

SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)	1. SOLICITATION NUMBER	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED	PAGE OF PAGES
	IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.			

4. CONTRACT NUMBER	5. REQUISITION/PURCHASE REQUEST NUMBER	6. PROJECT NUMBER
7. ISSUED BY	CODE	8. ADDRESS OFFER TO

9. FOR INFORMATION CALL:	a. NAME	b. TELEPHONE NUMBER (Include area code) (NO COLLECT CALLS)
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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)	

11. The contractor shall begin performance within _____ calendar days and complete it within _____ calendar days after receiving <input type="checkbox"/> award, <input type="checkbox"/> notice to proceed. This performance period is <input type="checkbox"/> mandatory <input type="checkbox"/> negotiable. (See _____).	
12a. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES", indicate within how many calendar days after award in Item 12b.) <input type="checkbox"/> YES <input type="checkbox"/> NO	12b. CALENDAR DAYS

13. ADDITIONAL SOLICITATION REQUIREMENTS:

a. Sealed offers in original and _____ copies to perform the work required are due at the place specified in Item 8 by _____ (hour) local time _____ (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 _____ 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)

15. TELEPHONE NUMBER (Include area code)

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

CODE

FACILITY CODE

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

☐ 10 U.S.C. 2304(c) () ☐ 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

31c. DATE

BY

Section 00 00 00 - Procurement and Contracting Requirements

D/B Construct Logistics Resupply Pad and Improve Access Road at Bahn Di Lang Range, Lopburi, Thailand

Section 00 10 00 - Solicitation, Contract Line Item Number (CLIN) Schedule

Additional Information/Notes

Continuation of SF1442, Block 10

e. The North American Industry Classification System (NAICS) code for this procurement is: 237310, Highway, Street, and Bridge Construction. The Small Business Size Standard for this NAICS is \$45 million in annual revenue. This acquisition is not restricted or set-aside for small businesses.

f. Per FAR 36.204 Disclosure of the magnitude of construction projects, the estimated Magnitude Range for this contract is between \$1,000,000 and \$5,000,000.

g. The proposal due date is shown in Block 13, Thailand Time.

h. Proposals shall set forth full, accurate, and complete information as required by this request for proposal (including enclosures and attachments). The penalty for making false statements in proposals is prescribed in 18 U.S.C. 1001.

i. The Government intends to evaluate proposals and award without discussions; therefore, each initial offer should contain the best terms from a technical and price standpoint. However, the Government reserves the right to conduct discussions if it is determined to be necessary by the Contracting Officer.

j. RFP/Contract POC:

- Contract Officer: Rondel Williams

Email: williamsrg@state.gov

Email: rondel.g.williams.civ@us.navy.mil

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Contract Specialist: Nitiwate Dissanont

Email: nitiwate@state.gov

Email: nitiwate.dissanont.ln@us.navy.mil

Item	Supplies/Service	Quantity	Unit	Unit Price	Amount
0001	Construct Logistics Resupply Pad (LRP): This is a Design-Build project. The contractor shall provide complete design and construction of Logistics Resupply Pad (LRP), located in Bahn Di Lang Range, Lopburi, Thailand, in accordance with the Parts 2-6 attached here within. Pricing Arrangement: Firm Fixed Price	1	Project		
0002	IMPROVE 15 KM ACCESS ROAD: This is a Design-Build project. The contractor shall provide complete design and improvement of 15 KM Access Road, located in Bahn Di Lang Range, Lopburi, Thailand, in accordance with the Parts 2-6 attached here within. Pricing Arrangement: Firm Fixed Price	1	Project		
Option Line Item 0003	OPTION 0001 - IMPROVE 6 KM ACCESS ROAD: This is a Design-Build project. The contractor shall provide complete design and improvement of 6 KM Access Road, located in Bahn Di Lang Range, Lopburi, Thailand, in accordance	1	Project		

	with the Parts 2-6 attached here within.				
	Pricing Arrangement: Firm Fixed Price				

Section 00 20 00 - Instructions for Procurements

FAR Clauses Incorporated by Full Text

52.236-27 Site Visit (Construction). (Alternate I)

(Feb 1995) Alternate I (Feb 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

Alternate I (Feb 1995). If an organized site visit will be conducted, substitute a paragraph substantially the same as the following for paragraph (b) of the basic provision:

(b) An organized site visit has been scheduled for June 23, 2025 at the project site.

