involved.

3.1.13.2 Existing Concealed Wiring to be Removed

Disconnect existing concealed wiring to be removed from its source. Remove conductors; cut conduit flush with floor, underside of floor, and through walls; and seal openings.

3.1.13.3 Removal of Existing Electrical Distribution System

Removal of existing electrical distribution system equipment includes equipment's associated wiring, including conductors, cables, exposed conduit, surface metal raceways, boxes, and fittings, back to equipment's power source as indicated.

3.1.13.4 Continuation of Service

Maintain continuity of existing circuits of equipment to remain. Maintain existing circuits of equipment energized. Restore circuits wiring and power which are to remain but were disturbed during demolition back to original condition.

3.2 FIELD FABRICATED NAMEPLATE MOUNTING

Provide number, location, and letter designation of nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets. Provide nameplate on all equipment in access controlled spaces and areas.

3.3 WARNING SIGN MOUNTING

Provide the number of signs required to be readable from each accessible side. Space the signs in accordance with NFPA 70E.

3.4 FIELD APPLIED PAINTING

Paint electrical equipment as required to match finish of adjacent surfaces or to meet the indicated or specified safety criteria.

3.5 FIELD QUALITY CONTROL

Furnish test equipment and personnel and submit written copies of test results. Give Contracting Officer 5 working days notice prior to each test. Where applicable, test electrical equipment in accordance with NETA ATS.

3.5.1 Devices Subject to Manual Operation

Operate each device subject to manual operation at least five times, demonstrating satisfactory operation each time.

3.5.2 600-Volt Wiring Test

Test wiring rated 600 volt and less to verify that no short circuits or accidental grounds exist. Perform insulation resistance tests on wiring No. 6 AWG and larger diameter using instrument which applies voltage of 1,000 volts DC for 600 volt rated wiring and 500 volts DC for 300 volt rated wiring per NETA ATS to provide direct reading of resistance. All existing wiring to be reused must also be tested.

3.5.3 Transformer Tests

Perform the standard tests in accordance with the Inspection and Test Procedures for transformers, dry type, air-cooled, 600 volt and below; as specified in NETA ATS. Measure primary and secondary voltages for proper tap settings. Tests need not be performed by a recognized independent testing firm or independent electrical consulting firm.

3.5.4 Ground-Fault Receptacle Test

Test ground-fault receptacles with a "load" (such as a plug in light) to verify that the "line" and "load" leads are not reversed. Press the TEST button and then the RESET button to verify by LED status that the device is a self-test model as specified in UL 943.

3.5.5 Grounding System Test

Test grounding system to ensure continuity, and that resistance to ground is not excessive. Test each ground rod for resistance to ground before making connections to rod; tie grounding system together and test for resistance to ground. Make resistance measurements in dry weather, not earlier than 48 hours after rainfall. Submit written results of each test to Contracting Officer, and indicate location of rods as well as resistance and soil conditions at time measurements were made.

3.5.6 Phase Rotation Test

Perform phase rotation test to ensure proper rotation of service power prior to operation of new or reinstalled equipment using a phase rotation meter. Follow the meter manual directions performing the test.

-- End of Section --

SECTION 28 31 76

INTERIOR FIRE ALARM AND MASS NOTIFICATION SYSTEM, ADDRESSABLE

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.

ACOUSTICAL SOCIETY OF AMERICA (ASA)

ASA S3.2	(2020; R 2025) American National Standard Method for Measuring the Intelligibility of Speech Over Communication Systems

FM GLOBAL (FM)

FM APP GUIDE	(updated on-line) Approval Guide https://www.approvalguide.com/

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C62.41.1	(2002; R 2008) Guide on the Surges Environment in Low-Voltage (1000 V and Less) AC Power Circuits
IEEE C62.41.2	(2002) Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 4	(2024) Standard for Integrated Fire Protection and Life Safety System Testing
NFPA 70	(2026; TIA 26-1; ERTA 26-1; TIA 26-2; TIA 26-3; TIA 26-4; TIA 26-5; TIA 26-6; TIA 26-7; ERTA 26-2; ERTA 26-3) National Electrical Code
NFPA 72	(2025; TIA 25-1; TIA 25-2; TIA 25-3; TIA 25-4; ERTA 25-1; ERTA 25-2) National Fire Alarm and Signaling Code
NFPA 90A	(2024) Standard for the Installation of Air Conditioning and Ventilating Systems
NFPA 170	(2024; ERTA 1 2023) Standard for Fire Safety and Emergency Symbols

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 3-601-02	(2021; with Change 1, 2025) Fire Protection Systems Inspection, Testing,

	and Maintenance
UFC 4-010-06	(2023) Cybersecurity of Facility-Related Control Systems

UL SOLUTIONS (UL)

UL 464	(2023) UL Standard for Safety Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories
UL 497A	(2001; Bul. 2019) UL Standard for Safety Secondary Protectors for Communications Circuits
UL 497B	(2004; Reprint Feb 2022) UL Standard for Safety Protectors for Data Communications and Fire Alarm Circuits
UL 864	(2023; Reprint Oct 2024) UL Standard for Safety Control Units and Accessories for Fire Alarm Systems
UL 1283	(2025) UL Standard for Safety Electromagnetic Interference Filters
UL 1449	(2021; Reprint Dec 2022) UL Standard for Safety Surge Protective Devices
UL 1480	(2023) UL Standard for Safety Speakers for Fire Alarm and Signaling Systems, Including Accessories
UL 2017	(2008; Reprint Jan 2024) UL Standard for Safety General-Purpose Signaling Devices and Systems
UL 2572	(2016; Bul. 2018) UL Standard for Safety Mass Notification Systems
UL Fire Prot Dir	UL Product IQ (updated online) at https://productiq.ulprospector.com/en

1.2 SUMMARY

1.2.1 Scope

a. This work includes designing and modifying the existing fire alarm and mass notification (MNS) system as described herein and on the contract drawings. Include system wiring, raceways, pull boxes, terminal cabinets, outlet and mounting boxes, control equipment, initiating devices, notification appliances, supervising station fire alarm transmitters/mass notification transceiver, and other accessories and miscellaneous items required for a complete operational system even though each item is not specifically mentioned or described. Provide system complete and ready for operation. Design and installation must comply with UFC 4-010-06.

b. Provide equipment, materials, installation, workmanship, inspection,

and testing in strict accordance with NFPA 72, except as modified herein. The system layout on the drawings show the intent of coverage and suggested locations. Final quantity, system layout, and coordination are the responsibility of the Contractor.

c. The fire alarm and mass notification system must be independent of the building security, building management, and energy/utility monitoring systems other than for control functions.

1.2.2 Qualified Fire Protection Engineer (QFPE)

Services of the QFPE must include:

a. Reviewing SD-02, SD-03, and SD-05 submittal packages for completeness and compliance with the provisions of this specification. Construction (shop) drawings and calculations must be prepared by, or prepared under the immediate supervision of, the QFPE. The QFPE must affix their professional engineering stamp with signature to the shop drawings, calculations, and material data sheets, indicating approval prior to submitting the shop drawings to the DFPE.

b. Providing a letter documenting that the SD-02, SD-03, and SD-05 submittal package has been reviewed and noting any outstanding comments.

c. Performing in-progress construction surveillance prior to installation of ceilings (rough-in inspection).

d. Witnessing pre-Government and final Government functional performance testing and performing a final installation review.

e. Signing applicable certificates under SD-07.

1.3 DEFINITIONS

Wherever mentioned in this specification or on the drawings, the equipment, devices, and functions must be defined as follows:

1.3.1 Interface Device

An addressable device that interconnects hard wired systems or devices to an analog/addressable system.

1.3.2 Fire Alarm and Mass Notification Control Unit (FMCU)

A master control unit having the features of a fire alarm control unit (FACU) and an autonomous control unit (ACU) where these units are interconnected to function as a combined fire alarm/mass notification system. The FACU and ACU functions may be contained in a single cabinet or in independent, interconnected, and co-located cabinets.

1.3.3 Remote Fire Alarm and Mass Notification Control Unit

A control unit, physically remote from the fire alarm and mass notification control unit, that receives inputs from automatic and manual fire alarm devices; may supply power to detection devices and interface devices; may provide transfer of power to the notification appliances; may provide transfer of condition to relays or devices connected to the control unit; and reports to and receives signals from the fire alarm and

mass notification control unit.

1.3.4 Local Operating Console (LOC)

A unit designed to allow emergency responders or building occupants to operate the MNS including delivery of recorded messages or live voice announcements, initiate visual, textual visual, and audible appliance operation and other relayed functions.

1.3.5 Terminal Cabinet

A steel cabinet with locking, hinge-mounted door where terminal strips are securely mounted inside the cabinet.

1.3.6 Control Module and Relay Module

Terms utilized to describe emergency control function interface devices as defined by NFPA 72.

1.3.7 Designated Fire Protection Engineer (DFPE)

The DoD fire protection engineer that oversees that Area of Responsibility for that project. This is sometimes referred to as the "cognizant" fire protection engineer. Interpret reference to "authority having jurisdiction" and AHJ in referenced standards to mean the Designated Fire Protection Engineer (DFPE). The DFPE may be responsible for review of the contractor submittals having a "G" designation, and for witnessing final inspection and testing.

1.3.8 Qualified Fire Protection Engineer (QFPE)

A QFPE is an individual who is a licensed professional engineer (P.E.), who has passed the fire protection engineering written examination administered by the National Council of Examiners for Engineering and Surveying (NCEES) and has relevant fire protection engineering experience.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government.

Shop drawings (SD-02), product data (SD-03) and calculations (SD-05) must be prepared by the fire alarm designer and combined and submitted as one complete package. The QFPE must review the SD-02/SD-03/SD-05 submittal package for completeness and compliance with the Contract provisions prior to submission to the Government. The QFPE must provide a Letter of Confirmation that they have reviewed the submittal package for compliance with the contract provisions. This letter must include their registered professional engineer stamp and signature. Partial submittals and submittals not reviewed by the QFPE will be returned by the Government disapproved without review.

Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Qualified Fire Protection Engineer (QFPE); G

Fire alarm system designer; G

Supervisor; G

Technician; G

Installer; G

Test Technician; G

Fire Alarm System Site-Specific Software Acknowledgement; G

SD-02 Shop Drawings

Nameplates; G

Wiring Diagrams; G

System Layout; G

Notification Appliances; G

Initiating devices; G

Battery Power; G

Voltage Drop Calculations; G

SD-03 Product Data

Manual Stations; G

Addressable Interface Devices; GAddressable Control Modules; G

Notification Appliances; G

Surge Protective Devices; G

Alarm Wiring; G

Back Boxes and Conduit; G

Document Storage Cabinet; G

SD-06 Test Reports

Test Procedures; G

SD-07 Certificates

Verification of Compliant Installation; G

Request for Government Final Test; G

SD-10 Operation and Maintenance Data

Operation and Maintenance (O&M) Instructions; G

Instruction of Government Employees; G

SD-11 Closeout Submittals

As-Built Drawings

Spare Parts

1.5 SYSTEM OPERATION

Fire alarm system/mass notification system including textual display sign control panel(s), components requiring power, except for the FMCU(s) power supply, must operate on 24 volts DC unless noted otherwise in this section.

The interior fire alarm and mass notification system must be a complete, supervised, noncoded, analog/addressable fire alarm and mass notification system conforming to NFPA 72, UL 864, and UL 2572. Systems meeting UL 2017 only are not acceptable. The system must be activated into the alarm mode by actuation of an alarm initiating device. The system must remain in the alarm mode until the initiating device is reset and the control unit is reset and restored to normal. The system may be placed in the alarm mode by local microphones, LOC, FMCU, or remotely from authorized locations/users.

1.5.1 Alarm Initiating Devices and Notification Appliances (Visual, Voice, Textual)

a. Connect alarm initiating devices to initiating device circuits (IDC) Class "B", or to signaling line circuits (SLC) Class "B" and installed in accordance with NFPA 72.

b. Connect notification appliances to notification appliance circuits (NAC) Class "B".

1.5.2 Functions and Operating Features

The system must provide the following functions and operating features:

a. Power, annunciation, supervision, and control for the system. Addressable systems must be microcomputer (microprocessor or microcontroller) based with a minimum word size of eight bits with sufficient memory to perform as specified.

b. Visual alarm notification appliances must be synchronized as required by NFPA 72.

c. Electrical supervision of the primary power (AC) supply, presence of the battery, battery voltage, and placement of system modules within the control unit.

d. An audible and visual trouble signal to activate upon a single break or open condition, or ground fault. The trouble signal must also operate upon loss of primary power (AC) supply, absence of a battery supply, low battery voltage, or removal of alarm or supervisory control unit modules. After the system returns to normal operating conditions, the trouble signal must again sound until the trouble is

acknowledged. A smoke detector in the process of being verified for the actual presence of smoke must not initiate a trouble condition.

e. A trouble signal silence feature that must silence the audible trouble signal, without affecting the visual indicator.

f. Program capability via switches in a locked portion of the FMCU to bypass the automatic notification appliance circuits, fire reporting systemair handler shutdownsmoke control operation features. Operation of this programmed action must indicate on the FMCU display as a supervisory or trouble condition.

g. Alarm functions must override trouble or supervisory functions. Supervisory functions must override trouble functions.

h. The system must be capable of being programmed from the control unit keyboard. Programmed information must be stored in non-volatile memory.

i. The system must be capable of operating, supervising, and monitoring non-addressable alarm and supervisory devices.

j. There must be no limit, other than maximum system capacity, as to the number of addressable devices that may be in alarm simultaneously.

k. Where the fire alarm/mass notification system is responsible for initiating an action in another emergency control device or system, such as HVAC, the addressable fire alarm relay must be located in the vicinity of the emergency control device.

l. An alarm signal must automatically initiate the following functions:

(1) Transmission of an alarm signal to the fire department or a remote supervising station.

(2) Visual indication of the device operated on the FMCU, and on the remote annunciator.

(3) Actuation of alarm notification appliances.

(4) Recording of the event electronically in the history log of the FMCU.

m. A supervisory signal must automatically initiate the following functions:

(1) Visual indication of the device operated on the FMCU, and on the graphic or remote annunciator.

(2) Transmission of a supervisory signal to the fire department or a remote supervising station.

(3) Operation of a duct smoke detector must shut down the appropriate air handler in accordance with NFPA 90A in addition to other requirements of this paragraph and as allowed by NFPA 72.

(4) Recording of the event electronically in the history log of the FMCU.

n. A trouble condition must automatically initiate the following functions:

(1) Visual indication of the device operated on the FMCU, and on the graphic or remote annunciator.

(2) Transmission of a trouble signal to the fire department or a remote supervising station.

(3) Recording of the event electronically in the history log of the FMCU.

o. System control equipment must be programmed to provide a 60-minute to 180-minute delay in transmission of trouble signals resulting from primary power failure.

1.6 TECHNICAL DATA AND SITE-SPECIFIC SOFTWARE

Technical data and site-specific software (meaning technical data that relates to computer software) that are specifically identified in this project, and may be required in other specifications, must be delivered, strictly in accordance with the CONTRACT CLAUSES. The fire alarm system manufacturer must submit written confirmation of this contract provision as "Fire Alarm System Site-Specific Software Acknowledgement". Identify data delivered by reference to the specification paragraph against which it is furnished. Data to be submitted must include complete system, equipment, and software descriptions. Descriptions must show how the equipment will operate as a system to meet the performance requirements of this contract. The site-specific software data package must also include the following:

a. Items identified in NFPA 72, titled "Site-Specific Software".

b. Identification of programmable portions of the system equipment and capabilities.

c. Description of system revision and expansion capabilities and methods of implementation detailing both equipment and software requirements.

d. Provision of operational software data on all modes of programmable portions for fire alarm and mass notification.

e. Description of Fire Alarm and Mass Notification Control Unit equipment operation.

f. Description of auxiliary and remote equipment operations.

g. Library of application software.

h. Operation and maintenance manuals.

1.7 EXISTING EQUIPMENT

a. Equipment and devices must be compatible and operable with the existing fire alarm/mass notification system and must not impair reliability or operational functions of existing supervising station fire alarm system.

b. Equipment and devices must be compatible and operable with the

existing building fire alarm/mass notification system. Equipment must not impair reliability or operational functions of the existing system. The existing building system control unit is Honeywell Silent Knight IFP-1000.

c. Equipment and devices must be compatible and operable with the existing installation-wide mass notification system and must not impair reliability or operational functions of the existing system.

1.8 QUALITY ASSURANCE

1.8.1 Submittal Documents

1.8.1.1 Preconstruction Submittals

Within 36 days of contract award but not less than 14 days prior to commencing any work on site, the Contractor must submit the following for review and approval. SD-02, SD-03 and SD-05 submittals received prior to the review and approval of the qualifications of the fire alarm subcontractor and QFPE must be returned disapproved without review. All resultant delays must be the sole responsibility of the Contractor.

1.8.1.2 Shop Drawings

Shop drawings must not be smaller than ANSI D. Drawings must comply with the requirements of NFPA 72 and NFPA 170. Minimum scale for floor plans must be 1/8"=1'.

1.8.1.3 Nameplates

Nameplate illustrations and data to obtain approval by the Contracting Officer before installation.

1.8.1.4 Wiring Diagrams

3 copies of point-to-point wiring diagrams showing the points of connection and terminals used for electrical field connections in the system, including interconnections between the equipment or systems that are supervised or controlled by the system. Diagrams must show connections from field devices to the FMCU and remote FMCU, initiating circuits, switches, relays and terminals, including pathway diagrams between the control unit and shared communications equipment within the protected premises. Point-to-point wiring diagrams must be job specific and must not indicate connections or circuits not being utilized. Provide complete riser diagrams indicating the wiring sequence of all devices and their connections to the control equipment. Include a color-code schedule for the wiring.

1.8.1.5 System Layout

3 copies of plan view drawing showing device locations, terminal cabinet locations, junction boxes, other related equipment, conduit routing, conduit sizes, wire counts, conduit fill calculations, wire color-coding, circuit identification in each conduit, and circuit layouts for all floors. Indicate candela rating of each visual notification appliance. Indicate the wattage of each speaker. Clearly identify the locations of isolation modules. Indicate the addresses of all devices, modules, relays, and similar. Show/identify all acoustically similar spaces. Indicate if the environment for the FMCU is within its environmental

listing (e.g. temperature/humidity).

Provide a complete description of the system operation in matrix format similar to the "Typical Input/Output Matrix" included in the Annex of NFPA 72.

1.8.1.6 Notification Appliances

Calculations and supporting data on each circuit to indicate that there is at least 25 percent spare capacity for notification appliances. Annotate data for each circuit on the drawings.

1.8.1.7 Initiating Devices

Calculations and supporting data on each circuit to indicate that there is at least 25 percent spare capacity for initiating devices. Annotate data for each circuit on the drawings.

1.8.1.8 Battery Power

Calculations and supporting data as required in paragraph Battery Power Calculations for alarm, alert, and supervisory power requirements. Calculations including ampere-hour requirements for each system component and each control unit component, and the battery recharging period, must be included on the drawings.

1.8.1.9 Voltage Drop Calculations

Voltage drop calculations for each notification circuit indicating that sufficient voltage is available for proper operation of the system and all components, at a minimum rated voltage of the system operating on batteries. Include the calculations on the system layout drawings.

1.8.1.10 Product Data

3 copies of annotated descriptive data to show the specific model, type, and size of each item. Catalog cuts must also indicate the NRTL listing. The data must be highlighted to show model, size, and options that are intended for consideration. Data must be adequate to demonstrate compliance with all contract requirements. Product data for all equipment must be combined into a single submittal.

Provide an equipment list identifying the type, quantity, make, and model number of each piece of equipment to be provided under this submittal. The equipment list must include the type, quantity, make and model of spare equipment. Types and quantities of equipment submitted must coincide with the types and quantities of equipment used in the battery calculations and those shown on the shop drawings.

1.8.1.11 Operation and Maintenance (O&M) Instructions

Six copies of the Operation and Maintenance Instructions. The O&M Instructions must be prepared in a single volume or in multiple volumes, with each volume indexed, and may be submitted as a Technical Data Package. Manuals must be approved prior to training. The Interior Fire Alarm And Mass Notification System Operation and Maintenance Instructions must include the following:

a. "Manufacturer Data Package five" as specified in Section 01 78 23

OPERATION AND MAINTENANCE DATA.

b. Operating manual outlining step-by-step procedures required for system startup, operation, and shutdown. The manual must include the manufacturer's name, model number, service manual, parts list, and preliminary equipment list complete with description of equipment and their basic operating features.

c. Maintenance manual listing routine maintenance procedures, possible breakdowns and repairs, and troubleshooting guide. The manuals must include conduit layout, equipment layout and simplified wiring, and control diagrams of the system as installed.

d. Complete procedures for system revision and expansion, detailing both equipment and software requirements.

e. Software submitted for this project on CD/DVD media utilized.

f. Printouts of configuration settings for all devices.

g. Routine maintenance checklist. The routine maintenance checklist must be arranged in a columnar format. The first column must list all installed devices, the second column must state the maintenance activity or state no maintenance required, the third column must state the frequency of the maintenance activity, and the fourth column provided for additional comments or reference. All data (devices, testing frequencies, and similar) must comply with UFC 3-601-02.

h. A final Equipment List must be submitted with the Operating and Maintenance (O&M) manual.

1.8.1.12 As-Built Drawings

The drawings must show the system as installed, including deviations from both the project drawings and the approved shop drawings. These drawings must be submitted within two weeks after the final Government test of the system. At least one set of the as-built (marked-up) drawings must be provided at the time of, or prior to the final Government test.

1.8.2 Qualifications

1.8.2.1 Fire Alarm System Designer

The fire alarm system designer must be certified as a Level III (minimum) Technician by National Institute for Certification in Engineering Technologies (NICET) in the Fire Alarm Systems subfield of Fire Protection Engineering Technology or meet the qualifications for a QFPE.

1.8.2.2 Supervisor

A NICET Level III or IV fire alarm technician must supervise the installation of the fire alarm/mass notification system.A fire alarm technician with a minimum of eight years of experience must supervise the installation of the fire alarm/mass notification system. The fire alarm technicians supervising the installation of equipment must be factory trained in the installation, adjustment, testing, and operation of the equipment specified herein and on the drawings.

1.8.2.3 Technician

Fire alarm technicians with a minimum of four years of experience must be utilized to install and terminate fire alarm/mass notification devices, cabinets and control units. The fire alarm technicians installing the equipment must be factory trained in the installation, adjustment, testing, and operation of the equipment specified herein and on the drawings.

1.8.2.4 Installer

NICET Level II technician to assist in the installation of fire alarm/mass notification devices, cabinets and control units. A licensed electrician must be allowed to install wire, cable, conduit and backboxes for the fire alarm system/mass notification system. The fire alarm installer must be factory trained in the installation, adjustment, testing, and operation of the equipment specified herein and on the drawings.

1.8.2.5 Test Technician

Fire alarm technicians with a minimum of eight years of experience and NICET Level III or IV utilized in testing and certification of the installation of the fire alarm/mass notification devices, cabinets and control units. The fire alarm technicians testing the equipment must be factory trained in the installation, adjustment, testing, and operation of the equipment installed as part of this project.

1.8.2.6 Manufacturer

Components must be of current design and must be in regular and recurrent production at the time of installation. Provide design, materials, and devices for a protected premises fire alarm system, complete, conforming to NFPA 72, except as specified herein.

1.8.3 Regulatory Requirements

Equipment and material must be listed or approved. Listed or approved, as used in this section, means listed, labeled or approved by a Nationally Recognized Testing Laboratory (NRTL) such as UL Fire Prot Dir or FM APP GUIDE. The omission of these terms under the description of any item of equipment described must not be construed as waiving this requirement. All listings or approvals by testing laboratories must be from an existing ANSI or UL published standard. The recommended practices stated in the manufacturer's literature or documentation must be considered as mandatory requirements.

1.9 DELIVERY, STORAGE, AND HANDLING

Protect equipment delivered and placed in storage from the weather, humidity, and temperature variation, dirt and dust, and other contaminants.

1.10 MAINTENANCE

1.10.1 Spare Parts

Furnish or verify the following spare parts in the manufacturers original unopened containers are in stock:

a. One manual stations.

b. Two of each type of detector installed.

c. Two of each type of addressable monitor module installed.

d. Two of each type of addressable control module installed.

1.10.2 Special Tools

Software, connecting cables and proprietary equipment, necessary for the maintenance, testing, and reprogramming of the equipment must be furnished to the Contracting Officer, prior to the instruction of Government employees.

PART 2 PRODUCTS

2.1 GENERAL PRODUCT REQUIREMENT

All fire alarm and mass notification equipment must be listed for use under the applicable reference standards. Interfacing of UL 864 or similar approved industry listing with Mass Notification equipment listed to UL 2572must be done in a laboratory listed configuration, if the software programming features cannot provide a listed interface control.

2.2 MATERIALS AND EQUIPMENT

2.2.1 Standard Products

Provide materials, equipment, and devices that have been tested by a nationally recognized testing laboratory and listed for fire protection service when so required by NFPA 72 or this specification. Select material from one manufacturer, where possible, and not a combination of manufacturers, for any particular classification of materials. Material and equipment must be the standard products of a manufacturer regularly engaged in the manufacture of the products for at least 2 years prior to bid opening.

2.3 MANUAL STATIONS

Provide metal or plastic, semi-flush mounted,double-action, addressable manual stations, that are not subject to operation by jarring or vibration. Provide separately addressed conventional single-action manual pull stations in hazardous locations, and where indicated on plans. Stations must be equipped with screw terminals for each conductor. Stations that require the replacement of any portion of the device after activation are not permitted. Stations must be finished in red with molded raised lettering operating instructions of contrasting color. The use of a key must be required to reset the station.

2.4 ADDRESSABLE INTERFACE DEVICES

The initiating device being monitored must be configured as a Class "B" initiating device circuits. The module must be listed as compatible with the control unit. The module must provide address setting means compatible with the control unit's SLC supervision and store an internal identifying code. Monitor module must contain an integral LED that flashes each time the monitor module is polled and is visible through the device cover plate. Pull stations with a monitor module in a common

backbox are not required to have an LED. Existing fire alarm system initiating device circuits must be connected to a single module to supervise the circuit. Modules must be listed for the environmental conditions in which they will be installed.

2.5 ADDRESSABLE CONTROL MODULES

The control module must be capable of operating as a relay (dry contact form C) for interfacing the control unit with other systems, and to control door holders or initiate elevator fire service. The module must be listed as compatible with the control unit. The indicating device or the external load being controlled must be configured as Class B notification appliance circuits. The system must be capable of supervising, audible, visual and dry contact circuits. The control module must have both an input and output address. The supervision must detect a short on the supervised circuit and must prevent power from being applied to the circuit. The control module must provide address setting means compatible with the control unit's SLC supervision and store an internal identifying code. The control module must contain an integral LED that flashes each time the control module is polled and is visible through the device cover plate. Control Modules must be listed for the environmental conditions in which they will be installed.