(c) On June 23, 2025, at 0900 AM, all offerors must meet NAVFAC personnel before entering the project site. The meeting point is Cafe Amazon, located inside the PTT Station on Phahonyothin Road, approximately 200 meters before the West Gate of the Artillery Center (GPS Coordinates: N 14.884421, E 100.631778)

Note:

-Due to muddy road conditions caused by the ongoing rainy season, standard passenger vehicles cannot access the site. The Royal Thai Army (RTA) will not provide transportation for this site visit. Offerors must arrange for a four-wheel drive (4WD) vehicle to reach all site visit locations. Off-road motorcycles and All-Terrain Vehicles (ATVs) are also permitted for site access. The estimated travel time is approximately three hours. Attendees should be prepared for challenging environmental conditions, including dust, mud, and wet terrain. Appropriate clothing, sun protection, face masks, and sufficient drinking water are strongly recommended.

-Pre-Proposal Site Visit (PPSV) attendance is highly encouraged to ensure full understanding of the logistical challenges involved with this project and decrease risk of unsuccessful completion or financial hardship for contractors.

Section 00 21 00 - Instructions

1. Pre-Proposal Site Visit (PPSV)

a. The Contracting Office intends to host a Pre-Proposal Site Visit (PPSV). The PPSV is scheduled on June 23, 2025 at the project site, Bahn Di Lang Range, Lopburi, Thailand.

Note:

- On June 23, 2025, at 0900 AM, all offerors must meet NAVFAC personnel before entering the project site. The meeting point is Cafe Amazon, located inside the PTT Station on Phahonyothin Road, approximately 200 meters before the West Gate of the Artillery Center (GPS Coordinates: N 14.884421, E 100.631778)

- Due to muddy road conditions caused by the ongoing rainy season, standard passenger vehicles cannot access the site. The Royal Thai Army (RTA) will not provide transportation for this site visit. Offerors must arrange for a four-wheel-drive (4WD) vehicle to reach all site visit locations. Off-road motorcycles and All-Terrain Vehicles (ATVs) are also permitted for site access. The estimated travel time is approximately three hours. Attendees should be prepared for challenging environmental conditions, including dust, mud, and wet terrain. Appropriate clothing, sun protection, face masks, and sufficient drinking water are strongly recommended.

Reference clause 52.236-27 SITE VISIT (CONSTRUCTION) - ALTERNATE I in this solicitation.

b. Pre-Proposal Site Visit (PPSV) attendance is highly encouraged to ensure full understanding of the logistical challenges involved with this project and decrease risk of unsuccessful completion or financial hardship for contractors.

c. No minutes from the PPSV will be issued. All prospective Offerors are advised that nothing said verbally at the PPSV will change the solicitation and the solicitation will remain unchanged unless it is amended in writing; however, if an amendment is issued in accordance with FAR 15.206, Offerors shall return a completed acknowledgement on the SF-30 with their proposal submission.

d. The Contracting Officer may require proof of active SAM.gov registration or registration in progress to attend the PPSV.

e. Any inspection of the project site outside of the scheduled site visit without Contracting Officer approval will result in Contractor being ineligible for award based on having a competitive advantage over other contractors for conducting an unscheduled site visit.

f. No recording of the US Government presentation or US Government employees is allowed. Doing so could result in ineligibility for award.

g. Sharing participation and photos/video from the site visit on social media is not allowed and may result in ineligibility for award.

h. Attending the site visit assumes Contractor is familiar with the solicitation and statement of work.

2. Proposal Submittal Requirements.

The following instructions to offerors are to ensure offerors submit information necessary for the Government to fully understand and evaluate proposals. Offerors are cautioned to follow the detailed instructions carefully and provide technical information that clearly shows they have the background and expertise necessary to perform the requirements listed in Statement of Work (SOW) or Project Program as the Government reserves the right to make an award based on initial offers received without discussions of such offers. Failure to meet a requirement may result in an offer being ineligible for award. Prior to the proposal due date, Offerors must clearly identify any exception to the solicitation terms and conditions and provide complete accompanying rationale. Proposals must be complete, self-sufficient, and respond directly to the requirements of this solicitation; alternate proposals will not be accepted.