2.6 NOTIFICATION APPLIANCES

2.6.1 Audible Notification Appliances

Audible appliances must conform to the applicable requirements of UL 464. Appliances must be connected into notification appliance circuits. Surface mounted audible appliances must be painted to match existing devices. Recessed audible appliances must be installed with a grill that is painted to match existing devices with a factory finish to match the surface to which it is mounted.

2.6.1.1 Speakers

a. Speakers must conform to the applicable requirements of UL 1480. Speakers must have six different sound output levels and operate with audio line input levels of 70.7 VRMs and 25 VRMs, by means of selectable tap settings. Interior speaker tap settings must include taps of 1/4, 1/2, 1, and 2 watt, at a minimum. Exterior speakers must also be multi-tapped with no more than 15 watt maximum setting. Speakers must incorporate a high efficiency speaker for maximum output at minimum power across a frequency range of 400 Hz to 4,000 Hz, and must have a sealed back construction. Speakers must be capable of installation on standard 4-inch square electrical boxes. Where speakers and strobes are provided in the same location, they may be combined into a single wall mounted unit. All inputs must be polarized for compatibility with standard reverse polarity supervision of circuit wiring via the FMCU.

b. Provide speaker mounting plates constructed of cold rolled steel having a minimum thickness of 16 gage or molded high impact plastic and equipped with mounting holes and other openings as needed for a complete installation. Fabrication marks and holes must be ground and finished to provide a smooth and neat appearance for each plate. Each plate must be primed and painted.

c. Speakers must utilize screw terminals for termination of all field

wiring.

2.7 SURGE PROTECTIVE DEVICES

Surge protective devices must be provided to suppress all voltage transients which might damage fire alarm control unit components. Systems having circuits located outdoors, communications equipment must be protected against surges induced on any signaling line circuit. Cables and conductors, that serve as communications links, must have surge protection circuits installed at each end. The surge protective device must wire in series to the power supply of the protected equipment with screw terminations. Line voltage surge arrestor must be installed directly adjacent to the power panel where the FMCU breaker is located.

a. Surge protective devices for nominal 120 VAC must be UL 1449 listed with a maximum 500 volt suppression level and have a maximum response time of 5 nanoseconds. The surge protective device must also meet IEEE C62.41.1 and IEEE C62.41.2 category B tests for surge capacity. The surge protective device must feature multi-stage construction and be provided with a long-life indicator lamp (either light emitting diode or neon) which extinguishes upon failure of protected components. Any unit fusing must be externally accessible.

b. Surge protective devices for nominal 24 VAC, fire alarm telephone dialer, or ethernet connection must be UL 497B listed, meet IEEE C62.41.1 and have a maximum response time of 1-nanosecond. The surge protective device must feature multi-stage construction and be self-resetting. The surge protective device must be a base and plug style. The base assembly must have screw terminals for fire alarm wiring. The base assembly must accept "plug-in" surge protective module.

c. All surge protective devices (SPD) must be the standard product of a single manufacturer and be equal or better than the following:

(1) For 120 VAC nominal line voltage: UL 1449 and UL 1283 listed, series connected 120 VAC, 20A rated, surge protective device in a NEMA 4x enclosure. Minimum 50,000 amp surge current rating with EMI/RFI filtering and a dry contact circuit for remote monitoring of surge protection status.

(2) For 24-volt nominal line voltage: UL 497B listed, series connected low voltage, 24-volt, 5A rated, loop circuit protector, base and replaceable module.

(3) For alarm telephone dialers: UL 497A listed, series connected, 130-volt, 150 mA rated with self-resetting fuse, dialer circuit protector with modular plug and play.

(4) For IP-DACTS: UL 497B listed, series connected, 6.4-volt, 1.5A rated with 20 kA/pair surge current, data network protector with modular plug and play.

2.8 WIRING

Provide wiring materials under this section as specified in Section 26 20 00INTERIOR DISTRIBUTION SYSTEM with the additions and modifications specified herein.

2.8.1 Alarm Wiring

IDC and SLC wiring must be fiber optic or solid copper or stranded copper cable in accordance with the manufacturers requirements. Copper signaling line circuits and initiating device circuit field wiring must be No. 14 AWG size conductors at a minimum. Visual notification appliance circuit conductors, that contain audible alarm appliances, must be copper No. 16 AWG size conductors at a minimum. Speaker circuits must be copper No. 16 AWG size twisted and shielded conductors at a minimum. Wiring for textual notification appliance circuits must be in accordance with manufacturer's requirements but must be supervised by the FMCU. Wire size must be sufficient to prevent voltage drop problems. Circuits operating at 24 VDC must not operate at less than the listed voltages for the detectors and appliances. Power wiring, operating at 120 VAC minimum, must be a minimum No. 12 AWG solid copper having similar insulation. Acceptable power-limited cables are FPL, FPLR or FPLP as appropriate with red colored covering. Nonpower-limited cables must comply with NFPA 70.

PART 3 EXECUTION

3.1 VERIFYING ACTUAL FIELD CONDITIONS

Before commencing work, examine all adjoining work on which the contractor's work is in any way dependent for perfect workmanship according to the intent of this specification section, and report to the Contracting Officer's Representative any condition which prevents performance of first class work. No "waiver of responsibility" for incomplete, inadequate or defective adjoining work will be considered unless notice has been filed before submittal of a proposal.

3.2 INSTALLATION

3.2.1 Manual Stations

Locate manual stations as required by NFPA 72 Mount stations so they are located no farther than5feet from the exit door they serve, measured horizontally. Manual stations must be mounted at 42 inches measured to the operating handle.

3.2.2 Notification Appliances

a. Locate notification appliance devices as required by NFPA 72and to meet the intelligibility requirements. Where two or more visual notification appliances are located in the same room or corridor or field of view, provide synchronized operation. Devices must use screw terminals for all field wiring. Audible and visual notification appliances mounted in acoustical ceiling tiles must be centered in the tiles plus or minus 2 inches.

b. Audible and visual notification appliances mounted on the exterior of the building, within unconditioned spaces, or in the vicinity of showers must be listed weatherproof appliances installed on weatherproof backboxes.

c. Speakers must not be located in close proximity to the FMCU or LOC so as to cause feedback when the microphone is in use.

3.3 SYSTEM FIELD WIRING

3.3.1 Wiring within Cabinets, Enclosures, and Boxes

Provide wiring installed in a neat and professional manner and installed parallel with or at right angles to the sides and back of any box, enclosure, or cabinet. Conductors that are terminated, spliced, or otherwise interrupted in any enclosure, cabinet, mounting, or junction box must be connected to screw-type terminal blocks. Mark each terminal in accordance with the wiring diagrams of the system. The use of wire nuts or similar devices is prohibited. Wiring to conform with NFPA 70.

Indicate the following in the wiring diagrams:

a. Point-to-point wiring diagrams showing the points of connection and terminals used for electrical field connections in the system, including interconnections between the equipment or systems that are supervised or controlled by the system. Diagrams must show connections from field devices to the FMCU and remote fire alarm/mass notification control units, initiating circuits, switches, relays and terminals.

b. Complete riser diagrams indicating the wiring sequence of devices and their connections to the control equipment. Include a color code schedule for the wiring. Include floor plans showing the locations of devices and equipment.

3.3.2 Alarm Wiring

a. Voltages must not be mixed in any junction box, housing or device, except those containing power supplies and control relays.

b. Utilize shielded wiring where recommended by the manufacturer. For shielded wiring, ground the shield at only one point, in or adjacent to the FMCU.

c. Pigtail or T-tap connections to signal line circuits, initiating device circuits, supervisory alarm circuits, and notification appliance circuits are prohibited.

d. Color coding is required for circuits and must be maintained throughout the circuit. Conductors used for the same functions must be similarly color coded. Conform wiring to NFPA 70.

e. Pull all conductors splice free. The use of wire nuts, crimped connectors, or twisting of conductors is prohibited. Where splices are unavoidable, the location of the junction box or pull box where they occur must be identified on the as-built drawings. The number and location of splices must be subject to approval by the Designated Fire Protection Engineer (DFPE).

3.3.3 Back Boxes and Conduit

In addition to the requirements of Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM, provide all wiring in rigid metal conduit or intermediate metal conduit unless specifically indicated otherwise. Minimum conduit size must be 3/4-inch in diameter. Do not use electrical non-metallic tubing (ENT) or flexible non-metallic tubing and associated fittings.

a. Galvanized rigid steel (GRS) conduit must be utilized where exposed to weather, where subject to physical damage, and where exposed on exterior of buildings. Intermediate metal conduit (IMC) may be used in lieu of GRS as allowed by NFPA 70.

b. Electrical metallic tubing (EMT) is permitted above suspended ceilings or exposed where not subject to physical damage. Do not use EMT underground, encased in concrete, mortar, or grout, in hazardous locations, where exposed to physical damage, outdoors or in fire pump rooms. Use die-cast compression connectors.

c. For rigid metallic conduit (RMC), only threaded type fitting are permitted for wet or damp locations.

d. Flexible metal conduit is permitted for initiating device circuits, notification appliance circuits and signaling line circuits 6 feet in length or less. Use liquid tight flexible metal conduit in damp and wet locations.

e. Schedule 40 (minimum) polyvinyl chloride (PVC) is permitted where conduit is routed underground or underground below floor slabs. Convert non-metallic conduit, other than PVC Schedule 40 or 80, to plastic-coated rigid, or IMC, steel conduit before turning up through floor slab.

f. Exterior wall penetrations must be weathertight. Conduit must be sealed to prevent the infiltration of moisture.

g. For Class "A" or "X" circuits with conductor lengths of 10 feet or less, the conductors must be permitted to be installed in the same raceway in accordance with NFPA 72.

3.3.4 Conductor Terminations

Labeling of conductors at terminal blocks in terminal cabinets, FMCU, and the LOC must be provided at each conductor connection. Each conductor or cable must have a shrink-wrap label to provide a unique and specific designation. Each terminal cabinet, FMCU, and remote FMCU must contain a laminated drawing that indicates each conductor, its label, circuit, and terminal. The laminated drawing must be neat, using 12 point lettering minimum size, and mounted within each cabinet, control unit, or unit so that it does not interfere with the wiring or terminals. Maintain existing color code scheme where connecting to existing equipment.

3.4 CONNECTION OF NEW SYSTEM

The following new system connections must be made during the last phase of construction, at the beginning of the pre-Government tests. New system connections must include:

a. Connection of new relays to existing magnetic door hold-open devices.

b. Connection of new elevator recall relays to existing wiring and conduit.

c. Connection of new system transmitter to existing installation fire reporting system.

Once these connections are made, system must be left energized. Report

immediately to the Contracting Officer, coordination and field problems resulting from the connection of the above components.

3.5 FIRESTOPPING

Provide firestopping for holes at conduit penetrations through floor slabs, fire-rated walls, partitions with fire-rated doors, corridor walls, and vertical service shafts.

3.6 PAINTING

a. In unfinished areas (including areas above drop ceilings), paint all exposed electrical conduit (serving fire alarm equipment), fire alarm conduit, surface metal raceway, junction boxes and covers red. In lieu of painting conduit, the contractor may utilize red conduit with a factory applied finish.

b. In finished areas, paint exposed electrical conduit (serving fire alarm equipment), fire alarm conduit, surface metal raceways, junction boxes, and electrical boxes to match adjacent finishes. The inside cover of the junction box must be identified as "Fire Alarm" and the conduit must have painted red bands 3/4-inch wide at 10-foot centers and at each side of a floor, wall, or ceiling penetration.

c. Painting must comply with Section 09 90 00 PAINTS AND COATINGS.

3.7 FIELD QUALITY CONTROL

3.7.1 Test Procedures

Submit detailed test procedures, prepared and signed by the NICET Level III or IV Fire Alarm Technician, and the representative of the installing company, and reviewed by the QFPE 60 days prior to performing system tests. Detailed test procedures must list all components of the installed system such as initiating devices and circuits, notification appliances and circuits, signaling line devices and circuits, control devices/equipment, batteries, transmitting and receiving equipment, power sources/supply, annunciators, special hazard equipment, emergency communication equipment, interface equipment, and surge protective devices. Test procedures must include sequence of testing, time estimate for each test, and sample test data forms. The test data forms must be in a check-off format (pass/fail with space to add applicable test data; similar to the forms in NFPA 72 and NFPA 4.) The test procedures and accompanying test data forms must be used for the pre-Government testing and the Government testing. The test data forms must record the test results and must:

a. Identify the NFPA Class of all Initiating Device Circuits (IDC), and Notification Appliance Circuits (NAC), Voice Notification System Circuits (NAC Audio), and Signaling Line Circuits (SLC).

b. Identify each test required by NFPA 72 Test Methods and required test herein to be performed on each component, and describe how these tests must be performed.

c. Identify each component and circuit as to type, location within the facility, and unique identity within the installed system. Provide necessary floor plan sheets showing each component location, test location, and alphanumeric identity.

d. Identify all test equipment and personnel required to perform each test including equipment necessary for smoke detector testing. The use of magnets is not permitted.

e. Provide space to identify the date and time of each test. Provide space to identify the names and signatures of the individuals conducting and witnessing each test.

3.7.2 Pre-Government Testing

3.7.2.1 Verification of Compliant Installation

Conduct inspections and tests to ensure that devices and circuits are functioning properly. Tests must meet the requirements of paragraph entitled "Minimum System Tests" as required by NFPA 72. The contractor and an authorized representative from each supplier of equipment must be in attendance at the pre-Government testing to make necessary adjustments. After inspection and testing is complete, provide a signed Verification of Compliant Installation letter by the QFPE that the installation is complete, compliant with the specification and fully operable. The letter must include the names and titles of the witnesses to the pre-Government tests. Provide all completion documentation as required by NFPA 72 including all referenced annex sections and the test reports noted below.

a. NFPA 72 Record of Completion.

b. NFPA 72 Record of Inspection and Testing.

c. Fire Alarm and Emergency Communication System Inspection and Testing Form.

d. Audibility test results with marked-up test floor plans.

e. Intelligibility test results with marked-up floor plans.

f. Documentation that all tests identified in the paragraph "Minimum System Tests" are complete.

3.7.2.2 Request for Government Final Test

When the verification of compliant installation has been completed, submit a formal request for Government final test to the Designated Fire Protection Engineer (DFPE). Government final testing will not be scheduled until the DFPE has received copies of the request for Government final testing and Verification of Compliant Installation letter with all required reports. Government final testing will not be performed until after the connections to the installation-wide fire reporting system and the installation-wide mass notification system have been completed and tested to confirm communications are fully functional. Submit request for test at least 15 calendar days prior to the requested test date.

3.7.3 Correction of Deficiencies

If equipment was found to be defective or non-compliant with contract requirements, perform corrective actions and repeat the tests. Tests must be conducted and repeated if necessary until the system has been demonstrated to comply with all contract requirements.

3.7.4 Government Final Tests

The tests must be performed in accordance with the approved test procedures in the presence of the DFPE. Furnish instruments and personnel required for the tests. The following must be provided at the job site for Government Final Testing:

a. The manufacturer's technical representative.

b. The contractor's Qualified Fire Protection Engineer (QFPE).

c. Marked-up red line drawings of the system as actually installed.

d. Loop resistance test results.

e. Complete program printout including input/output addresses.

f. Copy of pre-Government Test Certificate, test procedures and completed test data forms.

g. Audibility test results with marked-up floor plans.

h. Intelligibility test results with marked-up floor plans.

Government Final Tests will be witnessed by the, Designated Fire Protection Engineer, Qualified Fire Protection Engineer (QFPE). At this time, any and all required tests noted in the paragraph "Minimum System Tests" must be repeated at their discretion.

3.8 MINIMUM SYSTEM TESTS

3.8.1 System Tests

Test the system in accordance with the procedures outlined in NFPA 72. The required tests are as follows:

a. Loop Resistance Tests: Measure and record the resistance of each circuit with each pair of conductors in the circuit short-circuited at the farthest point from the circuit origin. The tests must be witnessed by the Contracting Officer and test results recorded for use at the final Government test.

b. Verify the absence of unwanted voltages between circuit conductors and ground. The tests must be accomplished at the pre-Government test with results available at the final system test.

c. Verify that the control unit is in the normal condition as detailed in the manufacturer's O&M manual.

d. Test each initiating device and notification appliance and circuit for proper operation and response at the control unit. Smoke detectors must be tested in accordance with manufacturer's recommended calibrated test method. Use of magnets is prohibited. Testing of duct smoke detectors must comply with the requirements of NFPA 72 except disconnect at least 20 percent of devices. If there is a failure at these devices, then supervision must be tested at each device.

e. Test the system for specified functions in accordance with the

contract drawings and specifications and the manufacturer's O&M manual.

f. Test both primary power and secondary power. Verify, by test, the secondary power system is capable of operating the system for the time period and in the manner specified.

g. Determine that the system is operable under trouble conditions as specified.

h. Visually inspect wiring.

i. Test the battery charger and batteries.

j. Verify that software control and data files have been entered or programmed into the FMCU. Hard copy records of the software must be provided to the Contracting Officer.

k. Verify that red-line drawings are accurate.

l. Measure the current in circuits to ensure there is the calculated spare capacity for the circuits.

m. Measure voltage readings for circuits to ensure that voltage drop is not excessive.

n. Disconnect the verification feature for smoke detectors during tests to minimize the amount of smoke needed to activate the sensor. Testing of smoke detectors must be conducted using real smoke or the use of canned smoke which is permitted.

o. Measure the voltage drop at the most remote appliance (based on wire length) on each notification appliance circuit.

p. Verify the documentation cabinet is installed and contains all as-built shop drawings, product data sheets, design calculations, site-specific software data package, and all documentation required by paragraph titled "Test Reports".

3.8.2 Audibility Tests

Sound pressure levels from audible notification appliances must be a minimum of 15 dBa over ambient with a maximum of 110 dBa in any occupiable area. The provisions for audible notification (audibility and intelligibility) must be met with doors, fire shutters, movable partitions, and similar devices closed.

3.8.3 Intelligibility Tests

Intelligibility testing of the System must be accomplished in accordance with NFPA 72 for Voice Evacuation Systems, and ASA S3.2. Following are the specific requirements for intelligibility tests:

a. Intelligibility Requirements: Verify intelligibility by measurement after installation.

b. Ensure that a CIS value greater than the required minimum value is provided in each area where building occupants typically could be found. The minimum required value for CIS is .7. Rounding of values is permitted.

c. Areas of the building provided with hard wall and ceiling surfaces (such as metal or concrete) that are found to cause excessive sound reflections may be permitted to have a CIS score less than the minimum required value if approved by the DFPE, and if building occupants in these areas can determine that a voice signal is being broadcast and they must walk no more than 33 feet to find a location with at least the minimum required CIS value within the same area.

d. Areas of the building where occupants are not expected to be normally present are permitted to have a CIS score less than the minimum required value if personnel can determine that a voice signal is being broadcast and they must walk no more than 50 feet to a location with at least the minimum required CIS value within the same area.

e. Take measurements near the head level applicable for most personnel in the space under normal conditions (e.g., standing, sitting, sleeping, as appropriate).

f. The distance the occupant must walk to the location meeting the minimum required CIS value must be measured on the floor or other walking surface as follows:

(1) Along the centerline of the natural path of travel, starting from any point subject to occupancy with less than the minimum required CIS value.

(2) Curving around any corners or obstructions, with a 12 inches clearance there from.

(3) Terminating directly below the location where the minimum required CIS value has been obtained.

Use commercially available test instrumentation to measure intelligibility as specified by NFPA 72 as applicable. Use the mean value of at least three readings to compute the intelligibility score at each test location.

3.9 SYSTEM ACCEPTANCE

Following acceptance of the system, as-built drawings and O&M manuals must be delivered to the Contracting Officer for review and acceptance. The drawings must show the system as installed, including deviations from both the project drawings and the approved shop drawings. These drawings must be submitted within two weeks after the final Government test of the system. At least one set of as-built (marked-up) drawings must be provided at the time of, or prior to the Final Government Test.

a. The drawings must be prepared electronically and sized no less than the contract drawings. Furnish one set of CDs or DVDs containing software back-up and CAD based drawings in latest version of AutoCAD, DXF and portable document formats of as-built drawings and schematics.

b. Include complete wiring diagrams showing connections between devices and equipment, both factory and field wired.

c. Include a riser diagram and drawings showing the as-built location of devices and equipment.

d. Provide Operation and Maintenance (O&M) Instructions.

In existing buildings, the transfer of devices from the existing system to the new system and the permission to begin demolition of the old fire alarm system will not be permitted until the as-built drawings and O&M manuals are received.

3.10 INSTRUCTION OF GOVERNMENT EMPLOYEES

3.10.1 Instructor

Provide the services of an instructor, who has received specific training from the manufacturer for the training of other persons regarding the operation, inspection, testing, and maintenance of the system provided. The instructor must train the Government employees designated by the Contracting Officer, in the care, adjustment, maintenance, and operation of the fire alarm system. The instructor must be thoroughly familiar with all parts of this installation. The instructor must be trained in operating theory as well as in practical O&M work. Submit the instructors information and qualifications including the training history.

3.10.2 Required Instruction Time

Provide instruction after final acceptance of the system. The instruction must be given during regular working hours on such dates and times selected by the Contracting Officer. The instruction may be divided into two or more periods at the discretion of the Contracting Officer. The training must allow for rescheduling for unforeseen maintenance and fire department responses.

3.10.3 Technical Training Manual

Provide, in manual format, lesson plans, operating instructions, maintenance procedures, and training data for the training courses. The operations training must familiarize designated government personnel with proper operation of the installed system. The maintenance training course must provide the designated government personnel adequate knowledge required to diagnose, repair, maintain, and expand functions inherent to the system.

3.11 EXTRA MATERIALS

3.11.1 Repair Service/Replacement Parts

Repair services and replacement parts for the system must be available for a period of 10 years after the date of final acceptance of this work by the Contracting Officer. During the warranty period, the service technician must be on-site within 24 hours after notification. All repairs must be completed within 24 hours of arrival on-site.

During the warranty period, the installing fire alarm contractor is responsible for conducting all required testing and maintenance in accordance with the requirements and recommended practices of NFPA 72 and the system manufacturer. Installing fire alarm contractor is NOT responsible for any damage resulting from abuse, misuse, or neglect of equipment by the end user.

3.11.2 Spare Parts

Spare parts furnished must be directly interchangeable with the

corresponding components of the installed system. Spare parts must be suitably packaged and identified by nameplate, tagging, or stamping. Spare parts must be delivered to the Contracting Officer at the time of the Government testing and must be accompanied by an inventory list.

3.11.3 Document Storage Cabinet

Upon completion of the project, but prior to project close-out, place in the document storage cabinet copies of the following record documentation:

a. As-built shop drawings

b. Product data sheets

c. Design calculations

d. Site-specific software data package

e. All documentation required by SD-06.

-- End of Section --

SECTION 32 01 19.61

SEALING OF JOINTS IN RIGID PAVEMENT

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 C1016	(2014; R 2022) Standard Test Method for Determination of Water Absorption of Sealant Backing (Joint Filler) Material
ASTM D789	(2015) Determination of Relative Viscosity and Moisture Content of Polyamide (PA)
ASTM D5249	(2010; R 2016) Standard Specification for Backer Material for Use with Cold-and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints
ASTM D5893/D5893M	(2016) Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Concrete Pavements

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Sealants

Submit catalog cuts, specifications, Safety Data Sheets and other information documenting conformance to Contract requirements.

Manufacturer's Recommendations

SD-04 Samples

Sealants

Provide for testing a 5-gal sample of each sealant with associated primer to the Contracting Officer a minimum of 60 days prior to its use on the job. Provide factory-sealed containers with a factory applied label showing the following information:

Name of sealant

Identification of component, or primer

Specification number and type

Manufacturer's name

Manufacturer's lot and batch number

Date of Manufacture (month and year)

Shelf life retest date (month and year)

List of hazardous components

Quantity of material in container (volume)

Storage instructions

Instructions for use

Blocking Media/Backup Materials

Backer Rod

Bond Breaking Tapes

SD-06 Test Reports

Sealants

SD-07 Certificates

Equipment List

SD-08 Manufacturer's Instructions

Sealants

Provide instructions that include, but not limited to: storage requirements, ambient temperature and humidity ranges, and moisture condition of joints for successful installation; requirements for preparation of joints; safe heating temperature; mixing instructions; installation equipment and procedures; application and disposal requirements; compatibility of sealant with filler material; curing requirements; and restrictions to be adhered to in order to reduce hazards to personnel or to the environment. Submit instructions at least 30 days prior to use.

1.3 QUALITY ASSURANCE

1.3.1 Test Requirements

Test the sealant and backup or separating material for conformance with the referenced material specification. Perform testing of the materials in an approved independent laboratory and submit certified copies of the test reports for approval 30 days prior to the use of the materials at the job

site. Submit samples to be retained by the Government for possible future testing if the materials appear defective during or after application. Conformance with the requirements of the laboratory tests specified does not constitute final acceptance of the materials. Base final acceptance on the performance of the in-place materials. Submit samples of the materials (sealant, primer if required, and backup material), in sufficient quantity for testing and approval 30 days prior to the beginning of work. Do not use material until it has been approved.

1.4 DELIVERY, STORAGE, AND HANDLING

Inspect materials delivered to the site for visible damage, and unload and store with a minimum of handling. Deliver joint materials in original sealed containers and protect from freezing or overheating. Provide jobsite storage facilities capable of maintaining temperature ranges within manufacturers recommendations.

1.5 ENVIRONMENTAL REQUIREMENTS

Do not proceed with work when weather conditions detrimentally affect the quality of cleaning joints or applying sealants. Proceed with joint preparation and sealing only when weather conditions are in accordance with manufacturer's instructions. Install joint sealant to dry surfaces and protect sealant and bond breakers from moisture.

1.6 TRAFFIC CONTROL

Do not permit vehicular or heavy equipment traffic on the pavement in the area of the joints being sealed during the protection and curing period of the sealant. Permit traffic on the pavement at the end of the curing period.

PART 2 PRODUCTS

2.1 SEALANTS

Use materials for sealing joints in accordance with ASTM D5893/D5893M based on the type of area as follows:

Area	Sealing Material
Expansion and construction joints adjacent to hangar door	ASTM D5893/D5893M, NON-SAG

2.2 PRIMERS

Use primers in accordance with the recommendation of the manufacturer.

2.3 BOND BREAKERS

2.3.1 Blocking Media/Backup Materials

Provide backup (joint filler) material that is a compressible, nonshrinking, nonstaining, nonabsorbing, nonreactive material with the sealant. Use backup material compliant with ASTM D5249. Use material with a melting point at least 5 degrees F greater than the pouring temperature of the sealant being used when tested in accordance with ASTM D789. Use material with a water absorption of not more than 5

percent of the sample weight when tested in accordance with ASTM C1016. Use backup (joint filler) material that is 25 plus or minus 5 percent larger in diameter than the nominal width of the crack. Use blocking media consistent with the sealant manufacturer's installation instructions.

2.3.2 Bond Breaking Tapes

Provide a bond breaking tape or separating material that is a flexible, nonshrinkable, nonabsorbing, nonstaining, and nonreacting adhesive-backed tape. Use material with a melting point at least 5 degrees F greater than the pouring temperature of the sealant being used when tested in accordance with ASTM D789. Use bond breaker tape approximately 1/8 in wider than the nominal width of the joint and that does not bond to the sealant. Use bond breaking tape consistent with the sealant manufacturer's installation instructions.

PART 3 EXECUTION

3.1 EXECUTING EQUIPMENT

Submit equipment list and description of the equipment to be used and a statement from the supplier of the sealant that the proposed equipment is acceptable for installing the specified sealant. Use equipment for heating, mixing, and installing seals in accordance with the instructions provided by the sealant manufacturer. Provide equipment, tools, and accessories necessary to clean existing joints and install liquid joint sealants. Maintain machines, tools, and other equipment in proper working condition. Submit a list of proposed equipment to be used in performance of construction work including descriptive data, 30 days prior to use on the project.

3.1.1 Joint Cleaning Equipment

3.1.1.1 Tractor-Mounted Routing and Plowing Tool

Use routing tools for removing old sealant from the joints, of such shape and dimensions and so mounted on the tractor that do not damage the sides of the joints. Use tools designed to be adjusted to remove the old material to varying depths and widths as required. Use equipment capable of maintaining accurate cutting depth and width control. Use a joint plow equipped with a spring or hydraulic mechanism to release pressure on the tool prior to spalling the concrete. Do not permit the use of V-shaped tools or rotary impact routing devices. Permit the use of hand-operated spindle routing devices to clean and enlarge random cracks.

3.1.1.2 Concrete Saw

Provide a self-propelled power saw, with water-cooled diamond or abrasive saw blades, for cutting joints to the depths and widths specified, for refacing joints, cleaning sawed joints where sandblasting does not provide a clean joint, widening, or deepening existing joints as specified without damaging the sides, bottom, or top edge of joints. Permit single or gang type blades with one or more blades mounted in tandem for fast cutting. Select saw adequately powered and sized to cut specified opening with not more than two passes of the saw through the joint.

3.1.1.3 Waterblasting Equipment

Include with the waterblasting equipment a trailer-mounted water tank,

pumps, high-pressure hose, wand with safety release cutoff control, nozzle, and auxiliary water resupply equipment. Provide water tank and auxiliary resupply equipment of sufficient capacity to permit continuous operations. Use a nozzle with an adjustable guide that holds the nozzle aligned with the joint approximately 1 in above the pavement surface. Adjust the height, angle of inclination and the size of the nozzle to obtain satisfactory results. Use a pressure gauge mounted at the pump that shows the pressure in psi at which the equipment is operating.

3.1.1.4 Air Compressor

Use a portable air compressor capable of operating the sandblasting equipment and capable of blowing out sand, water, dust adhering to sidewalls of concrete, and other objectionable materials from the joints. Use a compressor that provides air at a pressure not less than 90 psi and a minimum rate of 150 cubic ft of air per minute at the nozzles and free of oil.

3.1.1.5 Vacuum Sweeper

Use a self-propelled, vacuum pickup sweeper capable of completely removing loose sand, water, joint material, and debris from pavement surface.

3.1.1.6 Hand Tools

Permit the use of hand tools, such as brooms and chisels, when approved, for removing defective sealant from a crack and repairing or cleaning the crack faces.

3.1.2 Sealing Equipment

Use joint sealing equipment of a type required by the sealant manufacturer's installation instructions. Use equipment capable of installing sealant to the depths, widths and tolerances indicated. Do not proceed with joint sealing when malfunctions are noted until the malfunctions are corrected.

3.1.2.1 Cold-Applied, Single-Component Sealing Equipment

Use equipment for installing ASTM D5893/D5893M single component joint sealants that consists of an extrusion pump, air compressor, following plate, hoses, and nozzle for transferring the sealant from the storage container into the joint opening. Use a nozzle with dimensions that allows the tip of the nozzle to extend into the joint to allow sealing from the bottom of the joint to the top. Maintain the initially approved equipment in good working condition, serviced in accordance with the supplier's instructions, and unaltered in any way without obtaining prior approval. Use lined hoses and seals to prevent moisture penetration and withstand pumping pressures. Use equipment free of contamination from previously used or other type sealant. Permit use of small hand-held air-powered equipment (i.e., caulking guns) for small applications.

3.2 PREPARATION OF JOINTS

Unless otherwise indicated, remove existing material, saw, clean and reseal joints. Do not proceed with final cleaning operations by more than one working day in advance of sealant. Clean joints by removing existing joint sealing compound, bond-breakers, dirt, laitance, curing compound, filler, and protrusions of hardened concrete from the sides and upper

edges of the joint space to be sealed and other foreign material with the equipment. Do not permit cleaning procedures that damage joints or previously repaired patches by chipping or spalling. Remove existing sealant to the required depth. Precise shape and size of existing joints vary, and conditions of joint walls and edges vary and include but are not limited to rounding, square edges, sloping, chips, voids, depressions, and projections.

3.2.1 Existing Sealant Removal

Cut loose the in-place sealant from both joint faces and to the required depth, using the concrete saw as specified in paragraph EQUIPMENT. Provide a depth sufficient to accommodate blocking media and bond breakers that are required to maintain the depth of new sealant to be installed. For expansion joints, remove existing sealant to a depth of not less than the indicated depth. 1 in. When existing preformed expansion-joint material is more than 1 in below the surface of the pavement, remove existing sealant to the top of the preformed joint filler. Prior to further cleaning operations, remove loose old sealant remaining in the joint opening by blowing with compressed air. Permit use of hand tools to remove sealant from random cracks. Do not permit chipping, spalling, or other damage to the concrete. Clean pavement surface with vacuum sweeper. Protect previously cleaned joints from being contaminated by subsequent cleaning operations.

3.2.2 Sawing

3.2.2.1 Refacing of Joints

Accomplish refacing of joints using a concrete saw as specified in paragraph EQUIPMENT to remove residual old sealant and a minimum of concrete from the joint face to provide exposure of newly cleaned concrete, and, if required, to enlarge the joint opening to the width and depth shown on the drawings. Provide exposure of newly clean concrete through removal. Remove burrs and irregularities from sides of joint faces. Stiffen the blade with a sufficient number of dummy (used) blades or washers. Clean, immediately following the sawing operation, the joint opening using a water jet to remove saw cuttings and debris and adjacent concrete surface. Protect adjacent previously cleaned joint spaces from receiving water and debris during the cleaning operation.

a. Joint Widening (Except Expansion Joints): Saw joints having grooves less than 3/8 in wide and less than 1 in deep to a minimum width of 1/2 in and to the minimum depth, of 1 in .

3.2.2.2 Refacing of Random Cracks

Accomplish sawing of the cracks using a power-driven concrete saw as specified in paragraph EQUIPMENT. Use a saw blade 6 in or less in diameter to enable the saw to follow the trace of the crack. Stiffen the blade with dummy (or used) blades or washers. Immediately following the sawing operation, clean the crack opening using a water jet to remove saw cuttings and debris.

3.2.3 Final Cleaning of Joints

3.2.4 Bond Breaker

At the time the joints receive the final cleaning and are dry, install

bond breaker material as indicated with a steel wheel or other approved device.

3.2.4.1 Blocking Media (Backer Rod) (Except for Expansion Joints)

When the joint opening is of a greater depth than indicated for the sealant depth, plug or seal off the lower portion of the joint opening using a blocking media/back-up material to prevent the entrance of the sealant below the specified depth. Take care to ensure that the blocking media/backup material is placed at the specified depth and is not stretched or twisted during installation.

3.2.4.2 Bond Breaking Tape

Where inserts or filler materials contain bitumen, or the depth of the joint opening does not allow for the use of a backup material, insert a bond breaker separating tape to prevent incompatibility with the filler materials and three-sided adhesion of the sealant. Bond the tape to the bottom of the joint opening to prevent it from floating up into the new sealant.

3.2.5 Rate of Progress of Joint Preparation

Limit the stages of joint preparation, including sandblasting, air pressure cleaning and placing of the back-up material to only that lineal footage that can be sealed during the same day.

3.2.6 Disposal of Debris

Sweep pavement surface to remove excess joint material, dirt, water, sand, and other debris by vacuum sweepers or hand brooms. Remove the debris immediately to a point off station.

3.3 PREPARATION OF SEALANT

3.3.1 Single-Component, Cold-Applied Sealants

Inspect the ASTM D5893/D5893M sealant and containers prior to use. Reject materials that contain water, hard caking of any separated constituents, nonreversible jell, or materials that are otherwise unsatisfactory. Do not reject sealants that exhibit settlement of constituents in a soft mass that can be readily and uniformly remixed in the field with simple tools.

3.4 INSTALLATION OF SEALANT

3.4.1 Time of Application

After approval of the test section, seal joints immediately following final cleaning and placing of bond breakers. Commence sealing joints when walls are dust free and dry, and when weather conditions meet sealant manufacturer's instructions. If the above conditions cannot be met, or when rain interrupts sealing operations, reclean and permit the joints to dry prior to installing the sealant.

3.4.2 Sealing Joints

Do not install joint sealant until joints to be sealed have been inspected and approved. Install bond breaker just prior to pouring sealant. Fill the joints with sealant from bottom up until joints are uniformly filled

solid from bottom to top using the specified equipment for the type of sealant required. Fill joints to 1/8 in plus or minus 1/16 in below top of pavement, and without formation of voids or entrapped air. Do not permit gravity methods or pouring pots to be used to install the sealant material. Except as otherwise permitted, tool the sealant immediately after application to provide firm contact with the joint walls and to form the indicated sealant profile below the pavement surface. Remove excess sealant that has been inadvertently spilled on the pavement surface. Do not permit traffic over newly sealed pavement until authorized. When a primer is recommended by the manufacturer, apply it evenly to the joint faces in accordance with the manufacturer's recommendations. Check sealed joints frequently to ensure that newly installed sealant is cured to a tack-free condition within the specified time. Protect new sealant from rain during curing period.

3.5 INSPECTION/FIELD QUALITY CONTROL

3.5.1 Joint Cleaning

Inspect joints during the cleaning process to correct improper equipment and cleaning techniques that damage the concrete pavement in any manner. Approve cleaned joints prior to installation of the separating or back-up material and joint sealant.

3.5.2 Sampling Sealant

Obtain a one gal sample of each type of sealant on the project from material used for each 10,000 linear ft or less of joints sealed. Store samples according to sealant manufacturer's instructions. Retain samples until final acceptance of the work.

3.5.3 Sealant Application Equipment

Inspect the application equipment to ensure conformance to temperature requirements, proper proportioning and mixing (if two-component sealant) and proper installation. Suspend operations if there is evidences of bubbling, improper installation, or failure to cure or set until causes of the deficiencies are determined and corrected.

3.5.4 Joint Sealant

Inspect the joint sealant for proper rate of cure and set, bonding to the joint walls, cohesive separation within the sealant, reversion to liquid, entrapped air and voids. Remove sealants exhibiting these deficiencies prior to the final acceptance of the project from the joint, wasted, and replace at no additional cost to the Government. Obtain approval for each joint seal installation.

3.6 ACCEPTANCE

Reject sealer that fails to cure properly, or fails to bond to joint walls, or reverts to the uncured state, or fails in cohesion, or shows excessive air voids, blisters, surface defects, swelling, or other deficiencies, or is not properly recessed within indicated tolerances. Remove rejected sealer and reclean and reseal joints. Perform removal and

reseal work promptly by and at the expense of the Contractor.

3.7 CLEAN-UP

Upon completion of the project, remove unused materials from the site and leave the pavement in a clean condition.

-- End of Section --

SECTION 32 11 20

BASE COURSE FOR RIGID PAVING

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 C29/C29M	(2023) Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate
ASTM C117	(2023) Standard Test Method for Materials Finer than 75-um (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C131/C131M	(2020) Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136/C136M	(2019) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D75/D75M	(2019) Standard Practice for Sampling Aggregates
ASTM D1556/D1556M	(2015; E 2016) Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method
ASTM D1557	(2012; E 2015) Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3) (2700 kN-m/m3)
ASTM D2487	(2017; R 2025) Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D3665	(2012; R 2017) Standard Practice for Random Sampling of Construction Materials
ASTM D4318	(2017; E 2018) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4718/D4718M	(2015) Standard Practice for Correction of Unit Weight and Water Content for Soils Containing Oversize Particles

ASTM D6938	(2017a) Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
ASTM D7928	(2017) Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis
ASTM E11	(2024) Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves

1.2 DEGREE OF COMPACTION

Degree of compaction required, except as noted in the second sentence, is expressed as a percentage of the maximum laboratory dry density obtained by the test procedure presented in ASTM D1557. Since ASTM D1557 applies only to soils that have 30 percent or less by weight of their particles retained on the 3/4 inch sieve, express the degree of compaction for material having more than 30 percent by weight of their particles retained on the 3/4 inch sieve as a percentage of the laboratory maximum dry density in accordance with ASTM D1557 Method C and corrected with ASTM D4718/D4718M.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Plant, Equipment, and Tools; G

SD-06 Test Reports

Initial Tests; G

In-Place Tests; G

1.4 QUALITY ASSURANCE

Perform sampling and testing using a laboratory approved in accordance with Section 01 45 00 QUALITY CONTROL. Do not start work requiring testing until the testing laboratory has been inspected and approved. Test the materials to establish compliance with the specified requirements and perform testing at the specified frequency. Furnish copies of test results within 24 hours of completion of the tests.

1.4.1 Sampling

Take samples for laboratory testing in conformance with ASTM D75/D75M.

1.4.2 Tests

1.4.2.1 Gradation

Perform gradation in conformance with ASTM C117 and ASTM C136/C136M using sieves conforming to ASTM E11. Perform particle-size analysis of the soils in conformance with ASTM D7928.

1.4.2.2 Liquid Limit and Plasticity Index

Determine liquid limit and plasticity index in accordance with ASTM D4318.

1.4.2.3 Moisture-Density Determinations

Determine the laboratory maximum dry density and optimum moisture in accordance with paragraph DEGREE OF COMPACTION.

1.4.2.4 Field Density Tests

Measure field density in accordance with ASTM D1556/D1556M, or ASTM D6938. For the method presented in ASTM D1556/D1556M, use the base plate, as shown in the drawing. For the method presented in ASTM D6938, check the calibration curves and adjust them, if necessary, using only the sand cone method as described in Annex A2, of the ASTM publication. Use ASTM D6938 to determine the moisture content of the soil. Check the calibration curves furnished with the moisture gauges along with density calibration checks as described in ASTM D6938. Make the calibration checks of both the density and moisture gauges using the prepared containers of material method, as described in Annex A2, in ASTM D6938, on each different type of material to be tested at the beginning of a job and at intervals as directed. Submit calibration curves and related test results prior to using the device or equipment being calibrated.

1.4.2.5 Wear Test

Perform wear tests on rigid pavement base course material in conformance with ASTM C131/C131M.

1.4.2.6 Weight of Slag

Determine weight per cubic foot of slag in accordance with ASTM C29/C29M.

1.5 ENVIRONMENTAL REQUIREMENTS

Perform construction when the atmospheric temperature is above 35 degrees F. When the temperature falls below 35 degrees F, protect all completed areas by approved methods against detrimental effects of freezing. Correct completed areas damaged by freezing, rainfall, or other weather conditions to meet specified requirements.

1.6 ACCEPTANCE

1.6.1 Tolerances

Acceptance of rigid pavement base course is based on compliance with the tolerances presented in Table 1. Remove and replace any course identified by the failing tests.

TABLE 1	
Measurement	Tolerance
Grade	Plus 0, Minus 1/2 inch
Smoothness	Plus/Minus 1/2 inch
Total Thickness	Plus/Minus 1/2 inch
Average Job Thickness	Plus/Minus 1/4 inch
Compaction	
Rigid Pavement Base Course	Mimimum 95 percent

1.6.2 Test Section

A test section is not required.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Rigid Pavement Base Course

Provide aggregates consisting of crushed stone or gravel. Provide aggregates which are durable and sound, free from lumps and balls of clay, organic matter, objectionable coatings, and other foreign material. Limit the percentage of loss to a maximum of 50 percent after 500 revolutions when tested in accordance with ASTM C131/C131M. Provide aggregates with at least 75 percent by weight retained on each sieve having one freshly fractured face with the area at least equal to 75 percent of the smallest midsectional area of the piece. Provide aggregate that is reasonably uniform in density and quality. Provide aggregates having a maximum size of2 inches, a minimum of 70 percent passing the 3/4 inch sieve, and within the limits specified as follows:

TABLE 3	
Maximum Allowable Percentage by Weight Passing Square-Mesh Sieve	
Sieve Designation	Rigid Pavement Base Course
No. 10	85
No. 200	8

Limit particles having diameters less than 0.02 mm to a maximum of 3 percent by weight of the total sample tested as determined in accordance with ASTM D7928. Limit the portion of any blended component and of the completed course passing the No. 40 sieve to be either nonplastic or have a liquid limit not greater than 25 and a plasticity index not greater than 8. Provide any additional stability required to maintain a working platform for construction equipment. If a test section can demonstrate that a material has adequate stability to support construction equipment,

the fractured face requirement can be deleted, subject to approval by the Government.

2.2 TESTS, INSPECTIONS, AND VERIFICATIONS

2.2.1 Initial Tests

Perform one of each of the following Initial Tests on the proposed material prior to commencing construction to demonstrate that the proposed material meets all specified requirements prior to installation. Complete this testing for each source if materials from more than one source are proposed.

a. Gradation including 0.02 mm size material.

b. Liquid limit and plasticity index.

c. Moisture-density relationship.

d. Wear.

Submit certified copies of test results for approval not less than 30 days before material is required for the work.

2.2.2 Approval of Material

Tentative approval of material will be based on initial test results.

2.3 EQUIPMENT, TOOLS, AND MACHINES

All plant, equipment, and tools used in the performance of the work are subject to approval by the Government before the work is started. Maintain all plant, equipment, and tools in satisfactory working condition at all times. Submit a list of proposed equipment, including descriptive data. Use equipment capable of minimizing segregation, producing the required compaction, meeting grade controls, thickness control, and smoothness requirements as set forth herein.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Provide adequate drainage during the entire period of construction to prevent water from collecting or standing on the working area.

3.2 OPERATION OF AGGREGATE SOURCES

Condition aggregate sources on private lands in accordance with local laws and authorities.

3.3 STOCKPILING MATERIAL

Clear and level storage sites prior to stockpiling of material. Stockpile all materials, including approved material available from excavation and grading, in the manner and at the locations designated. Stockpile aggregates on the cleared and leveled areas designated to prevent segregation. Stockpile materials obtained from different sources separately.

3.4 PREPARATION OF UNDERLYING COURSE OR SUBGRADE

Clean the underlying course or subgrade of all foreign substances prior to constructing the rigid pavement base course. Do not construct rigid pavement base course on underlying course or subgrade that is frozen. Construct the surface of the underlying course or subgrade to meet specified compaction and surface tolerances. Correct ruts or soft yielding spots in the underlying courses, areas having inadequate compaction, and deviations of the surface from the specified requirements set forth herein by loosening and removing soft or unsatisfactory material and adding approved material, reshaping to line and grade, and recompacting to specified density requirements. For cohesionless underlying courses or subgrades containing sands or gravels, as defined in ASTM D2487, stabilize the surface prior to placement of the overlying course. Stabilize by mixing the overlying course material into the underlying course and compacting by approved methods. Consider the stabilized material as part of the underlying course and meet all requirements of the underlying course. Do not allow traffic or other operations to disturb the finished underlying course and maintain in a satisfactory condition until the overlying course is placed.

3.5 GRADE CONTROL

Provide a finished and completed rigid pavement base course conforming to the lines, grades, and cross sections shown. Place line and grade stakes as necessary for control.

3.6 MIXING AND PLACING MATERIALS

Mix and place the materials to obtain uniformity of the material at the water content specified. Make such adjustments in mixing or placing procedures or in equipment as directed to obtain the true grades, to minimize segregation and degradation, to reduce or accelerate loss or increase of water, and to provide a satisfactory course.

3.7 LAYER THICKNESS

Compact the completed course to the thickness indicated. Limit individual compacted lifts to a maximum thickness of 6 inches and a minimum thickness of 3 inches. Compact the course(s) to a total thickness that is within the tolerances of paragraph ACCEPTANCE. Where the measured thickness is more than 1/2 inch deficient, correct such areas by scarifying, adding new material of proper gradation, reblading, and recompacting as directed. Where the measured thickness is more than 1/2 inch thicker than indicated, the course will be considered as conforming to the specified thickness requirements. However, the requirements for the overlying course thickness and plan grade are still applicable. The average job thickness will be the average of all thickness measurements taken for the job and within the tolerances of paragraph ACCEPTANCE.

3.8 COMPACTION

Compact each lift of the material, as specified, with approved compaction equipment. For cohesive soils, maintain water content during the compaction procedure to within plus or minus 2 percent of optimum water content determined from laboratory tests as specified in this Section and for cohesionless soils, maintain a water content to facilitate compaction without bulking. Begin rolling at the outside edge of the surface and proceed to the center, overlapping on successive trips at least one-half

the width of the roller. Slightly vary the length of alternate trips of the roller. Adjust speed of the roller as needed so that displacement of the aggregate does not occur. Compact mixture with hand-operated power tampers in all places not accessible to the rollers. Make such adjustments in compacting or finishing procedures to obtain true grades, to minimize segregation and degradation, to reduce or increase water content, and to ensure a compliant rigid pavement base course. Remove any materials that are found to be non-compliant and replace with compliant material or rework, as directed, to meet the requirements of this specification.

3.9 FINISHING

Finish the surface of the top lift of rigid pavement base course after final compaction by cutting any overbuild to grade and rolling with a steel-wheeled roller. Do not add thin lifts of material to the top lift of rigid pavement base course to meet grade. If the elevation of the top lift of rigid pavement base course exceeds the tolerances of paragraph ACCEPTANCE, scarify the top lift to a depth of at least 3 inches and blend new material in and compact to bring to grade. Make adjustments to rolling and finishing procedures to minimize segregation and degradation, obtain grades, maintain moisture content, and insure an acceptable rigid pavement base course. If the surface becomes rough, corrugated, uneven in texture, or traffic marked prior to completion, scarify the non-compliant portion and rework and recompact it or replace as directed.

3.10 SMOOTHNESS TEST

Construct the top lift so that the surface shows no deviations exceeding the tolerances of paragraph ACCEPTANCE when tested with a 12 foot straightedge. Test the entire area in both a longitudinal and a transverse direction on parallel lines. Perform the transverse lines 15 feet or less apart, as directed. Perform the longitudinal lines at the centerline of each placement lane and at the 1/8th point in from each side of the lane. Hold the straightedge in contact with the surface and move ahead one-half the length of the straightedge for each successive measurement. Determine the amount of surface irregularity by placing the freestanding (unleveled) straightedge on the surface and measuring the maximum gap between the straightedge and the surface. Determine measurements along the entire length of the straight edge. Correct deviations exceeding the tolerances of Table 1 by removing material and replacing with new material, or by reworking existing material and compacting it to meet these specifications.

3.11 FIELD QUALITY CONTROL

3.11.1 In-Place Tests

Perform one of each of the following In-Place Tests on samples taken from the placed and compacted rigid pavement base course. Determine sample locations using random sampling in accordance with ASTM D3665. Take samples and test at the rates indicated.

a. Perform density tests on every lift of material placed and at a frequency of one set of tests for every 500 square yards, or portion thereof, of completed area.

b. Perform gradation including 0.02 mm size material on every lift of material placed and at a frequency of one gradation for every 1,000

square yards, or portion thereof, of material placed.

c. Perform liquid limit and plasticity index tests at the same frequency as the gradation.

d. Measure the thickness of each course at intervals providing at least one measurement for each 500 square yards or part thereof. Measure the thickness using test holes, at least 3 inches in diameter through the course.

3.11.2 Approval of Material

Final approval of the materials will be based on tests for gradation, liquid limit, and plasticity index performed on samples taken from the completed and fully compacted course(s).

3.12 TRAFFIC

Completed portions of the rigid pavement base course can be opened to limited traffic, provided there is no marring or distorting of the surface by the traffic. Do not allow heavy equipment on the completed rigid pavement base course except when necessary for construction. When it is necessary for heavy equipment to travel on the completed rigid pavement base course, protect the area against marring or damage to the completed work. Repair damage to meet these specifications.

3.13 MAINTENANCE

Maintain the completed course in a satisfactory condition until the full pavement section is completed and accepted. Immediately repair any defects and repeat repairs as often as necessary to keep the area intact. Retest any course that was not paved over prior to the onset of winter to verify that it still complies with the requirements of this specification. Rework or replace any area that is damaged as necessary to comply with this specification.

3.14 DISPOSAL OF UNSATISFACTORY MATERIALS

Dispose of any unsuitable materials that have been removed outside the limits of Government-controlled land. No additional payments will be made for materials that have to be replaced.