2.1 Proposal Format. The price proposal and technical proposal shall be submitted separately and must be submitted via e-mail to the Contract Specialist and the Contracting Officer. A cover letter shall accompany the proposal.

The cover letter shall include --

- a. The solicitation number;
- b. The name, address, telephone, and e-mail addresses of the Offeror;
- c. The Unique Entity Identifier (UEI) Number, CAGE/NCAGE Code, and Tax Identification Number (TIN) of the Offeror (if applicable);
- d. A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;
- e. Names, titles, phone numbers, and email addresses of persons authorized to negotiate on the Offeror's behalf with the Government in connection with this solicitation and;
- f. 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.
- i. Individuals. A contract with an individual shall be signed by that individual. A contract with an individual doing business as a firm shall be signed by that individual, and the signature shall be followed by the individual's typed, stamped, or printed name and the words "an individual doing business as [insert name of firm]."
- ii. Partnerships. A contract with a partnership shall be signed in the partnership name.
- iii. Corporations. A contract with a corporation shall be signed in the corporate name, followed by the word "by" and the signature and title of the person authorized to sign.
- iv. Joint Ventures. A contract with a joint venture may involve any combination of individuals, partnerships, or corporations. The contract shall be signed by each participant in the joint venture in the manner prescribed in paragraphs (a) through (c) above for each type of participant.
- v. Agents. When an agent is to sign the contract, other than as stated in paragraphs (a) through (d) above, the agent's authorization to bind the principal must be established by evidence satisfactory to the Contracting Officer.
- vi. Joint Venture Agreement or letter of commitment (if applicable). The cover letter or letter of commitment shall be signed by all proposed parties.

2.2 Content of Proposal Offerors shall submit separate price and technical proposals in two volumes as follows:

a. Volume 1: Price Proposal.

- i. Provide Standard Form 1442 of Blocks 14 through 20c completed, signed, and dated;
- ii. Acknowledge all amendments issued by filling out Block 19 of Standard Form 1442 or signing and dating each Standard Form 30;
- iii. Provide a completed Price Schedule for all CLINs;
- iv. Provide a completed Bill of Quantities (BOQ, Enclosure 4) showing price breakdown for CLINs; Provide in both PDF and Excel formats;
- v. Provide Completed Representations and Certifications, to include a copy of the electronic annual representations and certifications thru System for Awards Management (SAM) at www.sam.gov;
- vi. Provide Responsibility Determination and Financial Capability requirements specified in Paragraph 4;

b. Volume 2: Technical Proposal

- i. Factor 1, Offeror Experience Project Data Sheet specified in Section 002200 of this solicitation;
- ii. Factor 2, Past Performance Data as specified in Section 002200 of this solicitation;
- iii. Factor 3, Safety in Section 002200 of this solicitation;
- iv. Factor 4, Technical Solution in Section 002200 of this solicitation.

3. Pre-Proposal Inquiries. Pre-Proposal Inquiries (PPIs) related to the Request for Proposal (RFP) must be submitted electronically using the Pre-Proposal Inquiry Form (Enclosure 1) provided in this solicitation. The completed PPIs form shall be submitted to the Contracting Specialist, no later than seven (7) calendar days after the Pre-Proposal Site Visit (PPSV).

4. Responsibility Determination and Financial Capability. FAR subpart 9.104-1 requires prospective contractors to demonstrate that they have adequate financial resources to perform the contract or the ability to obtain them; capability to comply with the required performance schedule; a satisfactory performance record; the necessary organization, experience, accounting and operational controls, technical skills, production, construction and technical equipment and facilities or the ability to obtain them; and be otherwise eligible to receive an award under applicable laws and regulations. This is notice that the Contracting Officer may request Offerors submit the following information for review and determination prior to award:

4.1 Proof of the Offeror's ability to legitimately conduct business in the Country where the project is located. This requirement may be satisfied by an Offeror (or one of a firm's Joint Venture partners) having the appropriate registration.

4.2 A list of current, on-going projects. Include contract number, brief description of the project, dollar value, percent complete, whether your firm is performing as a prime contractor or a subcontractor and the percentage of the work that applies to your firm, customer point of contact, and customer phone number. The Government may contact the point of contacts listed for verification of information.