-- End of Section --

SECTION 32 13 14.13

CONCRETE PAVING FOR AIRFIELDS AND OTHER HEAVY DUTY PAVEMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO M 182	(2005; R 2021; E 2024) Standard Specification for Burlap Cloth Made from Jute or Kenaf and Cotton Mats

AMERICAN CONCRETE INSTITUTE (ACI)

ACI 201.1R	(2008) Guide for Conducting a Visual Inspection of Concrete in Service
ACI 211.1	(1991; R 2009) Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete
ACI 214R	(2011) Evaluation of Strength Test Results of Concrete
ACI 305R	(2020) Guide to Hot Weather Concreting
ACI 306R	(2016) Guide to Cold Weather Concreting
ACI 325.14R	(2017) Guide for Design and Proportioning of Concrete Mixtures for Pavements

ASTM INTERNATIONAL (ASTM)

ASTM A184/A184M	(2024) Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement
ASTM A615/A615M	(2024) Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
ASTM A996/A996M	(2016) Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement
ASTM A1064/A1064M	(2024) Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete

ASTM A1078/A1078M	(2019) Standard Specification for Epoxy-Coated Steel Dowels in Concrete Pavement
ASTM C31/C31M	(2025b) Standard Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C33/C33M	(2024a) Standard Specification for Concrete Aggregates
ASTM C78/C78M	(2022) Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
ASTM C88	(2018) Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C94/C94M	(2025) Standard Specification for Ready-Mixed Concrete
ASTM C117	(2023) Standard Test Method for Materials Finer than 75-um (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C123/C123M	(2023) Standard Test Method for Lightweight Particles in Aggregate
ASTM C125	(2025b) Standard Terminology Relating to Concrete and Concrete Aggregates
ASTM C131/C131M	(2020) Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136/C136M	(2019) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C138/C138M	(2024a) Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C142/C142M	(2017; R 2023) Standard Test Method for Clay Lumps and Friable Particles in Aggregates
ASTM C143/C143M	(2020) Standard Test Method for Slump of Hydraulic-Cement Concrete
ASTM C150/C150M	(2024) Standard Specification for Portland Cement
ASTM C172/C172M	(2017) Standard Practice for Sampling Freshly Mixed Concrete
ASTM C174/C174M	(2025) Standard Test Method for Measuring Thickness of Concrete Elements Using Drilled Concrete Cores

ASTM C192/C192M	(2025) Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory
ASTM C231/C231M	(2024) Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C260/C260M	(2024) Standard Specification for Air-Entraining Admixtures for Concrete
ASTM C295/C295M	(2019) Standard Guide for Petrographic Examination of Aggregates for Concrete
ASTM C494/C494M	(2024) Standard Specification for Chemical Admixtures for Concrete
ASTM C595/C595M	(2025) Standard Specification for Blended Hydraulic Cements
ASTM C618	(2025a) Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
ASTM C666/C666M	(2015) Resistance of Concrete to Rapid Freezing and Thawing
ASTM C881/C881M	(2020a) Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete
ASTM C989/C989M	(2025) Standard Specification for Slag Cement for Use in Concrete and Mortars
ASTM C1017/C1017M	(2013; E 2015) Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete
ASTM C1064/C1064M	(2023) Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM C1077	(2025a) Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM C1260	(2023) Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C1567	(2025) Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)
ASTM C1602/C1602M	(2022) Standard Specification for Mixing

	Water Used in Production of Hydraulic Cement Concrete
ASTM C1646/C1646M	(2024) Making and Curing Test Specimens for Evaluating Frost Resistance of Coarse Aggregate in Air-Entrained Concrete by Rapid Freezing and Thawing
ASTM C1895	(2020) Standard Test Method for Determination of Mohs Scratch Hardness
ASTM D75/D75M	(2019) Standard Practice for Sampling Aggregates
ASTM D1751	(2018) Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)
ASTM D2196	(2010) Standard Test Methods for Rheological Properties of Non-Newtonian Materials by Rotational (Brookfield type) Viscometer
ASTM D3665	(2012; R 2017) Standard Practice for Random Sampling of Construction Materials
ASTM D4791	(2019) Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate

NATIONAL READY MIXED CONCRETE ASSOCIATION (NRMCA)

NRMCA QC 3	(2015) Quality Control Manual: Section 3, Plant Certifications Checklist: Certification of Ready Mixed Concrete Production Facilities

U.S. ARMY CORPS OF ENGINEERS (USACE)

COE CRD-C 55	(1992) Test Method for Within-Batch Uniformity of Freshly Mixed Concrete
COE CRD-C 130	(2001) Standard Recommended Practice for Estimating Scratch Hardness of Coarse Aggregate Particles
COE CRD-C 300	(1990) Specifications for Membrane-Forming Compounds for Curing Concrete
COE CRD-C 521	(1981) Standard Test Method for Frequency and Amplitude of Vibrators for Concrete
COE CRD-C 662	(2009) Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials, Lithium Nitrate Admixture and Aggregate (Accelerated Mortar-Bar Method)

U.S. DEPARTMENT OF DEFENSE (DOD)

TSPWG M 3-250-04.97-05	(2019) Proportioning Concrete Mixtures with Graded Aggregates for Rigid Airfield Pavements

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Proposed Techniques; G

Preliminary Proposed Proportioning; G

Pavement Quality Control Plan; G

SD-03 Product Data

Diamond Grinding Plan; G

Dowels; G

Dowel Bar Assemblies; G

Equipment; G

Concrete Patching Mixture; G

SD-05 Design Data

Proportioning Studies; G, DO

SD-06 Test Reports

Sampling and Testing; G

Diamond Grinding of PCC Surfaces; G

Repair Recommendations Plan; G

Paving Lot Report; G

SD-07 Certificates

Contractor Quality Control (CQC) Staff; G

Laboratory Accreditation and Validation; G

Commercial Laboratory; G

1.3 QUALITY CONTROL

1.3.1 Contractor Quality Control (CQC) Staff

Reference Section 01 45 00 QUALITY CONTROL for general CQC personnel qualification requirements. In addition, submit specific CQC personnel qualification requirements listed below. Submit qualifications and resumes for the Concrete Paving CQC Manager and petrographer. Submit certification for all CQC personnel assigned to concrete construction for their respective position:

a. Identify an individual within the onsite work organization as the Concrete Paving CQC Manager, who is responsible for overall management of concrete paving CQC and has the authority to act in all concrete paving CQC matters including authority to stop concrete paving work which is out of compliance.

   The minimum requirements for the Concrete Paving CQC Manager consist of 8 years airfield concrete paving experience similar to work required under this contract with a minimum of 3 years in a concrete paving CQC role. The Concrete Paving CQC Manager is a separate person, and is in addition to the Quality Control Manager identified in Section 01 45 00 QUALITY CONTROL.

b. CQC personnel responsible for inspection of concrete paving operations: ACI Concrete Transportation Construction Inspector. The ACI Concrete Transportation Construction Inspector is required to be present at the paving site during all paving operations, with the exception of the initial saw cutting operation. The QC manager is required to be present during initial saw cutting operations.

c. CQC staff is required to oversee all aspects of sawing operations (sawing, flushing, vacuuming, checking for random cracking, lighting).

d. Lead Foreman or Journeyman of the Concrete Placing, Finishing, and Curing Crews: ACI Advanced Concrete Flatwork Finisher.

e. Field Testing Technicians: ACI Concrete Field Testing Technician, Grade I.

f. Laboratory Testing Technicians: ACI Concrete Strength Testing Technician and ACI Concrete Laboratory Testing Technician, Level 1 or 2.

1.3.2 Laboratory Accreditation and Validation

Provide laboratory and testing facilities. Submit accreditation of the commercial laboratory by an independent evaluation authority, indicating conformance to ASTM C1077, including all applicable test procedures identified in this specification. If multiple laboratories are proposed, identify which tests will be conducted by each. Submit accreditation documentation a minimum of 30 days before any specified testing is performed. The laboratories performing the tests are required to be accredited in accordance with ASTM C1077, including ASTM C78/C78M and ASTM C1260. Provide current accreditation and include the required and optional test methods, as specified.

1.3.2.1 Aggregate Testing and Mix Proportioning

Aggregate testing and mixture proportioning studies are required to be performed by a commercial laboratory.

1.3.2.2 Acceptance Testing

Provide all materials, labor, and facilities required for molding, curing, testing, and protecting test specimens at the paving site and in the laboratory. Provide steel molds for molding the beam specimens. Provide on-site temperature-controlled concrete curing facilities. Provide and maintain boxes or other facilities suitable for storing and curing the specimens at the paving site while in the mold within the temperature range stipulated by ASTM C31/C31M. Provide flexural loading equipment in accordance with ASTM C78/C78M

1.3.2.3 Pavement Quality Control Plan

Submit the Pavement Quality Control Plan. The Pavement Quality Control Plan is specific to this specification and supplements the overall Quality Control Plan required by Section 01 45 00 QUALITY CONTROL. Do not produce portland cement concrete pavement for payment until the Pavement Quality Control Plan has been approved. In the Pavement Quality Control Plan, address all elements which affect the quality of the pavement including, but not limited to:

a. Condition of underlying course

b. Condition of adjacent pavement and dowels

c. Stockpile management and aggregate grading

d. Mix proportions and batching operations

e. Transportation

f. Placing and consolidation

g. Placing dowels

h. Finishing and texturing

i. Curing

j. Sawcutting Joints

k. CQC Testing and Inspection

l. Inclement / Hot / Cold Weather Plans

1.3.2.4 Laboratory Inspection

The Government will inspect all laboratories requiring validation for equipment and test procedures prior to the start of any concreting operations for conformance to ASTM C1077. Schedule and provide payment for laboratory inspections. Additional payment or a time extension due to failure to acquire the required laboratory validation is not allowed. The laboratory is to maintain this certification for the duration of the project.

1.3.3 Preconstruction Testing of Materials

All sampling and testing is required to be performed using an approved commercial laboratory or, for cementitious materials and chemical admixtures, a laboratory maintained by the manufacturer of the material. Materials are not allowed to be used until notice of acceptance has been given. Additional payment or extension of time due to failure of any material to meet project requirements, or for any additional sampling or testing required is not allowed. Additional tests may be performed by the Government; such Government testing does not relieve any required testing responsibilities.

1.3.3.1 Aggregates

Sample aggregates in the presence of a Government Representative. Obtain samples representative of the materials to be used for the project in accordance with ASTM D75/D75M. Perform all aggregate tests no earlier than 6 months prior to test section construction.

1.3.3.2 Chemical Admixtures, Curing Compounds and Epoxies

At least 30 days before the material is used, submit certified copies of test results for the specific lots or batches to be used on the project. Provide test results less than 5 years old prior to use in the work. Retest chemical admixtures that have been in storage for longer than 6 months or that have been subjected to temperatures outside of manufacturer requirements. Reject if test results do not meet the Level 2 proof of compliance requirements of ASTM C494/C494M.

1.3.3.3 Testing of Cementitious Materials

All materials referenced under paragraph CEMENTITIOUS MATERIALS will be accepted on the basis of manufacturer's certification of compliance, accompanied by mill test reports showing that the material in each shipment meets the requirements of the specification under which it is provided. Provide mill test reports no more than 1 month old, prior to use in the work. Do not use cementitious materials until notice of acceptance has been given. Cementitious materials may be subjected to testing by the Government from samples obtained at the mill, at transfer points, or at the project site. If tests prove that a cementitious material that has been delivered is unsatisfactory, promptly remove it from the project site. Retest cementitious material that has not been used within 6 months after testing, and reject if test results do not meet manufacturer requirements.

1.3.4 Testing During Construction

During construction, sample and test aggregates, cementitious materials, and concrete as specified herein. The Government will sample and test concrete and ingredient materials as considered appropriate. Provide facilities and labor necessary for procurement of representative test samples. Testing by the Government does not relieve the specified testing requirements.

1.3.5 Acceptability of Work

The materials and the pavement itself will be accepted on the basis of production testing. The Government may make check tests to validate the

results of the production testing. If the results of the production testing vary by less than 2.0 percent of the Government's test results, the results of the production testing will be used. If the results of the Government and production tests vary by 2.0 percent, but less than 4.0 percent, the average of the two will be considered the value to be used. If these vary by 4.0 percent or more, carefully evaluate each sampling and testing procedure and obtain another series of Government and production tests on duplicate samples of material. If these vary by 4.0 percent or more, use the results of the tests made by the Government and the Government will continue check testing of this item on a continuous basis until the two sets of tests agree within less than 4.0 percent on a regular basis. Testing performed by the Government does not relieve the specified testing requirements.

1.3.6 Acceptance Requirements

1.3.6.1 Pavement Lots

A lot is that quantity of construction to be evaluated for acceptance with specification requirements. A lot is equal to production paving not to exceed 1000 cubic yards. In order to evaluate thickness, divide each lot into sublots not to exceed 250 cubic yards. Perform grade determinations on the lot as a whole. Perform surface smoothness determinations on every 0.1 mile segment in each lot. Select sample locations on a random basis in accordance with ASTM D3665. Areas of pavement placed with hand methods are considered a separate lot for evaluation. When operational conditions cause a lot to be terminated before the specified four sublots have been completed, use the following procedure to adjust the lot size and number of tests for the lot. Where three sublots have been completed, they constitute a lot. Where one or two sublots have been completed, incorporate them into the next lot (except for the last lot), and the total number of sublots used and acceptance criteria adjusted accordingly.

1.3.6.2 Evaluation

Provide all sampling and testing required for acceptance and payment adjustment, including batch tickets with all required acceptance testing. Individuals performing sampling, testing and inspection duties are required to meet the requirements of paragraph: Contractor Quality Control Staff. The Government reserves the right to direct additional samples and tests for any area which appears to deviate from the specification requirements. Testing in these areas are in addition to the sublot or lot testing, and the requirements for these areas are the same as those for a sublot or lot. Provide facilities, and where directed personnel, to assist in obtaining samples for any Government testing.

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Bulk Cementitious Materials

Provide all cementitious materials in bulk at a temperature, as delivered to storage at the site, not exceeding 150 degrees F. Provide sufficient cementitious materials in storage to sustain continuous operation of the concrete mixing plant while the pavement is being placed. Provide separate facilities to prevent any intermixing during unloading, transporting, storing, and handling of each type of cementitious material.

1.4.2 Aggregate Materials

Store aggregate at the site of the batching and mixing plant avoiding breakage, segregation, intermixing or contamination by foreign materials. Store each size of aggregate from each source separately and allow the fine aggregate and the smallest size coarse aggregate to drain. Provide a minimum 24 inch thick sacrificial layer left undisturbed for each aggregate stored on ground or provide a paved or chemically stabilized surface course beneath the stockpiles. Maintain sufficient aggregate at the site at all times to permit continuous uninterrupted operation of the mixing plant at the time concrete pavement is being placed. Do not allow tracked equipment on coarse aggregate stockpiles.

1.4.3 Other Materials

Store reinforcing bars and accessories above the ground on supports. Store all materials properly to avoid contamination and deterioration.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

This section is intended to stand alone for construction of concrete pavement. However, where the construction covered herein interfaces with other sections, construct each interface to conform to the requirements of both this section and the other section, including tolerances for both.

2.1.1 Surface Smoothness

Use the profilograph method for all longitudinal testing, except for paving lanes less than 200 feet in length. Use the straightedge method for transverse testing, for longitudinal testing where the length of each pavement lane is less than 200 feet, and at the ends of the paving limits for the project. Smoothness requirements do not apply over crowns, drainage structures, or similar penetrations. Maintain detailed notes of the testing results and provide a copy to the Government after each day's testing.

2.1.1.1 Straightedge Testing

Provide the finished surfaces of the pavements with no sudden change in elevation or abrupt change of 1/4 inch or more from the as-built finished surface or face, and all pavements within the limits specified when checked with an approved 12 foot straightedge. Report measurements to the nearest 1/16 inch. Provide airfield areas with a variation from a straight edge not greater than 1/4 inch in either the longitudinal or transverse direction.

2.1.1.2 Bumps ("Must Grind" Areas)

Reduce any bumps ("must grind" areas) shown on the profilograph trace or by straightedge measurements which exceed 0.4 inch in height by diamond grinding in accordance with paragraph DIAMOND GRINDING OF PCC SURFACES below until they do not exceed 0.3 inch when retested. Taper such diamond grinding in all directions to provide smooth transitions to areas not requiring diamond grinding.

2.1.1.3 Testing Method

After the concrete has hardened sufficiently to permit walking thereon, but not later than 48 hours after placement, test the entire surface of the pavement in each lot in such a manner as to reveal all surface irregularities exceeding the tolerances specified above. If any pavement areas are diamond ground, retest these areas immediately after diamond grinding. Test the entire area of the pavement in both a longitudinal and a transverse direction on parallel lines. Perform the transverse lines 15 feet or less apart, as directed. Perform the longitudinal lines at the 1/8th point in from each side of the lane and at the centerline of each paving lane shown on the drawings, regardless of whether multiple lanes are allowed to be paved at the same time. Also test other areas having obvious deviations. Perform longitudinal testing lines continuous across all joints. Perform transverse testing lines for pilot lanes carried to construction joint lines and for fill-in lanes carried 24 inches across construction joints, and the readings in this area applied to the fill-in lane. Perform straightedge testing of the longitudinal edges of slipformed pilot lanes before paving fill-in lanes as specified below.

2.1.1.3.1 Straightedge Testing

Hold the straightedge in contact with the surface and move ahead one-half the length of the straightedge for each successive measurement. Determine the amount of surface irregularity by placing the freestanding (unleveled) straightedge on the pavement surface and measuring the maximum gap between the straightedge and the pavement surface. Determine measurements along the entire length of the straight edge.

2.1.2 Edge Slump and Joint Face Deformation

2.1.2.1 Edge Slump

Provide a maximum of 15.0 percent of each free edge of each pavement panel with a maximum edge slump of 1/4 inch and none of the free edge of the pavement lot with an edge slump exceeding 3/8 inch. (A pavement panel is defined as a lane width by the length between two adjacent transverse contraction joints. The free edge of the pavement is the linear measurement of pavement panel edge originally constructed as non-adjacent to any existing pavement; for example, 100 feet of pilot lane originally constructed as a separate lane, would have 100 feet of free edge on each side; 100 feet of fill-in lane would have no free edge.) The area affected by the downward movement of the concrete along the pavement edge is a maximum of 18 inches back from the edge.

2.1.2.2 Joint Face Deformation

Provide a vertical joint face with a surface within the maximum limits shown in Table 5. Provide the offset measurements from all five Joint Face Deformation Limits from Table 5 at the specified testing frequency. Properly reference all recorded measurements in accordance with paving lane identification and stationing, and submit a report within 10 days after measurement is made. Identify areas requiring replacement within the report.

TABLE 5				
JOINT FACE DEFORMATION LIMITS				
Offset from Straightedge Applied Longitudinally to Pavement Surface (a)	Offset from Straightedge Applied Longitudinally to Vertical Face (b)	Offset from Straightedge Applied Top to Bottom Against the Joint Face (c)	Abrupt Offset in Any Direction (d)	Offset of Joint Face from True Vertical (e)
Airfield Pavement				
1/8 inch	1/4 inch	3/8 inch	1/4 inch	1 inch per 12 inches
All Other Pavement				
1/4 inch	All other items same as airfield pavement			
(a) Measurement is taken by placing the straightedge longitudinally on the pavement surface 1 inch from the free edge. Record the longitudinal joint face deformation of the joint on a continuous line 1 inch back from the joint line using the 12 foot straightedge advanced one-half its length for each reading.				
(b) Measurement is taken by applying the straightedge longitudinally along the center of the vertical joint face. Record the longitudinal joint face deformation using the 12 foot straightedge advanced one-half its length for each reading.				
(c) Measurement places a 3/8 inch spacer attached to a straightedge and spaced approximately equal to the thickness of the concrete being measured. The offset from straightedge with spacers is measured by placing the spacers against the top and bottom of the vertical concrete face. Record measurements at 5 foot spacings.				
(d) Check for abrupt offsets at any location that an abrupt change in the joint face plane appears to be present through use of a 12 foot straightedge.				
(e) Measurement of the offset from the joint face to a level in the true vertical position against the joint face. Record measurements at 5 foot spacings.				

2.1.2.3 Edge Slump Determination

Test the pavement surface to determine edge slump immediately after the concrete has hardened sufficiently to permit walking thereon. Perform testing with a minimum 12 foot straightedge to reveal irregularities exceeding the edge slump tolerance specified above. Determine the vertical edge slump at each free edge of each slipformed paving lane constructed. Place the straightedge transverse to the direction of paving and the end of the straightedge located at the edge of the paving lane. Record measurements at 5 to 10 foot spacings, as directed, commencing at the header where paving was started. Initially record measurements at 5

foot intervals in each lane. When no deficiencies are present after 5 measurements, the interval may be increased. The maximum interval is 10 feet. When any deficiencies exist, return the interval to 5 feet. Perform other tests of the exposed joint face to produce a uniform, true vertical joint face. Properly reference all recorded measurements in accordance with paving lane identification and stationing, and submit a report within 10 days after measurement is made. Identify areas requiring replacement within the report.

2.1.2.4 Excessive Edge Slump or Joint Face Deformation

When edge slump or joint face deformation exceeding the limits specified above is encountered on either side of the paving lane, record additional straightedge measurements to define the linear limits of the excessive slump or joint face deformation. Remove and replace concrete slabs having excessive edge slump or joint deformation to the next transverse joint in conformance with paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS. Discontinue use of slip-form paving equipment and procedures that fail to consistently provide edges within the specified tolerances on edge slump and joint face deformation and construct by means of standard paving procedures using fixed forms.

2.1.3 Plan Grade

Within 5 working days after completion of a particular lot, survey the surface of the pavement area for conformance with specified plan grade requirements. The grade will be determined by running lines of levels at intervals corresponding to every longitudinal and transverse joint to determine the elevation at each joint intersection. Resurvey any areas corrected after initial survey.

TABLE 6		
Plan Grade Tolerances		
Airfield Pavements	**Finished Surface Measurements at Joint Intersections** (after allowable corrections)	
	0-0.04 foot from designed Plan Grade	Acceptable, no Payment Adjustment considered on grade measurements at these Joint Intersections
	Greater than 0.04 foot from designed Plan Grade	Remove and Replace affected Panel(s)

The above deviations from the approved grade line and elevation are not permitted in areas where closer conformance with the planned grade and elevation is required for the proper functioning of appurtenant structures. Provide finished surfaces of new abutting pavements that coincide at their juncture. Corrections within the tolerances of paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS are allowed to improve the payment adjustment or to improve an unacceptable surface to allow for a payment adjustment. Provide horizontal control of the finished surfaces of all airfield pavements that vary not more than 1/2 inch from the plan joint alignment indicated.

2.1.3.1 Joint Alignment

Provide survey points for the joint intersections. Provide horizontal control of the finished surfaces of all airfield pavements.

TABLE 7		
Joint Alignment Tolerances		
All Airfield Pavements	**Horizontal Measurements of Joint Intersections (both transverse and longitudinal joints)**	
	0-1/2 inch from designed Jointing Plan	Acceptable
	Greater than 1/2 inch from the designed Jointing Plan	Remove and Replace affected Panel(s)

2.1.4 Flexural Strength

Each lot of pavement will be evaluated for acceptance for flexural strength in accordance with paragraph Sampling and Testing and paragraph Computations.

2.1.4.1 Sampling and Testing

For acceptance, obtain one composite sample of concrete from each sublot in accordance with ASTM C172/C172M from one batch or truckload.Fabricate and cure test beams 6 x 6 inches in accordance with ASTM C31/C31M; and test at 14 days in accordance with ASTM C78/C78M. Test two beams per sublot (8 per lot).

2.1.4.2 Computations

Average the eight 14-day strength tests for the lot. Use the average strength in accordance with paragraph Concrete Strength For Final Acceptance.

2.1.5 Thickness

Each lot of pavement will be evaluated for acceptance and payment adjustment in accordance with the following procedure. Drill two cores, between 4 and 6 inches in diameter, from the pavement, per sublot (8 per lot). Drill the cores within 3 days after lot placement, fill the core holes with an approved concrete patching mixture, and respray the cored areas with curing compound. Prevent the core hole from drying or damage until backfilled. Complete backfillng of core hole during the subsequent production placement or within 5 calendar days, whichever occurs first. Record eight measurements of thickness around the circumference of each core and one in the center, in accordance with ASTM C174/C174M. Provide the results with the thickness measurement data. Average the pavement thickness from the 8 cores for the lot and evaluate as described in paragraph Payment Adjustment For Thickness above.

2.1.6 Evaluation of Cores

Record and submit testing, inspection, and evaluation of each core for mortar-rich surface, uniformity of aggregate distribution, segregation, voids, cracks, and depth of reinforcement or dowels (if present). Moisten the core with water to visibly expose the aggregate and take a minimum of three photographs of the sides of the core's entire length, rotating the core approximately 120 degrees between photographs. Provide photographs with the clarity and quality to identify the defects identified above. Each core is to be identified on the top with the core number referenced to paving lot plan view. Photograph the core against a contrasting background, in profile, and with an extended tape measure parallel and to the right of the core with incremental measurements clearly visible. Provide plan view of location for each core. Store the cores and make available to the Government when requested, until otherwise directed.

2.1.7 Diamond Grinding of PCC Surfaces

Those performing diamond grinding are required to have a minimum of three years experience in diamond grinding of airfield pavements. In areas not meeting the specified limits for surface smoothness and plan grade, reduce high areas to attain the required smoothness and grade, except as depth and surface area is limited below. Reduce high areas by diamond grinding the hardened concrete with approved equipment after the concrete is at a minimum age of 14 days. Provide diamond grinding equipment capable of cutting a path a minimum of 3 feet wide. Equip the cutting head with saw blades that are 3 mm 1/8-inch wide with sufficient number of blades to create grooves between 0.090-inches and 0.130-inches wide and peaks and ridges approximately 1/32-inch higher than the bottom of the grinding cut. Diamond grinding equipment that causes ravels, aggregate fractures, spalls or disturbance to the joints is not permitted. The maximum area corrected by diamond grinding the surface of the hardened concrete is 10 percent of the total area of any sublot. The maximum depth of diamond grinding is 1/4 inch. Provide diamond grinding equipment capable of flushing and vacuuming the pavement surface. Dispose of all debris from diamond grinding operations off Government property, leaving the surface of the pavement in a clean condition. Prior to diamond grinding, submit a Diamond Grinding Plan for review and approval. At a minimum, include the daily reports for the deficient areas, the location and extent of deficiencies, corrective actions, and equipment. Remove and replace all pavement areas requiring plan grade or surface smoothness corrections in excess of the limits specified above in conformance with paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS. Repair aggregate popouts using the core and patch method of paragraph REPAIRING SPALLS ALONG JOINTS. Retexture pavement areas given a wire comb, tined texture, or areas exceeding 25 square feet that have been corrected by diamond grinding transverse grooves using an approved grooving machine of standard manufacture. Provide grooves that are 1/4 inch deep by 1/4 inch wide on 1-1/2 inch centers and carried into, and tapered to zero depth within the non-corrected surface, or match any existing grooves in the adjacent pavement. All areas in which diamond grinding has been performed are subject to the thickness tolerances specified in paragraph Thickness, above.

Prior to production diamond grinding operations, perform a test section at the approved location. Perform a test section that consists of a minimum of two adjacent passes with a minimum length of 40 feet to allow evaluation of the finish, transition between adjacent passes, and the

results of crossing a transverse joint. Production diamond grinding operations are not to be performed prior to approval.

2.2 CEMENTITIOUS MATERIALS

Provide cementitious materials consisting of portland cement, or portland cement in combination with supplementary cementitious materials (SCM), that conform to appropriate specifications listed below. New submittals are required when the cementitious materials sources or types change.

2.2.1 Portland Cement

Provide portland cement conforming to ASTM C150/C150M, Type I or II.

2.2.2 Blended Cements

Provide blended cement conforming to ASTM C595/C595M, Type IP, IS, or IL . Provide pozzolan added to the Type IP blend consisting of ASTM C618 Class F or Class N and that is interground with the cement clinker. Include a written statement from the manufacturer that the amount of pozzolan in the finished cement does not vary more than plus or minus 5 mass percent of the finished cement from lot to lot or within a lot. Provide limestone added to the Type IL blend that is interground with the cement clinker. Include a written statement from the manufacturer that the amount of limestone in the finished cement does not vary more than plus or minus 2.5 mass percent of the finished cement from lot to lot or within a lot. Limit the percent of slag, pozzolan, or limestone to a maximum of IS(50), IP(35) or IL(15). The percentage and type of mineral admixture used in the blend is not allowed to change from that submitted for the aggregate evaluation and mixture proportioning.

2.2.3 Pozzolan

2.2.3.1 Fly Ash

Provide fly ash that conforms to ASTM C618, Class F, including the optional requirement for uniformity with a loss on ignition not exceeding 6 percent. Provide Class F fly ash for use in mitigating Alkali-Silica Reactivity with a total equivalent alkali content less than 4 percent.

2.2.3.2 Raw or Calcined Natural Pozzolan

Provide natural pozzolan that is raw or calcined and conforms to ASTM C618, Class N, including the optional requirement for uniformity with a loss on ignition not exceeding 6 percent. Provide Class N pozzolan for use in mitigating Alkali-Silica Reactivity with a total equivalent alkali content less than 4 percent.

2.2.3.3 Ultra Fine Fly Ash and Ultra Fine Pozzolan

Provide Ultra Fine Fly Ash (UFFA) and Ultra Fine Pozzolan (UFP) that conforms to ASTM C618, Class F or N, and the following additional requirements:

a. The strength activity index at 28 days of age of at least 95 percent of the control specimens.

b. The average particle size is a maximum of 6 microns.

2.2.4 Slag Cement

Provide slag cement (ground-granulated blast-furnace slag) that conforms to ASTM C989/C989M, Grade 100 or Grade 120.

2.2.5 Supplementary Cementitious Materials (SCM) Content

Use of one of the SCMs listed below is optional, unless the SCM is required to mitigate ASR. The use of SCMs is encouraged.

TABLE 8		
SUPPLEMENTARY CEMENTITIOUS MATERIALS CONTENT		
Supplementary Cementitious Material	Minimum Content (percent)	Maximum Content (percent)
Class N Pozzolan and Class F Fly Ash		
$SiO_2 + Al_2O_3 + Fe_2O_3 > 70$ percent	25	35
$SiO_2 + A1_2O_3 + Fe_2O_3 > 80$ percent	20	35
$SiO_2 + A1_2O_3 + Fe_2O_3 > 90$ percent	15	35
UFFA and UFP	7	16
Slag Cement	40	50

2.3 AGGREGATES

Provide aggregates meeting the requirements of this specification. If aggregate sources in the project area do not meet the requirements of this specification, provide aggregates from sources outside the project area.

2.3.1 Aggregate Sources

2.3.1.1 Durability of Coarse Aggregate

Provide aggregate with a satisfactory service record in freezing and thawing of at least 5 years successful service in three concrete paving projects. Include a condition survey of the existing concrete and a review of the concrete-making materials, including coarse aggregates, cement, and mineral admixtures in the service record. Consider the previous aggregate source and test results, cement mill certificate data, mineral admixture chemical and physical composition, and the mix design (cement factor and water-cementitious material ratio) in the review. Provide service record performed by an independent third party professional engineer, petrographer, or concrete materials engineer along with their resume. Include photographs and a written report addressing D-cracks and popouts in accordance with ACI 201.1R in the service record. Provide coarse aggregate with a durability factor of 80 or more when subjected to freezing and thawing of specimens prepared in accordance with ASTM C1646/C1646M and tested in accordance with ASTM C666/C666M, Procedure A, when a coarse aggregate size group or source proposed for use does not have a satisfactory demonstrable service record. Test all coarse aggregate size groups and sources proposed for use individually.

2.3.1.2 Alkali-Silica Reactivity

Evaluate and test fine and coarse aggregates to be used in all concrete

for alkali-aggregate reactivity. Test all size groups and sources proposed for use individually.

a. Evaluate the aggregate size groups and sources separately using ASTM C1260. Reject individual aggregates with test results that indicate an expansion of greater than 0.08 percent after 28 days of immersion in 1N NaOH solution, or perform additional testing as follows: utilize the proposed portland cement, blended cement, and SCM, or Lithium Nitrate in combination with each individual aggregate. If only SCMs are being evaluated, test in accordance with ASTM C1567. If Lithium Nitrate is being evaluated, with or without SCMs, test in accordance with COE CRD-C 662. Determine the quantity that meets all the requirements of these specifications and that lowers the expansion equal to or less than 0.08 percent after 28 days of immersion in a 1N NaOH solution. Base the mixture proportioning on the highest percentage of SCM required to mitigate ASR-reactivity.

b. If any of the above options does not lower the expansion to less than 0.08 percent after 28 days of immersion in a 1N NaOH solution, reject the aggregate(s) and submit new aggregate sources for retesting. Submit the results of testing for evaluation and acceptance.

2.3.1.3 Combined Aggregate Gradation

In addition to the grading requirements specified for coarse aggregate and for fine aggregate, provide the combined aggregate grading meeting the following requirements:

a. Provide materials selected and the proportions used such that when the Coarseness Factor (CF) and the Workability Factor (WF) are plotted on a diagram as described in d. below, the point and its associated production tolerance thus determined falls within the parallelogram described therein. Refer to TSPWG M 3-250-04.97-05 for combined aggregate plot locations for the intended placement technique(s).

b. Determine the Coarseness Factor (CF) from the following equation:

$$CF = \frac{\text{(cumulative percent retained on the 3/8 inch sieve)(100)}}{\text{(cumulative percent retained on the No. 8 sieve)}}$$

c. The Workability Factor (WF) is defined as the percent passing the No. 8 sieve based on the combined aggregate gradation. Adjust the WF, prorated upwards only, by 2.5 percentage points for each 94 pounds per cubic yard of cementitious material greater than 564 pounds per cubic yard.

d. Plot a diagram using a rectangular scale with WF on the Y-axis with units from 20 (bottom) to 45 (top), and with CF on the X-axis with units from 80 (left side) to 30 (right side). On this diagram, plot a parallelogram with corners at the following coordinates (CF-75, WF-28), (CF-75, WF-40), (CF-45, WF-32.5), and (CF-45, WF-44.5). If the point determined by the intersection of the computed CF and WF does not fall within the above parallelogram, revise the grading of each size of aggregate used and the proportions selected as necessary.

e. Plot the associated production tolerance limits, identified in Table 17, around the CF and adjusted WF point.

2.3.2 Coarse Aggregate

2.3.2.1 Coarse Aggregate Composition

Provide coarse aggregate consisting of crushed or uncrushed gravel, crushed stone, or a combination thereof. Provide aggregates, as delivered to the mixers, consisting of clean, hard, uncoated particles meeting the requirements of ASTM C33/C33M except as specified herein. Provide coarse aggregate that has been washed sufficient to remove dust and other coatings. Provide coarse aggregate with no more than 40 percent loss when subjected to the Los Angeles abrasion test in accordance with ASTM C131/C131M. Provide coarse aggregates with a maximum sodium sulfate soundness loss of 12 percent, or with a magnesium sulfate soundness loss of 18 percent after five cycles when tested in accordance with ASTM C88.

2.3.2.2 Particle Shape Characteristics

Provide particles of the coarse aggregate that are generally spherical or cubical in shape. The quantity of flat particles and elongated particles in any size group coarser than the 3/8 inch sieve are not allowed to exceed 20 percent by weight as determined by the Flat Particle Test and the Elongated Particle Test of ASTM D4791, Method A. A flat particle is defined as one having a ratio of width to thickness greater than 3; an elongated particle is one having a ratio of length to width greater than 3.

2.3.2.3 Size and Grading

Provide coarse aggregate with a nominal maximum size (as defined in ASTM C125) of 1.5 inches with a minimum of 10 percent retained on the 1.0 inch sieve of the proposed combined aggregate gradation that meets the criteria of paragraph COMBINED AGGREGATE GRADATION. Grade and provide the coarse aggregates in a minimum of two size groups meeting the individual grading requirements of ASTM C33/C33M, Size No. 4 (1.5 inches to 0.75 inch) and Size No. 67 (0.75 inch to No. 4). A third coarse aggregate size group may be required to meet the criteria of paragraph Combined Aggregate Gradation.

Mix designs that include a minimum of three coarse aggregate size groups can use grading limits not defined by ASTM C33/C33M provided all other requirements are met. Provide upper and lower grading limits of historic gradations and for all proposed coarse aggregates not defined by ASTM C33/C33M but intended for use in the mix design.

2.3.2.4 Deleterious Materials - Airfield Pavements

The amount of deleterious material in each individual size group and source of coarse aggregate is not allowed to exceed the limits shown in Table 7A below, determined in accordance with the test methods shown.

TABLE 9A		
LIMITS OF DELETERIOUS MATERIALS IN COARSE AGGREGATE FOR AIRFIELD PAVEMENTS		
Percentage by Mass		
Materials (h)	Severe Weather	Moderate Weather
Clay lumps and friable particles (ASTM C142/C142M)	0.2	0.2
Shale (a) (ASTM C295/C295M)	0.1	0.2
Material finer than No. 200 sieve (b) (ASTM C117)	0.5	0.5
Lightweight particles (c) (ASTM C123/C123M)	0.2	0.2
Clay ironstone (d) (ASTM C295/C295M)	0.1	0.5
Chert, cherty stone, and other aggregates (less than 2.40 Sp. Gr.) (e) (ASTM C123/C123M and ASTM C295/C295M)	0.1	0.5
Claystone, mudstone, and siltstone (f) (ASTM C295/C295M)	0.1	0.1
Shaly and argillaceous limestone (g) (ASTM C295/C295M)	0.2	0.2
Other soft particles (COE CRD-C 130)	1.0	1.0
Total of all deleterious substances exclusive of material finer than No. 200 sieve	1.0	2.0
(a) Shale is defined as a fine-grained, thinly laminated or fissile sedimentary rock. It is commonly composed of clay or silt or both. It has been indurated by compaction or by cementation, but not so much as to have become slate.		
(b) Limit for material finer than No. 200 sieve is allowed to be increased to 1.5 percent for crushed aggregates if the fine material consists of crusher dust that is essentially free from clay or shale. Use XRD or other appropriate techniques as determined by petrographer to quantify amount and justify increase.		
(c) Test with a separation medium with a density of Sp. Gr. of 2.0. This limit does not apply to coarse aggregate manufactured from blast-furnace slag unless contamination is evident.		
(d) Clay ironstone is defined as an impure variety of iron carbonate, iron oxide, hydrous iron oxide, or combinations thereof, commonly mixed with clay, silt, or sand. It commonly occurs as dull, earthy particles, homogeneous concretionary masses, or hard-shell particles with soft interiors. Other names commonly used for clay ironstone are "chocolate bars" and limonite concretions.		

TABLE 9A		
LIMITS OF DELETERIOUS MATERIALS IN COARSE AGGREGATE FOR AIRFIELD PAVEMENTS		
Percentage by Mass		
Materials (h)	Severe Weather	Moderate Weather
(e) Chert is defined as a rock composed of quartz, chalcedony or opal, or any mixture of these forms of silica. It is variable in color. The texture is so fine that the individual mineral grains are too small to be distinguished by the unaided eye. Its hardness is such that it scratches glass but is not scratched by a knife blade. It may contain impurities such as clay, carbonates, iron oxides, and other minerals. Cherty stone is defined as any type of rock (generally limestone) that contains chert as lenses and nodules, or irregular masses partially or completely replacing the original stone. Other aggregates consist of obsidian, ash tuff, and palygorskite.		
(f) Claystone, mudstone, or siltstone, is defined as a massive fine-grained sedimentary rock that consists predominantly of indurated clay or silt without laminations or fissility. It may be indurated either by compaction or by cementation.		
(g) Shaly limestone is defined as limestone in which shale occurs as one or more thin beds or laminae. These laminae may be regular or very irregular and may be spaced from a few inches down to minute fractions of an inch. Argillaceous limestone is defined as a limestone in which clay minerals occur disseminated in the stone in the amount of 10 to 50 percent by weight of the rock; when these make up from 50 to 90 percent, the rock is known as calcareous (or dolomitic) shale (or claystone, mudstone, or siltstone).		
(h) Perform testing in accordance with the referenced test methods, except use the minimum sample size specified below.		

2.3.2.5 Testing Sequence for Deleterious Materials in Coarse Aggregate - Airfields Only

No extension of time or additional payment due to any delays caused by the testing, evaluation, or personnel requirements is allowed. The minimum test sample size of the coarse aggregate is 200 pounds for the 3/4 inch and larger maximum size and 25 pounds for the No. 4 to 3/4 inch coarse aggregate. Provide facilities for the ready procurement of representative test samples. The testing procedure on each sample of coarse aggregate for compliance with limits on deleterious materials is as follows:

Step 1: Wash each full sample of coarse aggregate for material finer than the No. 200 sieve. Discard material finer than the No. 200 sieve.

Step 2: Test remaining full sample for clay lumps and friable particles and remove.

Step 3. Test remaining full sample for chert and cherty stone with SSD density of less than 2.40 specific gravity. Remove lightweight chert and cherty stone. Retain other materials less than 2.40

specific gravity for Step 4.

Step 4: Test the materials less than 2.40 specific gravity from Step 3 for lightweight particles (Sp. GR. 2.0) and remove. Restore other materials less than 2.40 specific gravity to the sample.

Step 5: Test remaining sample for clay-ironstone, shale, claystone, mudstone, siltstone, shaly and argillaceous limestone, and remove.

Step 6: Test a minimum of one-fifth of remaining full sample for other soft particles.

2.3.3 Fine Aggregate

2.3.3.1 Fine Aggregate Composition

Provide fine aggregate consisting of natural sand, manufactured sand, or a combination of the two, each composed of clean, hard, durable particles meeting the requirements of ASTM C33/C33M. Stockpile and batch each type of fine aggregate separately. Provide fine aggregate with particles that are generally spherical or cubical in shape. For fine aggregate provided as a combination of sources, test each source individually.

2.3.3.2 Grading

Provide fine aggregate, as delivered to the mixer, with a grading that conforms to the requirements of ASTM C33/C33M and having a fineness modulus of not less than 2.50 nor more than 3.40. For fine aggregate supplied as a combination of sources, determine the fineness modulus on a composite sample.

2.3.3.3 Deleterious Material

The minimum test sample size for fine aggregate proposed for use in airfield paving is 10 pounds. The amount of deleterious material in the fine aggregate is not to exceed the limits listed in Table 8 when performed on the full sample:

TABLE 9	
LIMITS OF DELETERIOUS MATERIALS IN FINE AGGREGATE	
Material	Percentage by Mass
Clay lumps and friable particles ASTM C142/C142M	1.0
Material finer than No. 200 sieve ASTM C117	3.0
Lightweight particles ASTM C123/C123M using a medium with a density of Sp. Gr. of 2.0	0.5
Total of all above	3.0

2.3.3.4 Testing Sequence for Deleterious Materials in Fine Aggregate - Airfields Only

The testing procedure on each sample of fine aggregate for compliance with limits on deleterious materials is as follows:

Step 1: Wash each full sample of fine aggregate for material finer than the No. 200 sieve. Discard material finer than the No. 200 sieve.

Step 2: Test remaining full sample for clay lumps and friable particles and remove.

Step 3. Test remaining full sample for lightweight particles (Sp. GR. 2.0).

2.4 CHEMICAL ADMIXTURES

2.4.1 General Requirements

Only use chemical admixtures when the specific admixture type and manufacturer is the same material used in the mixture proportioning studies. Provide all chemical admixtures from the same manufacturer. Provide air-entraining admixture conforming to ASTM C260/C260M. Use an accelerating admixture conforming to ASTM C494/C494M, Type C or Type E, when specified in paragraph MIXTURE PROPORTIONS below provided it is not used to reduce the amount of cementitious material. Calcium chloride and admixtures containing calcium chloride are not allowed. Provide retarding or water-reducing admixture that meet the requirements of ASTM C494/C494M, Type A, B, or D, except that the 6-month and 1-year compressive strength tests are waived. ASTM C494/C494M, Type F and G high range water reducing admixtures and Type S specific performance admixtures are not allowed. ASTM C1017/C1017M flowable admixtures are not allowed.

2.5 MEMBRANE FORMING CURING COMPOUND

Provide membrane forming curing compound that conforms to COE CRD-C 300 and is white pigmented.

2.6 WATER

Provide water for mixing and curing that is fresh, clean, potable, and free of injurious amounts of oil, acid, salt, or alkali, except that non-potable water, or water from concrete production operations, can be used if it meets the requirements of ASTM C1602/C1602M.

2.7 JOINT MATERIALS

2.7.1 Expansion Joint Material

Provide preformed expansion joint filler material conforming to ASTM D1751. Provide expansion joint filler that is 3/4 inch thick, unless otherwise indicated, and provided in a single full depth piece.

2.7.2 Slip Joint Material

Provide slip joint material that is 1/4 inch thick expansion joint filler, unless otherwise indicated, conforming to paragraph EXPANSION JOINT MATERIAL.

2.8 REINFORCING

Provide reinforcement that is free from loose, flaky rust, loose scale, oil, grease, mud, or other coatings that might reduce the bond with concrete. Removal of thin powdery rust and tight rust is not required.

However, reinforcing steel which is rusted to the extent that it does not conform to the required dimensions or mechanical properties is not allowed to be used.

2.8.1 Reinforcing Bars and Bar Mats

Provide reinforcing bars conforming to ASTM A615/A615M, billet-steel, Grade 60. Provide bar mats conforming to ASTM A184/A184M. The bar members may be billet rail or axle steel.

2.8.2 Welded Wire Reinforcement

Provide welded wire reinforcement that is deformed or smooth, conforming to ASTM A1064/A1064M, and provided in flat sheets.

2.9 DOWELS

2.9.1 Dowels

Provide dowels in single piece bars fabricated or cut to length at the shop or mill before delivery to the site. Dowels are to be free of loose, flaky rust and loose scale and be clean and straight. Dowels may be sheared to length provided that the deformation from true shape caused by shearing does not exceed 0.04 inch on the diameter of the dowel and does not extend more than 0.04 inch from the end of the dowel. Dowels are required to be smooth steel bars conforming to ASTM A615/A615M, Grade 40 or 60; ASTM A996/A996M, Grade 50 or 60. Epoxy coat dowels in conformance with Type 1 coating requirements of ASTM A1078/A1078M, to include the ends. Provide grout retention rings that are fully circular metal or plastic devices capable of supporting the dowel until the epoxy hardens. Dowel sleeves or inserts are not permitted.

2.9.2 Dowel Bar Assemblies

Provide dowel bar assemblies that consist of a framework of metal bars or wires arranged to provide rigid support for the dowels throughout the paving operation, with a minimum of four continuous bars or wires extending along the joint line. Provide dowels that are welded to the assembly or held firmly by mechanical locking arrangements that prevent them from rising, sliding out, or becoming distorted during paving operations.

2.10 EPOXY RESIN

Provide epoxy-resin materials that consist of two-component materials conforming to the requirements of ASTM C881/C881M, Class as appropriate for each application temperature to be encountered, except that in addition, the materials meet the following requirements:

a. Type IV, Grade 3 for use for embedding dowels and anchor bolts.

b. Type III, Grade as required for use as patching materials for complete filling of spalls, saw-cut runouts, and other voids and for use in preparing epoxy resin mortar.

c. Type IV, Grade 1 for use for injecting cracks.

d. Type V, Grade as required for bonding freshly mixed portland cement concrete or mortar or freshly mixed epoxy resin concrete or mortar to

hardened concrete.

2.11 EQUIPMENT

Maintain all plant, equipment, tools, and machines used in the work in satisfactory working conditions at all times. Submit the following:

a. Details and data on the batching and mixing plant prior to plant assembly including manufacturer's literature showing that the equipment meets all requirements specified herein.

b. Obtain National Ready Mixed Concrete Association (NRMCA) certification of the concrete plant, at no expense to the Government. Provide inspection report of the concrete plant by an engineer approved by the NRMCA. The NRMCA certified engineer cannot be employed by the primary contractor or a subcontractor. A list of NRMCA approved engineers is available on the NRMCA website at http://www.nrmca.org. Submit a copy of the NRMCA QC Manual Section 3 Concrete Plant Certification Checklist, NRMCA Certificate of Conformance, and Calibration documentation on all measuring and weighing devices prior to uniformity testing.

c. A description of the equipment proposed for transporting concrete mixture from the central mixing plant to the paving equipment.

d. A description of the equipment proposed for the machine and hand placing, consolidating and curing of the concrete mixture. Manufacturer's literature on the paver and finisher, together with the manufacturer's written instructions on adjustments and operating procedures necessary to assure a tight, smooth surface on the concrete pavement. The literature is required to show that the equipment meets all details of these specifications.

2.11.1 Batching and Mixing Plant

2.11.1.1 Location

Provide concrete produced at an off-site commercial batching plant conforming to ASTM C94/C94M. The plant shall be designed and operated to produce concrete within the specified tolerances and shall have adequate capacity to supply the required concrete volume without interruption to placement operations.

2.11.2 Concrete Mixers

Use the project's approved mixture proportions for uniformity testing. Provide stationary or truck mixers that are capable of combining the materials into a uniform mixture and of discharging this mixture without segregation. Do not charge the mixers in excess of the capacity recommended by the manufacturer. Operate the mixers at the drum or mixing blade speed designated by the manufacturer. Maintain the mixers in satisfactory operating condition, with the mixer drums kept free of hardened concrete. Replace mixer blades or paddles when worn down more than 10 percent of their depth when compared with the manufacturer's dimension for new blades or paddles.

2.11.2.1 Truck Mixers

Truck mixers are not allowed for mixing or transporting slipformed paving

concrete. Provide only truck mixers designed for mixing or transporting paving concrete with extra large blading and rear opening specifically for low-slump paving concrete. Provide truck mixers, the mixing of concrete therein, and concrete uniformity and testing thereof that conform to the requirements of ASTM C94/C94M. Any changes to the mix constituents or sequence of charging the truck mixer requires an additional three consecutive passing batches. Determine the number of revolutions between 70 to 100 for truck-mixed concrete and the number of revolutions for shrink-mixed concrete by uniformity tests as specified in ASTM C94/C94M and in requirements for mixer performance stated in paragraph TESTING AND INSPECTION FOR CONTRACTOR QUALITY CONTROL DURING CONSTRUCTION in PART 3. If requirements for the uniformity of concrete are not met with 100 revolutions of mixing after all ingredients including water are in the truck mixer drum, discontinue use of the mixer until the condition is corrected. Water is not allowed to be added after the initial introduction of mixing water except, when on arrival at the job site, the slump is less than specified and the water-cement ratio is less than that given as a maximum in the approved mixture. Additional water may be added to bring the slump within the specified range provided the approved water-cement ratio is not exceeded. Inject water into the head of the mixer (end opposite the discharge opening) drum under pressure, and turn the drum or blades a minimum of 30 additional revolutions at mixing speed. The addition of water to the batch at any later time is not allowed.

2.11.3 Transporting Equipment

Provide non-agitating equipment or approved truck mixers conforming to ASTM C94/C94M for fixed form and hand placement paving concrete transportation. Truck mixers are not allowed for mixing or transporting slipformed paving concrete. All truck mixers are to be designed with extra large blading and rear opening specifically for low slump concrete. Provide transporting equipment designed and operated to deliver and discharge the required concrete mixture completely without segregation.

2.11.4 Paving and Finishing Equipment

Provide paving and finishing equipment suitable for fixed-form placement of isolated concrete pavement panels. Equipment shall be capable of placing, consolidating, striking off, and finishing the concrete to the lines, grades, and thicknesses shown. Use internal immersion vibrators for consolidation. Provide screeds, straightedges, and hand tools as necessary to strike off and finish the concrete.

2.11.5 Texturing Equipment

Provide texturing equipment as specified below. Before use, demonstrate the texturing equipment on the test section, and modify the equipment as necessary to produce the texture directed.

2.11.5.1 Burlap Drag

Securely attach a burlap drag to a separate wheel mounted frame spanning the paving lane or to one of the other similar pieces of equipment. Provide length of the material between 24 to 36 inches dragging flat on the pavement surface and with a width at least equal to the width of the slab. Provide clean, reasonably new burlap material, completely saturated with water before attachment to the frame, moistened before start of use, and kept clean and maintained moist during use. Provide burlap conforming

to AASHTO M 182, Class 3 or 4. Burlap drag is not to include any impervious layers, such as a polyethylene layer.

2.11.6 Sawing Equipment

Provide equipment for sawing joints and for other similar sawing of concrete consisting of standard diamond-type concrete saws mounted on a wheeled chassis which can be easily guided to follow the required alignment. Provide diamond tipped blades. If demonstrated to operate properly, abrasive blades may be used. Provide spares as required to maintain the required sawing rate. Provide wheel saws used in the removal of concrete with large diameter tungsten carbide tipped blades mounted on a heavy-duty chassis which produce a saw kerf at least 1-1/2 inches wide. Provide saws capable of sawing to the full depth required. Early-entry saws may be used, subject to demonstration and approval. No change to the initial sawcut depth is permitted.

2.11.7 Straightedge

Provide and maintain at the job site, in good condition, a minimum 12 foot straightedge for each paving train for testing the hardened portland cement concrete surfaces. Provide straightedges constructed of aluminum or magnesium alloy and blades of box or box-girder cross section with flat bottom, adequately reinforced to maintain rigidity and accuracy. Provide straightedges with handles for operation on the pavement.

2.11.8 Hand Finishing Tools

Provide hand finishing equipment in accordance with the provisions of this specification. Use the hand method only on isolated areas of odd slab widths or shapes and in the event of a breakdown of the mechanical finishing equipment. Keep supplemental hand finishing for machine finished pavement to an absolute minimum. Do not seal the paving surface with steel trowels.

2.12 SPECIFIED CONCRETE STRENGTH AND OTHER PROPERTIES

2.12.1 Specified Flexural Strength

Specified flexural strength, R, for concrete is 650 psi at 90 days, as determined by tests made in accordance with ASTM C78/C78M of beams fabricated and cured in accordance with ASTM C192/C192Mequivalent flexural strength, as specified in paragraph Mixture Proportioning For Flexural Strength below.

2.12.2 Allowable Water-Cementitious Materials Ratio

The allowable water-cementitious material ratio is 0.38 to 0.45. The water-cementitious material ratio is the equivalent water-cement ratio as determined by conversion from the weight ratio of water to cement plus SCM by the mass equivalency method described in ACI 211.1.

2.12.3 Air Content

Provide concrete that is air-entrained with a total air content of 6.5 plus or minus 1.5 percentage points, at the point of placement. Determine air content in accordance with ASTM C231/C231M.

2.12.4 Slump

The maximum allowable slump of the concrete at the point of placement is listed in Table 12.

TABLE 12	
MAXIMUM ALLOWABLE SLUMP	
Hand Placement utilizing Other Types of Finishing Equipment	3 inches

The selected slump is applicable to both pilot and fill-in lanes. Perform separate trial mixture studies for each placement method, as specified in paragraph Trial Mixture Studies.

2.12.5 Concrete Temperature

The temperature of the concrete as delivered is required to conform to the requirements of paragraphs Paving In Hot Weather and Paving In Cold Weather. Determine the temperature of concrete in accordance with ASTM C1064/C1064M.

2.12.6 Concrete Strength for Final Acceptance

The strength of the concrete will be considered acceptable when the average equivalent 90-day flexural strengths for each lot are above the 'Specified Flexural Strength' as determined by correlation with 14-day compressive strength tests specified in paragraph Mixture Proportioning For Flexural Strength below, and no individual set (2 specimens per sublot) in the lot are 25 psi or more below the equivalent 'Specified Flexural Strength'. If any lot or sublot, respectively, fails to meet the above criteria, remove and replace the lot or sublot at no additional cost to the Government. This is in addition to and does not replace the average strength required for day-to-day CQC operations as specified in paragraph Average Cqc Flexural Strength Required For Mixtures, below.

2.13 MIXTURE PROPORTIONS

2.13.1 Mixture Proportions Composition

Provide concrete composed of cementitious material, water, fine and coarse aggregates, and admixtures. Include supplementary Cementitious Materials (SCM) choice and usage in accordance with paragraph Supplementary Cementitious Materials (SCM) Content. Provide a minimum total cementitious materials content of 517 pounds per cubic yard. Acceptable admixtures consist of air entraining admixture and may also include, as approved, water-reducing and retarding admixtures.

2.13.2 Proportioning Studies

Perform trial design batches, mixture proportioning studies, and testing, at no expense to the Government. Submit for approval the Preliminary Proposed Proportioning to include items a., b., and i. below a minimum of 21 days prior to beginning a mixture proportioning study. Submit the results of the mixture proportioning studies signed and stamped by the registered professional engineer having technical responsibility for the mix design study, and submitted at least 30 days prior to commencing

concrete placing operations. Include a statement summarizing the maximum nominal coarse aggregate size and the weights and volumes of each ingredient proportioned on a one cubic yard basis. Base aggregate quantities on the mass in a saturated surface dry condition. Provide test results demonstrating that the proposed mixture proportions produce concrete of the qualities indicated. Base methodology for trial mixtures having proportions, slumps, and air content suitable for the work as described in ACI 211.1, modified as necessary to accommodate flexural strength. ACI 211.1 can be supplemented with ACI 325.14R. Submit test results including:

a. Individual coarse and fine aggregate gradations and plots that meet ASTM C33. Include historic gradation averages and standard deviations on individual sieves for each aggregate size group produced within the past 12 months. Historical gradation averages are not to be utilized for the Proportioning Studies.

b. Combined aggregate gradation and coarseness vs. workability plots.

c. Coarse aggregate quality test results. Report the Aggregate Correction Factor (ACF).

d. Fine aggregate quality test results.

e. Mill certificates for cement and supplementary cementitious materials.

f. Certified test results for air entraining, water reducing, retarding, non-chloride accelerating admixtures.

g. Specified flexural strength, slump, and air content.

h. Documentation of required average CQC flexural strength, Ra.

i. Recommended proportions and volumes for each proposed mixture for each proposed placement method (slipform, fixed form, and hand placement) if different. Include three trial water-cementitious materials ratios for each proposed placement method (slipform, fixed form, and hand placement).

j. Individual beam breaks.

k. Flexural strength summaries and plots.

l. Correlation ratios for acceptance testing and CQC testing.

m. Historical record of ACI 214R strength test results, documenting production standard deviation (if available).

n. Narrative discussing methodology on how the mix design was developed in accordance with ACI 211.1 and ACI 325.14R.

o. Alternative aggregate blending to be used during the test section if necessary to meet the required surface and consolidation requirements.

2.13.2.1 Water-Cementitious Materials Ratio

Perform at least three different water-cementitious materials ratios, within the limits specified in paragraph Allowable Water-Cementitious Materials Ratio, which produce a range of strength encompassing that

required on the project. The minimum and maximum water-cementitious materials ratios of the approved mix design become the minimnum and maximum water-cementitious materials ratio for the project during production.

2.13.2.2 Trial Mixture Studies

Perform separate sets of trial mixture studies made for each combination of cementitious materials and each combination of admixtures proposed for use. No combinations are to be used until proven by such studies, except that, if approved in writing and otherwise permitted by these specifications, an accelerating or retarding admixture can be used without separate trial mixture study. Perform separate trial mixture studies for each placing method (slip form, fixed form, or hand placement) proposed. Report the temperature of concrete in each trial batch. Design each mixture to promote easy and suitable concrete placement, consolidation and finishing, and to prevent segregation and excessive bleeding. Proportion laboratory trial mixtures for maximum slump and air content, as permitted by the placement method being utilized.

2.13.2.3 Mixture Proportioning for Flexural Strength

Follow the step by step procedure below:

a. Fabricate all beams for each mixture from the same batch or blend of batches. Fabricate and cure all beams in accordance with ASTM C192/C192M, using 6 x 6 inches steel beam molds.

b. Cure test beams from each mixture for 3, 7, 14, and 56 and 90-day flexural tests; 6 beams to be tested per age.

c. Test beams in accordance with ASTM C78/C78M.

d. Using the average strength for each w/c at each age, plot all results from each of the three mixtures on separate graphs for w/c versus:

    3-day flexural strength
    7-day flexural strength
    14-day flexural strength
    56 and 90-day flexural strength

e. From these graphs select a w/c that produces a mixture giving a 90-day flexural strength equal to the required strength determined in accordance with paragraph Average CQC Flexural Strength Required for Mixtures.

f. Using the above selected w/c, select from the graphs the expected 3, 7 and 14-day flexural strengths.

g. From the above expected strengths for the selected mixture, determine the Ratio of the 7-day flexural strength of the selected mixture to the 90-day flexural strength of the mixture (for CQC control).

h. From the above expected strengths for the selected mixture, determine the Ratio of the 14-day flexural strength of the selected mixture to the 90-day flexural strength of the mixture (for acceptance).

i. If there is a change in materials, perform additional mixture design studies using the new materials and determine new Correlation Ratios.

j. No concrete pavement placement is allowed until the mixture proportions are approved. The approved water-cementitious materials ratio is restricted to the minimum and maximum values specified in paragraph Water-Cementitious Materials Ratio and is not to be increased without written approval.

2.13.3 Average CQC Flexural Strength Required for Mixtures

a. In order to meet the strength requirements specified in paragraph SPECIFIED CONCRETE STRENGTH AND OTHER PROPERTIES during production, the mixture proportions selected during mixture proportioning studies and used during construction require an average CQC flexural strength, Ra, exceeding the specified flexural strength, R, by the amount indicated below.

b. The required average CQC flexural strength, Ra, is used only for proportioning studies and CQC operations as specified in paragraph Concrete Strength Testing for CQC.

c. Acceptance of production flexural strength results is based on the specified flexural strength R specified in paragraph: Specified Flexural Strength.

2.13.3.1 From Previous Test Records

Where a concrete production facility has previous test records current to within 18 months, establish a standard deviation in accordance with the applicable provisions of ACI 214R. Include test records from which a standard deviation is calculated that represent materials, quality control procedures, and conditions similar to those expected, that represent concrete produced to meet a specified flexural strength or strengths within 150 psi of the 90-day flexural strength specified for the proposed work, and that consist of at least 30 consecutive tests. Perform verification testing to document the current strength. A strength test is the average of the strengths of two specimens made from the same sample of concrete and tested at 90 days. Required average CQC flexural strength, Ra, used as the basis for selection of concrete proportions is the value from the equation that follows, using the standard deviation as determined above:

$$Ra = R + 1.34S$$

Where: S = standard deviation
R = specified flexural strength
Ra = required average CQC flexural strength

Where a concrete production facility does not have test records meeting the requirements above but does have a record based on 15 to 29 consecutive tests, establish a standard deviation as the product of the calculated standard deviation and a modification factor from Table 13:

TABLE 14	
MODIFICATION FACTOR FOR STANDARD DEVIATION	
NUMBER OF TESTS	MODIFICATION FACTOR
20	1.08
25	1.03
30 or more	1.00

2.13.3.2 Without Previous Test Records

When a concrete production facility does not have sufficient field strength test records for calculation of the standard deviation, determine the required average CQC flexural strength, Ra, by adding 15 percent to the specified flexural strength, R.

PART 3 EXECUTION

3.1 PREPARATION FOR PAVING

Before commencing paving, perform the following actions to prepare for paving operations. If used, place cleaned, coated, and adequately supported forms. Have any reinforcing steel needed at the paving site; all transporting and transfer equipment ready for use, clean, and free of hardened concrete and foreign material; equipment for spreading, consolidating, screeding, finishing, and texturing concrete at the paving site, clean and in proper working order; and all equipment and material for curing and for protecting concrete from weather or mechanical damage at the paving site, in proper working condition, and in sufficient amount for the entire placement.

3.1.1 Weather Precaution

When windy conditions during paving appear probable, have equipment and material at the paving site to provide windbreaks, shading, fogging, or other action to prevent plastic shrinkage cracking or other damaging drying of the concrete. During these conditions, record and report the evaporation rate hourly.

3.1.2 Proposed Techniques

Submit placing and protection methods; paving sequence; jointing pattern; data on curing equipment and profilographs; repair in accordance with paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS, demolition of existing pavements, as specified; pavement diamond grinding equipment and procedures. Submit for approval the following items:

a. Pavement demolition work plan, presenting the proposed methods and equipment to remove existing pavement and protect pavement to remain in place.

b. A description of the placing and protection methods proposed when concrete is to be placed in or exposed to hot, cold, or inclement weather conditions

c. A detailed paving sequence plan and proposed paving pattern showing all planned construction joints; transverse and longitudinal dowel bar

spacing; and identifying pilot lanes, fill-in lanes, and hand placement areas. Include stationing for reference to all sampling and testing performed. Deviations from the jointing pattern shown on the drawings are not allowed without written approval of the design engineer.

d. Plan and equipment proposed to control alignment of sawn joints within the specified tolerances.

e. Data on the curing equipment, media and methods to be used.

f. Data on profilograph and methods to measure pavement smoothness.

g. A description of the equipment and methods to be used for grinding and repairs.

3.2 CONDITIONING OF UNDERLYING MATERIAL

3.2.1 General Procedures

Confirm the underlying material upon which concrete is to be placed is clean, damp, and free from debris, waste concrete or cement, frost, ice, and standing or running water. Prior to setting forms or placement of concrete, confirm the underlying material is well drained and has been satisfactorily graded and uniformly compacted in accordance with the applicable contract documents. Test the surface of the underlying material to crown, elevation, and density in advance of setting forms or of concrete placement using slip-form techniques. Trim high areas to proper elevation. Fill and compact low areas to a condition similar to that of surrounding grade, or fill with concrete monolithically with the pavement. Low areas filled with concrete are not to be cored for thickness to avoid biasing the average thickness used for evaluation and payment adjustment. Rework and compact any underlying material disturbed by construction operations to specified density immediately in front of the paver. If a slipform paver is used, continue the same underlying material beyond the edge of the lane a sufficient distance to provide a suitable trackline for the slipform paver and firm support for the edge of the paving lane.

3.2.2 Traffic on Underlying Material

After the underlying material has been prepared for concrete placement, equipment is not permitted thereon with exception of the paver. Subject to specific approval, crossing of the prepared underlying material at specified intervals for construction purposes may be permitted, provided rutting or indentations do not occur. Rework and repair the surface before concrete is placed.

3.3 WEATHER LIMITATIONS

3.3.1 Placement and Protection During Inclement Weather

Do not commence placing operations when heavy rain or other damaging weather conditions appear imminent. At all times when placing concrete, maintain on-site sufficient waterproof cover and means to rapidly place it over all unhardened concrete or concrete that might be damaged by rain. Immediately cover and protect all unhardened concrete from rain or other damaging weather. Suspend placement of concrete whenever rain, high winds, or other weather commences to damage the surface or texture of the placed

unhardened concrete, washes cement out of the concrete, or changes the water content of the surface concrete.

Remove and replace any slab damaged by rain or other weather, as defined in paragraph Weak Surfaces, full depth, by full slab width, to the nearest original joint as specified in paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS, at no expense to the Government.

3.3.2 Paving in Hot Weather

Prepare for hot weather paving in accordance with ACI 305R. When the ambient temperature during paving is expected to exceed 90 degrees F, properly place and finish the concrete in accordance with procedures previously submitted, approved, and as specified herein. Provide concrete that does not exceed the temperature shown in Table 14 below when measured in accordance with ASTM C1064/C1064M at the time of delivery. Cool the mixing water or aggregates or place in the cooler part of the day to obtain an adequate placing temperature. Cool steel forms and reinforcing as needed to maintain steel temperatures below 120 degrees F. Cool or protect transporting and placing equipment if necessary to maintain proper concrete placing temperature. Keep the finished surfaces of the newly laid pavement damp by applying a fog spray (mist) with approved spraying equipment until the pavement is covered by the curing medium.

TABLE 15	
Maximum Allowable Concrete Placing Temperature	
Relative Humidity, Percent, During Time of Concrete Placement	Maximum Allowable Concrete Temperature in Degrees F
Greater than 60	90
55-60	85
Less than 55	75

3.3.3 Prevention of Plastic Shrinkage Cracking

During weather with low humidity, and particularly with high temperature and appreciable wind, develop and institute measures to prevent plastic shrinkage cracks from developing. If plastic shrinkage cracking occurs, halt further placement of concrete until protective measures are in place to prevent further cracking. Periods of high potential for plastic shrinkage cracking can be anticipated by use of ACI 305R. In addition to the protective measures specified in the previous paragraph, further protect the concrete placement by erecting shades and windbreaks and by applying fog sprays of water, the addition of monomolecular films, or wet covering. If monomolecular films are used, apply only after finishing is complete, do not use in the finishing process, and follow manufacturer recommendations. Immediately commence curing procedures when such water treatment is stopped. Repair plastic shrinkage cracks in accordance with paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS. Never trowel over or fill plastic shrinkage cracks with slurry.

3.3.4 Paving in Cold Weather

Cold weather paving is required to conform to ACI 306R. Use special protection measures, as specified herein, if freezing temperatures are

anticipated or occur before the expiration of the specified curing period. Do not begin placement of concrete unless the ambient temperature is at least 35 degrees F and rising. Thereafter, halt placement of concrete whenever the ambient temperature drops below 40 degrees F. When the ambient temperature is less than 50 degrees F, the temperature of the concrete when placed is required to be not less than 50 degrees F nor more than 75 degrees F. Provide heating of the mixing water or aggregates as required to regulate the plastic concrete temperature. Provide materials entering the mixer that are free from ice, snow, or frozen lumps. Do not incorporate salt, chemicals or other materials in the concrete to prevent freezing. Provide covering and other means for maintaining the concrete at a temperature of at least 10 degrees C 50 degrees F for not less than 72 hours after placing, and at a temperature above freezing for the remainder of the curing period as defined in paragraph Protection of Concrete. Remove pavement slabs, full depth by full width, damaged by freezing or falling below freezing temperature to the nearest planned joint, and replace as specified in paragraph REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS, at no expense to the Government.

3.4 CONCRETE PRODUCTION

Accompany every load of concrete delivered to the paving site with a batch ticket from the operator of the batching plant. Provide batch ticket information required by ASTM C94/C94M on approved forms. In addition provide design quantities in mass or volume for all materials, batching tolerances of all materials, mixture batching time, and design and actual water cementitious materials ratio on each batch delivered, the water meter and revolution meter reading on truck mixers and the time of day on all batch tickets. Provide batch tickets for each truck delivered as part of the lot acceptance package to the placing foreman to maintain on file and deliver them to the Government weekly.

3.4.1 Batching and Mixing Concrete

Remove any equipment which fails to perform as specified immediately from use until properly repaired and adjusted or replaced.

3.4.2 Transporting and Transfer - Spreading Operations

Operate non-agitating equipment only on smooth roads and for haul time less than 30 minutes. Deposit concrete as close as possible to its final position in the paving lane. Operate all equipment to discharge and transfer concrete without segregation. Dumping of concrete in discrete piles is not permitted. No transfer or spreading operation which requires the use of front-end loaders, dozers, or similar equipment to distribute the concrete is permitted.

3.5 PAVING

3.5.1 General Requirements

Construct pavement using rigid fixed forms and approved placing, consolidation, and finishing equipment. Perform paving operations in a manner that produces concrete slabs meeting the specified line, grade, thickness, and surface tolerances.

3.5.2 Consolidation

Insert vibrators into the concrete to a depth that provides the best

full-depth consolidation but not closer to the underlying material than 2 inches. Excessive vibration is not permitted. Consolidate concrete in small, odd-shaped slabs or in isolated locations with an approved hand-operated immersion vibrator. Do not use vibrators to transport or spread the concrete. Do not operate hand-operated vibrators in the concrete at one location for more than 20 seconds. Insert hand-operated vibrators between 6 to 15 inches on centers. Any evidence of inadequate consolidation (honeycomb along the edges, large air pockets, or any other evidence) requires the immediate stopping of the paving operation and approved adjustment of the equipment or procedures.

3.5.3 Required Results

Adjust and coordinate placing, consolidation, and finishing procedures with the concrete mixture being used, to produce a thoroughly consolidated slab throughout that is true to line and grade within specified tolerances. Provide finishing operations that produces a surface finish with a minimum, isolated amount of irregularities, tears, voids of any kind, and any other discontinuities. Stop paving if any equipment or operation fails to produce the above results. Prior to recommencing paving, properly adjust or replace the equipment, modify the operation, or modify the mixture proportions, in order to produce the required results. No water, other than fog sprays (mist) as specified in paragraph Prevention Of Plastic Shrinkage Cracking above, is allowed to be applied to the concrete or the concrete surface during paving and finishing.

3.5.4 Fixed Form Paving

Provide paving equipment for fixed-form paving and operation that conforms to the requirements of paragraph EQUIPMENT, and all requirements specified herein.

3.5.4.1 Forms for Fixed-Form Paving

a. Provide straight forms made of steel and in sections not less than 10 feet in length that are clean and free of rust or other contaminants. Seal any holes or perforations in forms prior to paving unless otherwise permitted. Maintain forms in place and passable by all equipment necessary to complete the entire paving operation without need to remove horizontal form supports. Provide flexible or curved forms of proper radius for curves of 100-foot radius or less. Provide wood forms for curves and fillets made of well-seasoned, surfaced plank or plywood, straight, and free from warp or bend that have adequate strength and are rigidly braced. Provide forms with a depth equal to the pavement thickness at the edge. Where the project requires several different slab thicknesses, build up forms by bolting or welding a tubular metal section or by bolting wood planks to the bottom of the form to completely cover the underside of the base of the form and provide an increase in depth of not more than 25 percent. Provide forms with the base width of the one-piece or built-up form not less than eight-tenths of the vertical height of the form, except provide forms 8 inches or less in vertical height with a base width not less than the vertical height of the form. Provide forms with maximum vertical deviation of top of any side form, including joints, not varying from a true plane more than 1/8 inch in 10 feet, and the upstanding leg not varying more than 1/4 inch.

b. Provide form sections that are tightly locked and free from play or movement in any direction. Provide forms with adequate devices for

secure settings so that when in place they withstand, without visible spring or settlement, the impact and vibration of the consolidating and finishing equipment.

c. Set forms for full bearing on foundation for entire length and width and in alignment with edge of finished pavement. Support forms during entire operation of placing, consolidation, and finishing so that forms do not deviate vertically more than 0.01 foot from required grade and elevations indicated. Check conformity to the alignment and grade elevations shown on the drawings and make necessary corrections immediately prior to placing the concrete. Clean and oil the forms each time before concrete is placed. Concrete placement is not allowed until setting of forms has been checked and approved by the CQC team.

d. Do not anchor guide rails for fixed form pavers into new concrete or existing concrete to remain.

3.5.4.2 Form Removal

Keep forms in place at least 12 hours after the concrete has been placed. When conditions are such that the early strength gain of the concrete is delayed, leave the forms in place for a longer time. Remove forms by procedures that do not damage the concrete. Do not use bars or heavy metal tools directly against the concrete in removing the forms. Promptly repair any concrete found to be defective after form removal, using procedures specified or as directed.

3.5.5 Placing Reinforcing Steel

Provide the type and amount of steel reinforcement indicated. Regardless of placement procedure, provide reinforcing steel free from coatings which could impair bond between the steel and concrete, with reinforcement laps as indicated. Regardless of the equipment or procedures used for installing reinforcement, adequately consolidate the entire depth of concrete. Install steel reinforcement at the required elevation within a tolerance of plus of minus 1/2 inch.

3.5.5.1 Pavement Thickness Less Than 12 Inches

For pavements less than 12 inches thick, position the reinforcement on suitable chairs or continuous mesh support devices securely fastened to the subgrade prior to concrete placement. Consolidate concrete after the steel has been placed.

3.5.6 Placing Dowels

Provide a method to install and hold dowels in position that meets the tolerances for location, alignment, and spacing of Table 15. Do not place longitudinal dowels closer than 0.6 times the dowel bar length to the planned joint line. If the last regularly spaced longitudinal dowel is closer than that dimension, move it away from the joint to a location 0.6 times the dowel bar length, but not closer than 6 inches to its nearest neighbor. Resolve dowel interference at a transverse joint-longitudinal joint intersection by deleting the closest transverse dowel. Do not position the end of a transverse dowel closer than 12 inches from the end of the nearest longitudinal dowel. Install dowels as specified in the following subparagraphs.

TABLE 16	
DOWEL ALIGNMENT TOLERANCES	
Dowel Measurement	Tolerance
Horizontal alignment (a)	Maximum of 1/8 inch per foot after the pavement has been completed
Vertical alignment (b)	Maximum of 1/8 inch per foot after the pavement has been completed
Horizontal spacing	plus or minus 5/8 inch, except as otherwise specified above
Vertical location on the face of the slab	plus or minus 1/2 inch
(a) Check horizontal alignment perpendicular to the joint edge with a framing square.	
(b) Measure the vertical alignment of the dowels parallel to the designated top surface of the pavement, except for those across the crown or other grade change joints. Measure dowels across crowns and other joints at grade changes to a level surface.	

3.5.6.1 Contraction Joints

Securely hold dowels in longitudinal and transverse contraction joints within the paving lane in place, as indicated, by means of rigid metal frames or basket assemblies of an approved type. Securely hold the basket assemblies in the proper location by means of suitable pins or anchors. Do not cut or crimp the dowel basket tie wires.

3.5.6.2 Construction Joints-Fixed Form Paving

Install dowels by the bonded-in-place method or the drill-and-dowel method. Installation by removing and replacing in preformed holes is not permitted. Prepare and place dowels across joints where indicated, correctly aligned, and securely held in the proper horizontal and vertical position during placing and finishing operations, by means of devices fastened to the forms. Provide the spacing of dowels in construction joints as indicated, except that, where the planned spacing cannot be maintained because of form length or interference with form braces, provide closer spacing with additional dowels.

3.5.6.3 Dowels Installed in Hardened Concrete

Install dowels in hardened concrete by bonding the dowels into holes drilled into the hardened concrete. Before drilling commences, cure the concrete for 7 days or until it has reached a minimum field cured flexural strength of 450 psi. Drill holes 1/8 inch greater in diameter than the dowels into the hardened concrete using rotary-core drills. Rotary-percussion drills are permitted, provided that excessive spalling does not occur at the concrete joint face. Excessive spalling is defined

as spalling deeper than 1/4 inch from the joint face or 1/2 inch radially from the outside of the drilled hole. Continuing damage requires modification of the equipment and operation. Drill depth of dowel hole within a tolerance of plus or minus 1/2 inch of the half length of the embedded dowel. Upon completion of the drilling operation, blow out the dowel hole with oil-free, compressed air. Bond dowels in the drilled holes using epoxy resin. Inject epoxy resin at the back of the hole before installing the dowel and extrude to the collar during insertion of the dowel so as to completely fill the void around the dowel. Application by buttering the dowel is not permitted. Hold the dowels in alignment at the collar of the hole, after insertion and before the grout hardens, by means of a suitable metal or plastic grout retention ring fitted around the dowel. Provide dowels required between new and existing concrete in holes drilled in the existing concrete, all as specified above.

3.5.6.4 Lubricating Dowel Bars

Wipe clean the portion of each dowel intended to move within the concrete and coat with a thin, even film of lubricating oil or light grease before the concrete is placed. Form oil is not acceptable.

3.6 FINISHING

Provide finishing operations as a continuing part of placing operations starting immediately behind the paver. Provide finishing by the machine method. Hand finishing requirements are specifed in paragraph HAND FINISHING. Provide the sequence of operations consisting of transverse finishing, longitudinal machine floating if used, straightedge finishing, texturing, and then edging of joints. Provide a work bridge as necessary for consolidation and hand finishing operations. Use the hand method only on isolated areas of odd slab widths or shapes and in the event of a breakdown of the mechanical finishing equipment. Keep supplemental hand finishing for machine finished pavement to an absolute minimum. Immediately stop any machine finishing operation which requires appreciable hand finishing, other than a moderate amount of straightedge finishing. Prior to recommencing machine finishing, properly adjust or replace the equipment. Immediately halt any operations which produce more than 1/8 inchof mortar-rich surface (defined in paragraph Weak Surfaces) and modify the equipment, mixture, or procedures as necessary. Compensate for surging behind the screeds or extrusion plate and settlement during hardening and adjust the paving and finishing machines so that the finished surface of the concrete (not just the cutting edges of the screeds) is at the required line and grade. Maintain finishing equipment and tools clean and in an approved condition. Water is not allowed to be added to the surface of the slab with the finishing equipment or tools, or in any other way, except for fog (mist) sprays specified to prevent plastic shrinkage cracking.

3.6.1 Machine Finishing With Fixed Forms

Replace machines that cause displacement of the forms. Only one pass of the fixed form finishing machine is allowed over each area of pavement. If the equipment and procedures do not produce a surface of uniform texture, true to grade, in one pass, immediately stop the operation and adjust the equipment, mixture, and procedures as necessary.

3.6.2 Surface Correction and Testing

After all other finishing is completed but while the concrete is still

plastic, eliminate minor irregularities and score marks in the pavement surface by means of cutting straightedges. Provide cutting straightedges with a minimum length of 12 feet that are operated from the sides of the pavement or from bridges. Provide cutting straightedges operated from the side of the pavement equipped with a handle 3 feet longer than one-half the width of the pavement. Test the surface for trueness with a straightedge held in successive positions parallel and at right angles to the center line of the pavement, and cover the whole area to detect variations. Advance the straightedge along the pavement in successive stages of not more than one-half the length of the straightedge. Immediately fill depressions with freshly mixed concrete, strike off, consolidate with an internal vibrator, and refinish. Strike off projections above the required elevation and refinish. Continue the straightedge testing and finishing until the entire surface of the concrete is free from observable departure from the straightedge and conforms to the surface requirements specified in paragraph SURFACE SMOOTHNESS. This straightedging is not allowed to be used as a replacement for the straightedge testing of paragraph SURFACE SMOOTHNESS. Use long-handled, flat bull floats very sparingly and only as necessary to correct minor, scattered surface defects. If frequent use of bull floats is necessary, stop the paving operation and adjust the equipment, mixture or procedures to eliminate the surface defects. Keep finishing with hand floats and trowels to the absolute minimum necessary. Take extreme care to prevent overfinishing joints and edges. Produce the surface finish of the pavement essentially by the finishing machine and not by subsequent hand finishing operations. All hand finishing operations are subject to approval.

3.6.3 Hand Finishing

Use hand finishing operations only as specified below. Provide a work bridge to be used as necessary for consolidation and placement operations to avoid standing in concrete.

3.6.3.1 Equipment and Template

In addition to approved mechanical internal vibrators for consolidating the concrete, provide a strike-off and tamping template and a longitudinal float for hand finishing. Provide a template at least 1 foot longer than the width of pavement being finished, of an approved design, and sufficiently rigid to retain its shape, that is constructed of metal or other suitable material shod with metal. Provide a longitudinal float at least 10 feet long, of approved design, that is rigid and substantially braced to maintain a plane surface on the bottom. Grate tampers (jitterbugs) are not allowed.

3.6.3.2 Finishing and Floating

As soon as the plastic concrete is placed and consolidated, strike off the concrete and screed to the cross section and to such elevation above grade that when consolidated and finished, the surface of the pavement is at the required elevation. Immediately following the final tamping of the surface, float the pavement longitudinally from bridges resting on the side forms and spanning but not touching the concrete. Do not advance the floating operation more than half the length of the float and continue over the new and previously floated surfaces.

3.6.4 Texturing

Before the surface sheen has disappeared and before the concrete hardens or curing compound is applied, texture the surface of the pavement as described herein. After the curing period is complete, thoroughly power broom all textured surfaces to remove all debris.

3.6.4.1 Burlap Drag Surface

Apply surface texture by dragging the surface of the pavement, in the direction of the concrete placement, with an approved burlap drag. Operate the drag with the fabric moist, and maintain the fabric clean. Change as required to keep clean. Perform the dragging so as to produce a uniform finished surface having a fine sandy texture without disfiguring marks.

3.6.4.2 Surface Grooving

Groove the new pavement to match existing grooves of adjacent panels, as applicable.

3.6.5 Edging

Before texturing has been completed, carefully finish the edge of the slabs along the forms, along the edges of slipformed lanes, and at the joints with an edging tool to form a smooth rounded surface of 1/8 inch radius. Eliminate tool marks, and provide edges that are smooth and true to line. Water is not allowed to be added to the surface during edging. Take extreme care to prevent overworking the concrete.

3.6.6 Pavement Penetrations

Construct recesses for the tie-down anchors, lighting fixtures, and other outlets in the pavement to conform to the details and dimensions shown. Carefully finish the concrete in these areas to provide a surface of the same texture as the surrounding area that is within the requirements for plan grade and surface smoothness.

3.7 CURING

3.7.1 Protection of Concrete

Continuously protect concrete against loss of moisture and rapid temperature changes for at least 7 days from the completion of finishing operations. Have all equipment needed for adequate curing and protection of the concrete on hand and ready for use before actual concrete placement begins. If any selected method of curing does not afford the proper curing and protection against concrete cracking, remove or replace the damaged pavement, and provide another method of curing as directed. Accomplish curing by one of the following methods.

3.7.2 Membrane Curing

Apply a uniform coating of white-pigmented, membrane-forming, curing compound to the entire exposed surface of the concrete as soon as the free water has disappeared from the surface after finishing. Apply immediately along the formed edge faces after the forms are removed. Do not allow the concrete to dry before the application of the membrane. If any drying has occurred, moisten the surface of the concrete with a fine spray of water,

and apply the curing compound as soon as the free water disappears. Apply the curing compound to the finished surfaces by means of an approved automatic spraying machine. Apply the curing compound with an overlapping coverage that provides a two-coat application at a coverage of 400 square feet per gallon, plus or minus 5.0 percent for each coat. A one-coat application is allowed provided it is applied in a uniform application and coverage of 200 square feet per gallon, plus or minus 5.0 percent is obtained. The application of curing compound by hand-operated, mechanical powered pressure sprayers is permitted only on odd widths or shapes of slabs and on concrete surfaces exposed by the removal of forms. When the application is made by hand-operated sprayers, apply a second coat in a direction approximately at right angles to the direction of the first coat. If pinholes, abrasions, or other discontinuities exist, apply an additional coat to the affected areas within 30 minutes. Respray curing compound to concrete surfaces that are subjected to heavy rainfall within 3 hours after the curing compound has been applied. Within the curing period, immediately respray areas where the curing compound is damaged by subsequent construction operations. During the entire curing period, adequately protect membrane-cured concrete surfaces from pedestrian and vehicular traffic, except as required for joint-sawing operations and surface tests, and from any other possible damage to the continuity of the membrane.

3.7.3 Moist Curing

Maintain concrete to be moist-cured continuously wet for the entire curing period, or until curing compound is applied, commencing immediately after finishing. If forms are removed before the end of the curing period, provide curing on unformed surfaces, using suitable materials. Cure surfaces by ponding, by continuous sprinkling, by continuously saturated burlap or cotton mats, or by continuously saturated plastic coated burlap. Provide burlap and mats that are clean and free from any contamination and completely saturated before being placed on the concrete. Lap sheets to provide full coverage. Provide an approved system to provide continuous moist curing 24 hours per day and such that the entire surface is wet.

3.8 JOINTS

3.8.1 General Requirements for Joints

Construct joints that conform to the locations and details indicated and are perpendicular to the finished grade of the pavement. Provide joints that are straight and continuous from edge to edge or end to end of the pavement with no abrupt offset and no gradual deviation greater than 1/2 inch. Where any joint fails to meet these tolerances, remove and replace the slabs adjacent to the joint at no additional cost to the Government. Changes from the jointing pattern shown on the drawings are not allowed without written approval. Seal joints immediately following curing of the concrete or as soon thereafter as weather conditions permit as specified in Section 32 01 19.61 SEALING OF JOINTS IN RIGID PAVEMENT.

3.8.2 Longitudinal Construction Joints

Install dowels in the longitudinal construction joints, or thicken the edges as indicated. Install dowels as specified above. After the end of the curing period, saw longitudinal construction joints to provide a reservoir at the top for sealant conforming to the details and dimensions indicated.

3.8.3 Transverse Construction Joints

Install transverse construction joints at the end of each day's placing operations and at any other points within a paving lane when concrete placement is interrupted for 30 minutes or longer. Provide transverse construction joints by utilizing headers or by paving through the joint, then full-depth sawcutting the excess concrete. Construct pavement with the paver as close to the header as possible, with the paver run out completely past the header. Provide transverse construction joints at a planned transverse joint constructed as shown or, if not shown otherwise, dowelled in accordance with paragraph DOWELS INSTALLED IN HARDENED CONCRETE, or paragraph FIXED FORM PAVING above.

3.8.4 Expansion Joints

Provide expansion joints where indicated, and about any structures and features that project through or into the pavement, using joint filler of the type, thickness, and width indicated, and installed to form a complete, uniform separation between the structure and the pavement or between two pavements. Attach the filler to the original concrete placement with adhesive and mechanical fasteners and extending to the full slab depth. Tightly fit adjacent sections of filler together, with the filler extending across the full width of the paving lane or other complete distance in order to prevent entrance of concrete into the expansion space. Finish edges of the concrete at the joint face with an edger with a radius of 1/8 inch. After placement and curing of the adjacent slab, sawcut the sealant reservoir depth from the filler.

3.8.5 Slip Joints

Install slip joints where indicated using the specified materials. Attach preformed joint filler material to the face of the original concrete placement with adhesive and mechanical fasteners. Sawcut a 3/4 inch deep reservoir for joint sealant at the top of the joint. Finish edges of the joint face with an edger with a radius of 1/8 inch.

3.8.6 Contraction Joints

Construct transverse and longitudinal contraction joints by an initial sawcut in the concrete with a 1/8 inch blade to the indicated depth. During sawing of joints, and again 24 hours later, inspect all exposed lane edges for development of cracks below the saw cut, and immediately report results. If there are more than six consecutive uncracked joints after 48 hours, saw succeeding joints 25 percent deeper than originally indicated at no additional cost to the Government. Vary the time of initial sawing depending on existing and anticipated weather conditions to prevent uncontrolled cracking of the pavement. Commence sawing of the joints as soon as the concrete has hardened sufficiently to permit cutting the concrete without chipping, spalling, or tearing. Inspect the sawed faces of joints for undercutting or washing of the concrete due to the early sawing, and delay sawing if undercutting is sufficiently deep to cause structural weakness or excessive roughness in the joint. Continue the sawing operation as required during both day and night regardless of weather conditions. Saw the joints in the sequence of the concrete placement. Provide adequate lighting for night work. Illumination using vehicle headlights is not permitted. Provide a chalk line or other suitable guide to mark the alignment of the joint. Before sawing a joint, examine the concrete closely for cracks, and do not saw the joint if a

crack has occurred near the planned joint location. Discontinue sawing if a crack develops ahead of the saw cut. Immediately after the joint is sawed, thoroughly flush the saw cut and adjacent concrete surface with water and vacuum until all waste from sawing is removed from the joint and adjacent concrete surface. Properly protect the concrete from damage and cure at sawed joints. Tightly seal the top of the joint opening and the joint groove at exposed edges with cord backer rod before the concrete in the region of the joint is resprayed with curing compound, and maintain until removed immediately before sawing the joint sealant reservoir. Respray the surface with curing compound as soon as free water disappears. Seal the exposed saw cuts on the vertical faces of pilot lanes with bituminous mastic or masking tape. After expiration of the curing period, widen the upper portion of the groove by sawing with ganged diamond saw blades to the width and depth indicated for the joint sealer. Center the reservoir over the initial sawcut.

3.8.7 Thickened Edge Joints

Construct thickened edge joints as indicated on the drawings. Grade the underlying material in the transition area as shown and meet the requirements for smoothness and compaction specified for all other areas of the underlying material.

3.9 REPAIR, REMOVAL AND REPLACEMENT OF NEWLY CONSTRUCTED SLABS

3.9.1 General Criteria

Repair or remove and replace new pavement slabs as specified at no cost to the Government. Removal of partial slabs is not permitted. Prior to any repairs, submit a Repair Recommendations Plan detailing areas exceeding the specified limits as well as repair recommendations required to bring these areas within specified tolerances.

3.9.2 Repair of Free Edge Lane Vertical Faces

Repair excessive edge slump and joint face deformation while concrete is in a plastic state by approved methods using forms in accordance with paragraph Forms for Fixed-Form Paving.

3.9.3 Slabs with Cracks

The Government may require cores to be taken over cracks to determine depth of cracking. Drill cores with a minimum diameter of 6 inches, and backfill with an approved concrete mixture. Perform drilling of cores and filling of holes at no expense to the Government. Clean cracks that do not exceed 2 inches in depth; then pressure inject full depth with epoxy resin, Type IV, Grade 1. In lieu of injectable epoxy the following may be used:

a. For cracks of a width less than or equal to 0.015 inch: A High Molecular Weight Methyl Methacrylate (HMWMMA) with a neat monomer viscosity of less than or equal to 50 centipoise and greater than 5 centipoise as measured using ASTM D2196. If measuring the viscosity of a catalyzed or polymerization initiated HMWMMA the viscosity as measured using ASTM D2196 must be less than or equal to 60 centipoise and greater than 5 centipoise.

b. For crack widths greater than 0.015 inch: A HMWMMA with a neat monomer viscosity of less than 300 centipoise as measured using ASTM D2196.

The cured surface of the MMA must be flush with the surface of the surrounding PCC Plus or minus 1/16 inch.

c. Do not apply HMWMMA to surfaces larger than 25 square feet prior to 70 days of curing of the PCC. Perform a test section with the HMWMMA product manufacturer's representative present before production application in the presence of the government.

Remove and replace slabs containing cracks deeper than 2 inches.

3.9.4 Removal and Replacement of Full Slabs

Remove new or existing slabs damaged during construction that contain more than 15.0 percent of each longitudinal or transverse joint edge spalled. Where it is necessary to remove full slabs, remove in accordance with paragraph Removal Of Existing Pavement Slab below. Remove and replace full depth, by full width of the slab, and extend to each original joint. Compact and shape the underlying material as specified in the appropriate section of these specifications, clean the surfaces of all four joint faces of all loose material and contaminants, and coat with a double application of membrane forming curing compound as a bond breaker and to protect concrete that has not been cured for at least 7 days. Install dowels of the size and spacing as specified for other joints in similar pavement by epoxy grouting them into holes drilled into the existing concrete using procedures as specified in paragraph PLACING DOWELS, above. Provide dowels for all four edges of the new slab. Cut off original damaged dowels flush with the joint face. Lightly oil or grease protruding portions of new dowels. Place concrete as specified for original construction. Take care to prevent any curing compound from contacting dowels. Prepare and seal the resulting joints around the new slab as specified for original construction.

3.9.5 Repairing Spalls Along Joints

Repair spalls along joints to be sealed to a depth to restore the full joint-face support prior to placing adjacent pavement. Where directed, repair spalls along joints of new slabs, along edges of adjacent existing concrete, and along parallel cracks by first making a vertical saw cut at least 3 inches outside the spalled area and to a depth of at least 2 inches. Provide saw cuts consisting of straight lines forming rectangular areas without sawing beyond the intersecting saw cut. Chip out the concrete between the saw cut and the joint, or crack, to remove all unsound concrete and into at least 1/2 inch of visually sound concrete. Thoroughly clean the cavity thus formed with high pressure water jets supplemented with oil-free compressed air to remove all loose material. Immediately before filling the cavity, apply a prime coat to the dry cleaned surface of all sides and bottom of the cavity, except any joint face. Apply the prime coat in a thin coating and scrub into the surface with a stiff-bristle brush. Provide prime coat for portland cement repairs consisting of a neat cement grout and for epoxy resin repairs consisting of epoxy resin, Type III, Grade 1. Fill the prepared cavity with material identified in Table 16 based on the cavity volume.

TABLE 17	
SPALL REPAIRS	
Volume of Prepared Cavity After Removal Operations	Material

TABLE 17	
less than 0.03 cubic foot	epoxy resin mortar or epoxy resin or latex modified mortar
0.03 cubic foot and 1/3 cubic foot	portland cement mortar
more than 1/3 cubic foot	portland cement concrete or latex modified mortar

Provide portland cement concretes and mortars that consist of very low slump mixtures, 1/2 inch slump or less, proportioned, mixed, placed, consolidated by tamping, and cured, all as directed. Provide epoxy resin mortars made with Type III, Grade 1, epoxy resin, using proportions and mixing and placing procedures as recommended by the manufacturer and approved. Proprietary patching materials may be used, subject to Government approval. Place the epoxy resin materials in the cavity in layers with a maximum thickness of 2 inches. Provide adequate time between placement of additional layers such that the temperature of the epoxy resin material does not exceed 140 degrees F at any time during hardening. Provide mechanical vibrators and hand tampers to consolidate the concrete or mortar. Remove any repair material on the surrounding surfaces of the existing concrete before it hardens. Where the spalled area abuts a joint, provide an insert or other bond-breaking medium to prevent bond at the joint face. For existing joints, seal the bottom contraction crack with backer rod to prevent instrusion of primer or mortar. Saw a reservoir for the joint sealant to the dimensions required for other joints. Thoroughly clean the reservoir and then seal with the sealer specified for the joints. In lieu of sawing, spalls and popouts, less than 6 inches in maximum dimension and not adjacent to a joint, may be prepared by drilling a core 2 inches in diameter greater than the size of the defect, centered over the defect, and 2 inches deep or 1/2 inch into sound concrete, whichever is greater. Repair the core hole as specified above for other spalls.

3.9.6 Weak Surfaces

Weak surfaces are defined as mortar-rich, rain-damaged, uncured, or containing exposed voids or deleterious materials. Rain damaged pavement is pavement with coarse aggregate exposed at the surface. Cores evaluated by a qualified petrographer to contain carbonation to a depth greater than 1/8 inch or Mohs hardness of less than 2, when tested in accordance with ASTM C1895, are also considered rain damaged. A mortar-rich surface is defined as pavement deficient in plus 4.75 mm U.S. No. 4 sieve size aggregate. Diamond grind slabs containing weak surfaces less than 1/4 inch thick to remove the weak surface. Diamond grind in accordance with paragraph Diamond Grinding Of PCC Surfaces. All diamond ground areas are required to meet the thickness, smoothness and plan grade criteria specified in PART 1 GENERAL. Remove and replace slabs containing weak surfaces greater than 1/4 inch thick.

3.9.7 Repair of Pilot Lane Vertical Faces

Repair excessive edge slump and joint face deformation while concrete is in a plastic state by approved methods.

3.10 EXISTING CONCRETE PAVEMENT REMOVAL AND REPAIR

Demolition of existing operational pavement is not allowed prior to approval of the Proportioning Studies. Remove existing concrete pavement at locations indicated on the drawings. Prior to commencing pavement

removal operations, inventory the pavement distresses (cracks, spalls, and corner breaks) along the pavement edge to remain. After pavement removal, survey the remaining edge again to quantify any damage caused by removal operations. Perform both surveys in the presence of the Government. Perform repairs as indicated and as specified herein. Carefully control all operations to prevent damage to the concrete pavement and to the underlying material to remain in place. Perform all saw cuts perpendicular to the slab surface, forming rectangular areas. Perform all existing concrete pavement repairs prior to paving adjacent lanes.

3.10.1 Removal of Existing Pavement Slab

When existing concrete pavement is to be removed and adjacent concrete is to be left in place, perform the first full depth saw cut on the joint between the removal area and adjoining pavement to stay in place with a standard diamond-type concrete saw. Next, perform a full depth saw cut parallel to the joint that is at least 24 inches from the joint and at least6 inches from the end of any dowels with a wheel saw as specified in paragraph SAWING EQUIPMENT. Remove all pavement beyond this last saw cut in accordance with the approved demolition work plan. Remove all pavement between this last saw cut and the joint line by carefully pulling pieces and blocks away from the joint face with suitable equipment and then picking them up for removal. In lieu of this method, this strip of concrete may be carefully broken up and removed using hand-held jackhammers, 30 lb or less, or other approved light-duty equipment which does not cause stress to propagate across the joint saw cut and cause distress in the pavement which is to remain in place. In lieu of the above specified removal method, the slab may be sawcut full depth to divide it into several pieces and each piece lifted out and removed. Use suitable equipment to provide a truly vertical lift, and safe lifting devices used for attachment to the slab.

3.10.2 Edge Repair

Protect the edge of existing concrete pavement against which new pavement abuts from damage at all times. Remove and replace slabs which are damaged during construction as directed at no cost to the Government. Repair of previously existing damaged areas is considered a subsidiary part of concrete pavement construction. Saw off all exposed keys and keyways full depth.

3.10.2.1 Spall Repair

Repair spalls caused by construction activities if less than 15.0 percent of any slab's edge. Provide repair materials and procedures as previously specified in paragraph, Repairing Spalls Along Joints. Remove and replace full slabs if spalls exceed 15.0 percent of any slab's edge as specified in paragraph, Removal and Replacement of Full Slabs.

3.10.2.2 Underbreak and Underlying Material

Repair all underbreak by removal and replacement of the damaged slabs in accordance with paragraph REMOVAL AND REPLACEMENT OF FULL SLABS above. Protect the underlying material adjacent to the edge of and under the existing pavement which is to remain from damage or disturbance during removal operations and until placement of new concrete, and shape as directed. Maintain sufficient underlying material in place outside the joint line to completely prevent disturbance of material under the pavement which is to remain in place. Remove and replace any slab with

underlying material that is disturbed or loses its compaction.

3.11 PAVEMENT PROTECTION

Exclude traffic from the new pavement by erecting and maintaining barricades and signs until the concrete is at least 14 days old, or for a longer period if so directed. As a construction expedient in paving intermediate lanes between newly paved pilot lanes, operation of the hauling and paving equipment is permitted on the new pavement after the pavement has been cured for 7 days, the joints have been sealed or otherwise protected, the concrete has attained a minimum field cured flexural beam strength of 550 psi and approved means are provided to prevent damage to the slab edge. Fabricate and field cure specimens in accordance with ASTM C31/C31M. Continuously maintain all new and existing pavement carrying construction traffic or equipment completely clean, and clean up spillage of concrete or other materials immediately upon occurrence. Take special care in areas where traffic uses or crosses active airfield pavement. Power broom other existing pavements at least daily when traffic operates. For fill-in lanes, provide equipment that does not damage or spall the edges or joints of the previously constructed pavement. Protect the pavement against all damage prior to final acceptance of the work by the Government. Placement of aggregates, rubble, or other similar construction materials on airfield pavements is not allowed.

3.12 TESTING AND INSPECTION FOR CONTRACTOR QUALITY CONTROL DURING CONSTRUCTION

3.12.1 Testing and Inspection by Contractor

During construction, perform sampling and testing of aggregates, cementitious materials (cement, slag cement, and pozzolan), and concrete to determine compliance with the specifications. Provide facilities and labor for procurement of representative test samples. Furnish sampling platforms and belt templates to obtain representative samples of aggregates from charging belts at the concrete plant. Obtain samples of concrete at the point of delivery to the paver. Testing by the Government in no way relieves the specified testing requirements. Perform the inspection and tests described below, and based upon the results of these inspections and tests, take the action required and submit reports as required. Perform this testing regardless of any other testing performed by the Government, either for pay adjustment purposes or for any other reason. Include stationing for all sampling and testing.

3.12.2 Testing and Inspection Requirements

Perform CQC sampling, testing, inspection and reporting in accordance with the following Table. Retest aggregate sources and stockpiles in accordance with Table 17 if not used within the previous 3 months.

TABLE 18			
TESTING AND INSPECTION REQUIREMENTS			
Frequency	Test Method	Control Limit	Corrective Action
Fine Aggregate Gradation and Fineness Modulus			
2 per lot	ASTM C136/C136M sample at belt	9 of 10 tests vary less than 0.15 from average	Retest, resolve, retest
		Outside limits on any sieve	Retest
		2nd gradation failure	Stop, resolve, retest
1 per 10 gradations	ASTM C117	Outside limits on any sieve	Retest
		2nd gradation failure	Stop, repair, retest
Coarse Aggregate Gradation (each aggregate size)			
2 per lot	ASTM C136/C136M sample at belt	Outside limits on any sieve	Retest
		2nd gradation failure	report to COR, correct
		2 consecutive averages of 5 tests outside limits	report to COR, stop ops, repair, retest
1 per 10 gradations	ASTM C117	Outside limits on any sieve	Retest
		2nd gradation failure	report to COR, correct
		2 consecutive averages of 5 tests outside limits	report to COR, stop ops, repair, reverify all operations
Workability Factor and Coarseness Factor Computation			

TABLE 18			
TESTING AND INSPECTION REQUIREMENTS			
Frequency	Test Method	Control Limit	Corrective Action
Same as C.A. and F.A.	see paragraph AGGREGATES	Use individual C.A. and F.A. gradations. Combine using batch ticket percentages (average of aggregate percentages from 3 before and 3 after sampling). Tolerances: plus or minus 3 points on WF; plus or minus 5 points on CF from approved adjusted mix design values; only the portion of the tolerance box within the parallelogram is available for use	Check batching tolerances, recalibrate scales
		2 consecutive averages of 5 tests outside limits	Stop production paving, report to COR, and revise materials and operations to be in compliance prior to restarting production paving
Aggregate Deleterious, Quality, and ASR Tests			
Every 30 days of concrete production	see paragraph AGGREGATES		Stop production, retest, replace aggregate. Increase testing interval to 90 days if previous 2 tests pass
Plant - Scales, Weighing Accuracy			
Monthly	NRMCA QC 3		Stop plant ops, repair, recalibrate
Plant - Batching and Recording Accuracy			
Weekly	Record/Report	Record required/recorded/actual batch mass	Stop plant ops, repair, recalibrate
Plant - Batch Plant Control			

TABLE 18			
TESTING AND INSPECTION REQUIREMENTS			
Frequency	Test Method	Control Limit	Corrective Action
Every lot	Record/Report		Record type and amount of each material per lot
Plant - Mixer Uniformity - Stationary Mixers			
Before test section and Every 4 months during paving or Every 6 months when not generating production paving	COE CRD-C 55	After initial approval, use abbreviated method	Increase mixing time, change batching sequence, reduce batch size to bring into compliance. Retest
Plant - Mixer Uniformity - Truck Mixers			
Every 4 months during paving	ASTM C94/C94M	Random selection of truck.	Increase mixing time, change batching sequence, reduce batch size to bring into compliance. Retest
Concrete Mixture - Air Content			
When test specimens prepared plus 2 random per lot	ASTM C231/C231M sample at point of discharge within the paving lane	Individual test control chart: Warning plus or minus 1.0	Adjust AEA, retest
		Individual test control chart: Action plus or minus 1.5	Halt operations, repair, retest
		Range between 2 consecutive tests: Warning plus 2.0	Recalibrate AEA dispenser
		Range between 2 consecutive tests: Action plus 3.0	Halt operations, repair, retest
Concrete Mixture - Unit Weight and Yield			

TABLE 18			
TESTING AND INSPECTION REQUIREMENTS			
Frequency	Test Method	Control Limit	Corrective Action
Same as Air Content	ASTM C138/C138M sample at point of discharge within the paving lane	Individual test basis: Warning Yield minus 0 or plus 1 percent	Check batching tolerances
		Individual test basis: Action Yield minus 0 or plus 5 percent	Halt operations
Concrete Mixture - Slump			
When test specimens prepared plus 4 random per lot	ASTM C143/C143M sample at point of discharge within the paving lane	Individual test control chart: Upper Warning slipform minus 1/2 inch below max fixed form 1.5 inches hand placement 2.5 inches	Adjust batch masses within max W/C ratio
		Individual test control chart: Upper Action at maximum allowable slump	Stop operations, adjust, retest
		Range between each consecutive test: 1-1/2 inches	Stop operations, repair, retest
Concrete Mixture - Temperature			
When test specimens prepared	ASTM C1064/C1064M sample at point of discharge within the paving lane	See paragraph WEATHER LIMITATIONS	
Concrete Mixture - Strength			
8 per lot	ASTM C31/C31M sample at point of discharge within the paving lane	See paragraph CONCRETE STRENGTH TESTING for CQC Perform fabrication of strength specimens and initial cure outside the paving lane and within 1,000 feet of the sampling point.	
Paving - Inspection Before Paving			
Prior to each paving operation	Report	Inspect underlying materials, construction joint faces, forms, reinforcing, dowels, and embedded items	

TABLE 18			
TESTING AND INSPECTION REQUIREMENTS			
Frequency	Test Method	Control Limit	Corrective Action
Paving - Inspection During Paving			
During paving operation		Monitor and control paving operation, including placement, consolidation, finishing, texturing, curing, and joint sawing.	
Paving - Vibrators			
Weekly during paving	COE CRD-C 521	Test frequency (in concrete), and amplitude (in air), average measurement at tip and head.	Repair or replace defective vibrators.
Moist Curing			
2 per lot, min 4 per day	Visual		Repair defects, extend curing by 1 day
Membrane Compound Curing			
Daily	Visual	Calculate coverage based on quantity/area	Respray areas where coverage defective. Recalibrate equipment
Cold Weather Protection			
Once per day	Visual		Repair defects, report conditions to COR

3.12.3 Control Charts

Maintain linear control charts for fine and coarse aggregate gradation, combined gradation coarseness factor/workability factor, slump, air content, unit weight, yeld, and 7 and 14 day flexural strengths.

Post the control charts as directed and maintain current at all times. Identify the following on the control charts: the project number, the test parameter being plotted, the individual sample numbers, the Warning and Action Limits listed in Table 17 applicable to the test parameter being plotted, and the test results. Use the control charts as part of the process control system for identifying trends so that potential problems can be corrected before they occur. Make decisions concerning mix modifications based on analysis of the results provided in the control

charts.

3.12.4 Concrete Strength Testing for CQC

Perform Contractor Quality Control operations for concrete strength consisting of the following steps:

a. Take samples for strength tests at the paving site. Fabricate and cure test beams in accordance with ASTM C31/C31M; test them in accordance with ASTM C78/C78M.

b. Fabricate and cure 2 test beams per sublot from the same batch or truckload and at the same time acceptance beams are fabricated and test them for flexural strength at 7-day age.

c. Average all 8 flexural tests per lot. Convert this average 7-day flexural strength per lot to equivalent 90-day flexural strength using the Correlation Ratio determined during mixture proportioning studies.

d. Compare the equivalent 90-day flexural strength from the conversion to the required average CQC flexural strength, Ra.

e. If the equivalent average 90-day strength for the lot is below the required average CQC flexural strength, Ra, by 69 psi flexural strength or more, at any time, adjust the mixture to increase the strength, as approved.

f. Maintain up-to-date control charts for strength, showing the 7-day CQC flexural strength, the Ratio of the 14-day flexural strength to the 90 -day flexural strength (from acceptance tests), and the 90-day flexural strength (from acceptance tests) of each of these for each lot.

3.12.5 Reports

Report all results of tests or inspections conducted as they are completed and in writing daily. Post updated control charts and identify accepted paving lots on the detailed paving sequence paving plan covering the entire period from the start of paving through the current week. These requirements do not relieve the obligation to report failures immediately as required in preceding paragraphs and Section 01 45 00 QUALITY CONTROL. Confirm reports of failures and the corrective action taken in writing in the daily Quality Control reports and within each respective Paving Lot Report. Compile, reduce, analyze and compute pay adjustment factors for all associated test data collected on each paving lot.

Submit complete and comprehensive Paving Lot Reports for the test section and production paving within 16 days after the completion of the placement. Do not place an adjacent or contiguous lane/lot prior to providing required pavement data identified in items a.-y. conforming to the acceptance criteria. Payment will not be made until all required data identified in items a.-y. has been submitted and reviewed by the government. Organize each Paving Lot Report by the following specific items. The list below is not all inclusive. Add tests and inspections as appropriate for each specific paving lot constructed.

Table Summary of payment adjustment factors and pass/fail factors Detailed Placement Plan, labeling lots/sublots with stationing. Identify core locations, and testing locations.

Provide narrative addressing the following at a minimum:

a. Protective Measures: Rain, Cold, Hot and/or windy on-site conditions including evaporation rates, high/low ambient temperature. Post-Production protection and traffic control.

b. Success, failures, and issues encountered during all operations associated with the placement to include, but not limited to, batching, transporting, paving, texturing and curing.Include any process control changes that were necessary to meet specified tolerances.

c. Stockpile Management before and during placement.

d. Initial saw cutting operation to include start and finish times (early entry or wet diamond, flushing and vacuuming, backer rod installation and reapplication of curing compound).

e. Finishing operations (cutting straight-edge, automatic longitudinal float, edging tool, minimal hand work and excess paste).

f. Texturing operations to include start and finish times.

g. Curing operations to include start and finish times.

h. Environmental conditions of initial cure facility to include location and temperatures.

i. Planned correction(s) or correction(s) completed

j. Dowel installation

Provide required inspection documentation for the following at a minimum:

k. Batch Plant, Equipment, and Curing Equipment Verification

l. Dowel Baskets, forms, reinforcing, embeds and block-outs

m. Summary of recent underlying material test results showing compliance. Include information such as submittal numbers or date of daily report(s) where the detailed testing data is located.

Quality Control Testing

n. PCC Plastic Mixture Properties (temperature, air content, slump, unit weight)

o. Aggregate gradation test results and CF-WF plot

p. Control Charts

q. Joint Crack Tracking and Record

Acceptance Testing (before and after corrections)

r. Surface Smoothness test results (straightedge and profilograph) in both longitudinal and transverse directions.

s. Edge Slump test results (identify excessive, lost and rebuilt edge(s)).

t. Joint Face Deformation test results.

u. Plan Grade: table providing x, y, and elevation values versus design values signed by licensed surveyor.

v. Strength: beam/cylinder strength results (with updated correlation ratios and control chart).

w. Cores: Locations/Stationing of cores shown on Placement Plan, thickness measurements, photos and evaluation of cores.

x. Dowel holes, and dowel alignment

y. Legible copies of batch tickets. Tickets should include all required data, time received, and time discharge completed.

-- End of Section --

SECTION 32 13 73.19

COMPRESSION CONCRETE PAVING JOINT SEALANT

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 D412	(2016; R 2021) Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension
ASTM D2628	(2025) Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements
ASTM D2835	(1989; R 2017) Standard Specification for Lubricant for Installation of Preformed Compression Seals in Concrete Pavements

U.S. ARMY CORPS OF ENGINEERS (USACE)

COE CRD-C 548	(1988) Standard Specification for Jet-Fuel and Heat-Resistant Preformed Polychloroprene Elastomeric Joint Seals for Rigid Pavements

1.2 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Equipment

Manufacturer's Instructions

SD-04, Samples

Compression Seals; G

SD-06 Test Reports

Test Requirements; G

1.3 QUALITY ASSURANCE

1.3.1 Trial Joint Seal and Lubricant/Adhesive Installation

Prior to the cleaning and sealing of the joints for the entire project, prepare a test section at least 200 ft long at a designated location in the project pavement, using the specified materials and the approved equipment to demonstrate the proposed joint preparation and sealing of the joints in the project. Following the completion of the trial length and before another joint is sealed, the Government will inspect the trial joints to determine that the materials and installation meet the requirements specified. If materials or installation do not meet requirements, remove the materials, and reclean and reseal the joints at no cost to the Government. Do not seal other joints until the test installation has been approved. If the trial section is approved, permit the section to be incorporated into the permanent work. Seal other joints in the manner approved for sealing the trial joint.

1.4 DELIVERY, STORAGE, AND HANDLING

Inspect materials delivered to the jobsite for defects. Unload and store materials with a minimum of handling to avoid damage. Provide storage facilities that protect materials from weather and maintain materials within temperatures recommended by the manufacturer.

1.5 ENVIRONMENTAL REQUIREMENTS

Install materials only when the ambient temperature and the pavement temperature within the joint wall is at least 35 degrees F and rising. Do not permit sealant installation if moisture or foreign material is observed in the joint.

PART 2 PRODUCTS

2.1 SYSTEM EQUIPMENT

Provide machines, tools, and equipment, for use in the performance of the work required by this section, approved before the work is started, and maintained in satisfactory condition. Submit list of proposed machines, tools, and equipment to be used in the performance of joint sealing, including descriptive data, 30 days prior to use on the project.

2.1.1 Joint Cleaning Equipment

2.1.1.1 Concrete Saw

Provide a self-propelled power saw with water-cooled diamond saw blades for cutting joints to the depths and widths specified and for removing filler, existing old joint seal, or other material embedded in the joints or adhered to the joint faces.

2.1.1.2 Waterblasting Equipment

Include with the waterblasting equipment a trailer-mounted water tank, pumps, high-pressure hose, a wand with safety release cutoff controls, nozzle, and auxiliary water resupply equipment. Use a water tank and auxiliary water resupply equipment of sufficient capacity to permit continuous operations. Use pumps, hoses, wand, and nozzle of sufficient capacity to permit the cleaning of both walls of the joint and the

pavement surface for a width of at least 1/2 in on either side of the joint. Use a pressure gauge mounted at the pump that shows the pressure in psi at which the equipment is operating.

2.1.2 Sealing Equipment

Install the compression seal by placing the compression seal to the prescribed depths and within the specified tolerances without cutting, nicking, twisting, or otherwise damaging the seal. Use equipment capable of placing the seal with not more than two percent longitudinal stretch or compression of the seal during installation. Use a machine that is an automatic self-propelled joint seal application equipment and engine powered. Use a machine that includes a reservoir for the lubricant/adhesive, a device for conveying the lubricant/adhesive in the proper quantities to the sides of the compression seal or the sidewalls of the joints, a reel capable of holding one full spool of compression seal, and a power-driven apparatus for feeding the joint seal through a compression device and inserting the seal into the joint. Include a guide with the equipment to maintain the proper course along the joint being sealed. Operate the machine by an experienced operator.

2.1.3 Test Requirements

Submit certified copies of test results, 30 days prior to use of material on the project. Sample, identify and test each lot of compression joint seal and lubricant/adhesive for conformance with the material specification.

a. A lot of compression seal consists of 1 day's production or 20,000 linear ft for each cross section, whichever is less. A lot of lubricant/adhesive consists of 1 day's production. Submit samples of the compression joint seal and lubricant/adhesive material to be tested by the Government. Do not permit use of material at the project prior to receipt of written notice that the materials meet the laboratory requirements.

b. Testing of the compression joint seal and lubricant/adhesive material is the responsibility of the Contractor. Perform testing in an approved, independent laboratory, and submit certified copies of the test reports for approval 30 days prior to the use of the materials at the jobsite.

c. Submit samples of each lot of material to be retained by the Government for possible future testing if the materials appear defective during or after application. Provide additional samples of materials, in sufficient quantity to be tested, upon request. Base final acceptance on conformance to the specified test requirements and the performance of the in-place materials with respect to slipping down the joint or material coming out of the joint.

2.2 COMPRESSION SEALS

Regardless of testing responsibility, submit 9 ft long samples of the materials, 60 days prior to use on the project. Provide printed directions from the manufacturer on recommended installation criteria with the samples plus the manufacturer's certification that the selected seal is recommended for the installation on this project. Use compression joint seal materials that are vulcanized elastomeric compound using polychloroprene as the only base polymer. Use material and manufactured

seal in accordance with ASTM D2628 and COE CRD-C 548 where jet fuel and/or heat blast resistance is required as tested by ASTM D412. Use a labryinth seal for the joint seal. The uncompressed depth of the face of the compression seal (that is to be bonded to the joint wall) is greater than the uncompressed width of theseal, except that for seals 1 in or greater in width, the depth need be only1 in or greater. The actual width of the uncompressed seal for construction and contraction joints is 1 in. The tolerance on the seal is plus 1/8 in or minus 1/16 in.

2.3 LUBRICANT/ADHESIVE

Use a lubricant/adhesive for the compression elastomeric joint seal that is a one-component compound conforming to ASTM D2835.

PART 3 EXECUTION

3.1 PREPARATION OF JOINTS

Immediately before installation of the compression joint seal, clean the joints to remove laitance, filler, existing sealer, foreign material and protrusions of hardened concrete from the sides and upper edges of the joint space to be sealed. Clean by sandblasting or waterblasting and extend along pavement surfaces at least 1/2 in on either side of the joint. After final cleaning and immediately prior to sealing, blow out the joints with compressed air and leave free of debris and water. Demonstrate that the selected cleaning operation meets the cleanliness requirements resulting in joint sidewalls that are clean and dry and exhibit newly exposed concrete. Correct irregularities in the joint face which would prevent uniform contact between the joint seal and the joint face prior to the installation of the joint seal.

3.1.1 Sawing

Clean and open joints to the specified width and depth by sawing. Immediately following the sawing operation, clean the joint faces and opening using a water jet to remove saw cuttings or debris remaining on the faces or in the joint opening. Install compression seal within 3 calendar days of the time the joint cavity is sawed. Provide a depth of the joint cavity in accordance with manufacturer's instructions. Where installation procedures are required in accordance with the manufacturer's recommendations, submit printed copies of manufacturers' instructions, 30 days prior to use on the project. Center the saw cut for the joint seal cavity over the joint line. Provide the nominal width of the sawed joint seal cavity as follows:

a. If a nominal 1 in wide compression seal is provided, the nominal width of the saw cut is 9/16 ins when the pavement temperature at the time of sawing is between 25 and 140 degrees F. If the pavement temperature at the time of sawing is above this range, decrease the nominal width of the saw cut 1/16 in. If the pavement temperature at the time of sawing is below this range, increase the nominal width of the saw cut 1/16 in.

b. Measure the pavement temperature in the presence of the Contracting Officer. Make measurement each day before commencing sawing and when the temperature appears to be varying from the allowable sawing range.

Use a tolerance of plus or minus 1/16 in for the actual width.

3.1.2 Waterblast Cleaning

Use a multiple pass waterblast technique until the surfaces are free of dust, dirt, curing compound, or residue that might prevent ready insertion or uniform contact of the seal and bonding of the lubricant/adhesive to the concrete. After final cleaning and immediately prior to sealing, blow out the joints with compressed air and leave completely free of debris and water.

3.1.3 Rate of Progress

Limit sandblasting or waterblasting of joint faces to the length of joint that can be sealed during the same workday.

3.2 INSTALLATION OF THE COMPRESSION SEAL

Confirm a representative of the joint seal manufacturer is present at the trial joint installation to correct installation issues prior to full installation.

3.2.1 Time of Installation

Seal joints immediately within 3 calendar days of sawing the joint seal cavity and following concrete cure and the final cleaning of the joint walls. Provide open joints, ready for sealing that cannot be sealed under the specified conditions, with an approved temporary seal to prevent infiltration of foreign material. When rain interrupts the sealing operations, wash, clean with air pressure, and allow joints to dry prior to installing the lubricant/adhesive and compression seal.

3.2.2 Sequence of Installation

Seal longitudinal joints first, followed by transverse joints. Install seals in longitudinal joints so that transverse joint seals are intact from edge to edge of the pavement. Make intersections monolithic by use of joint seal adhesive and care in fitting the intersection parts together. Do not permit extender pieces of seal at intersections. Remove and replace seals falling short at the intersection with new seals at no additional cost to the Government. Require a poured sealant at the intersection where seals are required to change direction by more than 20 degrees. Provide poured sealant in accordance with compression seal manufacturer's instructions.

3.3 SEALING OF JOINTS

Cover the sides of the joint seal or the sides of the joint with a coating of lubricant/adhesive and the seal installed as specified. Coat butt joints and seal intersections with liberal applications of lubricant/adhesive. Immediately removed lubricant/adhesive spilled on the pavement to prevent setting on the pavement.

Provide the in-place joint seal will be in an upright position and free from twisting, distortion, and cuts. Adjustments will be made to the installation equipment and procedure, if the stretch exceeds 1 percent. Remove and replace seals exceeding 2 percent stretch. Place the joint seal at a uniform depth within the tolerances specified. Remove and replace in-place joint seals which fail to meet the specified requirements with new joint seal at no cost to the Government.

Place the compression joint seal to a depth of 1/4 in, plus or minus 1/8 in, below the pavement surface except when the joint is beveled or has a radius at the surface, or unless otherwise directed. For beveled joints or joints with a radius at the surface, install the compression joint seal at a depth of 1/8 in, plus or minus 1/8 in, below the bottom of the edge of the bevel or radius. Do not permit the seal to project above the surface of the pavement or above the edge of the bevel or radius.

Install the seal in the longest practicable lengths in longitudinal joints and cut at the joint intersections to provide continuous installation of the seal in the transverse joints. Permit the lubricant/adhesive in the longitudinal joints to set for 1 hour prior to cutting at the joint intersections to reduce the possibility of shrinkage. For transverse joints, the minimum length of the compression joint seal is the pavement width from edge to edge.

3.4 CLEAN-UP

Upon completion of the project, remove unused materials from the site, remove lubricant/adhesive on the pavement surface, and leave the pavement in clean condition.

3.5 QUALITY CONTROL PROVISIONS

3.5.1 Application Equipment

Inspect the application equipment to assure uniform application of lubricant/adhesive to the sides of the compression joint seal or the walls of the joint. If equipment causes cutting, twisting, nicking, excessive stretching or compressing of the seal, or improper application of the lubricant/adhesive, suspend the operation until causes of the deficiencies are determined and corrected.

3.5.2 Procedures

3.5.2.1 Quality Control Inspection

Provide quality control provisions during the joint cleaning process to prevent or correct improper equipment and cleaning techniques that damage the concrete. Cleaned joints will be approved by the Government prior to installation of the lubricant/adhesive and compression joint seal.

3.5.2.2 Conformance to Stretching and Compression Limitations

Determine conformance to stretching and compression limitations. Mark the top surface of the compression seal at 1 ft intervals in a manner clear and durable to enable length determinations of the seal. After installation, measure the distance between the marks on the seal. If the stretching or compression exceeds 2 percent, remove the seal and replace it with new joint at no additional cost to the Government. Remove the seal up to the last correct measurement. Inspect the seal a minimum of once per 100 ft of seal for compliance to the shrinkage or compression requirements. Make measurements at the same interval to determine conformance with depth and width of installation requirements. Remove and replace compression seal that is not in conformance with specification requirements with new joint seal at no additional cost to the Government.

3.5.2.3 Pavement Temperature

Determine the pavement temperature by placing a thermometer in the initial saw cut for the joint and record the reading. Permit the thermometer to remain in the joint for an adequate time to provide a stable control reading.

3.5.3 Acceptance

Inspect the joint sealing system (compression seal and lubricant/adhesive) for proper rate of cure and bonding to the concrete, cuts, twists, nicks and other deficiencies. Remove, waste and replace seals exhibiting defects prior to final acceptance of the project from the joint.

-- End of Section --

SECTION 33 40 00

STORMWATER UTILITIES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO HB-17	(2002; Errata 2003; Errata 2005, 17th Edition) Standard Specifications for Highway Bridges
AASHTO M 252	(2025) Standard Specification for Corrugated Polyethylene Pipe, 75- to 250-mm (3- to 10-in.) Diameter

ASTM INTERNATIONAL (ASTM)

ASTM D2321	(2020) Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications
ASTM D3212	(2020) Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
ASTM F477	(2014; R 2021) Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe

1.2 SUBMITTALS

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SD-08 Manufacturer's Instructions

Placing Pipe; G

SD-11 Closeout Submittals

Post-Installation Inspection Report; G

1.3 DELIVERY, STORAGE, AND HANDLING

1.3.1 Delivery and Storage

Inspect materials delivered to site for damage and unload and store materials with minimumal handling. Do not store materials directly on the ground. Keep the inside of pipes and fittings free of dirt and debris. Before, during, and after installation, protect plastic pipe and fittings from any environment that would result in damage or deterioration to the material. Keep a copy of the manufacturer's instructions available at the construction site at all times and follow these instructions unless directed otherwise by the Contracting Officer. Store solvents, solvent compounds, lubricants, elastomeric gaskets, and any similar materials required to install plastic pipe in accordance with the manufacturer's recommendations and discard if the storage period exceeds the recommended shelf life. Discard solvents in use when the recommended pot life is exceeded.

1.3.2 Handling

Handle materials in a manner that ensures delivery to the trench in sound, undamaged condition. Carry pipe to the trench.

PART 2 PRODUCTS

2.1 PIPE FOR STORM DRAINS

Pipe sizes for storm drains are indicated on the drawings.

2.1.1 Polyethylene (PE) Pipe

2.1.1.1 Corrugated Dual Wall PE Pipe

AASHTO M 252, Type S. Provide pipe walls having the following properties:

Nominal Size (inch)	Pipe Outside Diameter inch
4	4.8

2.2 PIPE JOINTS

2.2.1 Corrugated Dual Wall PE Plastic Pipe

Provide water tight joints conforming to the requirements in AASHTO M 252. The joint shall be watertight according to the requirements of ASTM D3212. Gaskets shall meet the requirments of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. Joint lubricant shall be used on the gasket and bell during assembly.

PART 3 EXECUTION

3.1 EXCAVATION FOR STORM DRAINS

Excavate trenches, excavate for appurtenances and backfill for storm drains, in accordance with the requirements specified below.

3.1.1 Trenching

Excavate trenches to the width indicated on the drawings or as specified herein. Trench width should permit satisfactory jointing and thorough tamping of the bedding material under and around the pipe. Place sheeting and bracing, where required, within the trench width as specified, without any overexcavation.

3.1.2 Removal of Rock

Replace rock in either ledge or boulder formation with suitable materials to provide a compacted earth cushion. Provide a compacted earth cushion between unremoved rock and the pipe with a thickness of at least 8 inches or1/2 inch for each foot of fill over the top of the pipe, whichever is greater, but not more than three-fourths the nominal diameter of the pipe. Maintain the cushion under the bell as well as under the straight portion of the pipe where bell-and-spigot pipe is used. Provide a compacted earth cushion between unremoved rock and the box culvert of at least 8 inches in thickness for concrete box culverts.

3.1.3 Removal of Unstable Material

Where wet or otherwise unstable soil incapable of properly supporting the pipe or box culvert, as determined by the Contracting Officer, is unexpectedly encountered in the bottom of a trench, remove such material to the depth required and replace with select granular material to the proper grade. Compact select granular material as specified in paragraph FINAL BACKFILL. When removal of unstable material is due to the fault or neglect of the Contractor while performing shoring and sheeting, water removal, or other specified requirements, perform such removal and replacement at no additional cost to the Government.

3.2 BEDDING AND INITIAL BACKFILL

Provide a firm bedding foundation of uniform density throughout the entire length of the pipe.

3.2.1 Plastic Pipe

Provide bedding for PVC, PE, SRPE and PP pipe meeting the requirements of ASTM D2321. Use Class IB or II material for PVC, PE, SRPE pipe bedding, haunching, and initial backfill. Use Class I, II, or III material for PP pipe bedding, haunching and initial backfill.

3.3 PLACING PIPE

Submit printed copies of the pipemanufacturer's recommended pipe installation procedures prior to installation. Thoroughly examine each section of pipe before being laid; do not use defective or damaged pipe. Protect plastic pipe, excluding SRPE pipe, from exposure to direct sunlight prior to laying, if necessary to maintain adequate pipe stiffness and meet installation deflection requirements. Lay pipelines to the grades and alignment indicated. Provide proper facilities for lowering sections of pipe into trenches. Do not lay pipe in water or when trench conditions or weather are unsuitable for such work. Divert drainage or dewater trenches during construction as necessary. Deflection of installed flexible pipe must not exceed the following limits:

TYPE OF PIPE	MAXIMUM ALLOWABLE DEFLECTION (percent)
Plastic (PVC, HDPE, SRPE, and PP)	5

3.3.1 PE, SRPE, and Dual Wall and Triple Wall PP Pipe

Lay on a bed shaped to line and grade and joint sections together in accordance with manufacturer's guidelines.

3.4 JOINTING

3.4.1 Corrugated Polyethylene (PE) Pipe

3.4.1.1 Flexible Watertight Joints

Use lubricants, cements, adhesives, and other special installation requirements for gaskets and jointing materials as recommended by the manufacturer. When lubricants, cements, or adhesives are used, only apply on surfaces that are clean and dry. Affix gaskets and jointing materials to the pipe not more than 24 hours prior to the installation of the pipe, and protect from the sun, blowing dust, and other deleterious agents at all times. Inspect gaskets and jointing materials before installing the pipe; remove and replace any loose or improperly affixed gaskets and jointing materials. Align the pipe with the previously installed pipe, and push the joint home. If the gasket becomes visibly dislocated when joining sections of pipe, remove the pipe and remake the joint.

3.5 FINAL BACKFILL

Backfill trenches with satisfactory material deposited in layers of a maximum of 6 inches loose thickness and compacted to 95 percent of maximum density. Testing is the responsibility of the Contractor and will be performed at no additional cost to the Government. Unless otherwise specified, determine field in-place density of final backfill at a frequency of one test per 50 linear feet, or fraction thereof, of each lift of backfill. Submit test results. Do not displace or damage pipe or box when compacting final backfill by rolling or operating heavy equipment parallel with the pipe or box. Movement of construction machinery over a culvert or storm drain at any stage of construction will be at the Contractor's risk. Repair or replace any damaged pipe. Protect concrete pipes with a minimum of 3 feet of cover prior to permitting heavy construction equipment to pass over them during construction. Provide the minimum cover for construction loads over corrugated steel pipes as specified in Section 26, Division II of AASHTO HB-17. Provide minimum cover for construction loads over plastic pipes as specified in ASTM D2321.

3.6 FIELD QUALITY CONTROL

3.6.1 Tests

Testing is the responsibility of the Contractor. Perform all testing and retesting at no additional cost to the Government.

3.6.2 Inspection

3.6.2.1 Post-Installation Inspection

3.6.2.1.1 Flexible Pipe

Check each flexible pipe (PE, PVC, PP, corrugated steel and aluminum) for rips, tears, joint separations, soil migration throught the joint, cracks, localized buckling, bulges, settlement and alignment.

3.6.2.1.2 Post-Installation Inspection Report

The deflection results and final post installation inspection report must include: pipe location identification, equipment used for inspection, inspector name, deviation from design, grade, deviation from line, deflection and deformation of flexible pipe, inspector notes, condition of joints, condition of pipe wall (e.g. distress, cracking, wall damage dents, bulges, creases, tears, holes, etc.).

3.6.3 Repair of Defects

3.6.3.1 Inspection

Replace pipe or repair defects indicated in the Post-Installation Inspection Report.

3.6.3.1.1 Flexible Pipe

Replace pipes having cracks or splits.

3.7 PROTECTION

Protect storm drainage piping and adjacent areas from superimposed and external loads during construction.

3.8 WARRANTY PERIOD

Pipe segments found to have defects during the warranty period must be replaced with new pipe and retested.

-- End of Section --