4.3 Company financial statements (balance sheets and income statements) for the past three years.

5. System for Award Management (SAM).

Per FAR 52.204-7(b)(1), offerors are required to be registered in the System for Award Management (SAM) when submitting an offer or quotation and at the time of award. (See FAR clause 52.204-13, System for Award Management Maintenance, for the requirement to maintain SAM registration during performance and through final payment.). Offerors must have active SAM registration to be eligible for award. To register, visit SAM.gov and complete all provisions associated with the annual representations and certifications in accordance with FAR Subpart 4.1202 and DFARS Subpart 204.1202. Remember to review the NAICS codes listed in your SAM record and make sure that you have listed the North American Industry Classification System (NAICS) code for this procurement.

Contractors intending to attend site visits shall have active SAM registration or provide proof that registration has been submitted to SAM.gov and is in progress. An International Entity Registration Guide is available upon request from the Contract Specialist. Offers submitted by companies without active SAM registrations will be determined non-compliance and the proposal will not be evaluated. For more information, see FAR 52.204-7 -- System for Award Management.

6. Contract Pricing. Offers must be made in United States Dollars.

7. Incurred Expenses. The Government is not responsible for any costs incurred or associated with preparation and submission of a proposal in response to this solicitation.

8. Enforceability of Proposal. The proposal must set forth full, accurate and complete information as required by this solicitation. The Government will rely on such information in the award of the contract. Items offered in the contractor's proposal (e.g., key personnel, subcontractors, materials, etc.) are binding on the contractor and shall be provided for the duration of the contract. Substitutions will require the Contracting Officer's approval and shall be equal or better, in the

judgment of the Contracting Officer, than the items originally proposed. The Contractor's proposal becomes part of the contract award document.

9. No Download Link. All proposals shall be submitted as email attachments to the Contract Specialist and Contracting Officer. The U.S. Government will not accept any proposals that require clicking a link and/or downloading files.

FAR Clauses Incorporated by Full Text

52.233-2 Service of Protest.

(Sep 2006)

Service of Protest (Sept 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from the Contracting Officer, 7 Sathorn Tai Rd., Bangkok, Thailand 10120.~~the Contracting Officer, 7 Sathorn Tai Rd., Bangkok, Thailand 10120.~~

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

(End of provision)

52.252-1 Solicitation Provisions Incorporated by Reference.

(Feb 1998)

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):

<http://acquisition.gov/far>

<http://www.acq.osd.mil/dpap/sitemap.html>

(End of provision)

Section 00 21 16 - Instructions to Proposers**FAR Clauses Incorporated by Reference**

Number	Title	Effective Date	Alternate/ Deviation	Variation Effective Date
52.204-6	Unique Entity Identifier.	Oct 2016		
52.204-16	Commercial and Government Entity Code Reporting.	Aug 2020		

Section 00 22 00 - Supplementary Instructions

PART I - GENERAL

1.1 SOURCE SELECTION

This competitive procurement uses source selection procedures to select the responsible Offeror whose proposal conforms to the requirements of the solicitation and is determined to provide the best value to the Government, price and other factors considered. The Government will use the Lowest Price Technically Acceptable (LPTA) method to evaluate proposals submitted in response to this solicitation. The Government reserves the right to eliminate from consideration for award any or all offers at any time prior to award of the contract; to negotiate with Offerors in the competitive range; and to award the contract to the Offeror submitting the lowest priced, technically acceptable (LPTA) proposal.

Per NPGI 15.101-2 (DFARS) Lowest price technically acceptable (LPTA) source selection process. (Business Rule), the number of proposals to be evaluated for technical acceptability may be limited to the lowest priced offer at the discretion of the Contracting Officer. If the number of proposals to be evaluated is limited, the technical proposal shall be provided to the evaluator(s) without any identification of price. If the lowest priced proposal is not found to be technically acceptable then the next lowest price proposal shall be evaluated. If that proposal is also not found to be technically acceptable, then the process described will be conducted again as many times as necessary, until such time as the Government identifies a technically acceptable proposal. The source selection method must be included in the request for proposal. If the Contracting Officer later determines that discussions are necessary, the procedures in FAR 15.306 shall be followed.

1.2 INTENT TO AWARD WITHOUT CONDUCTING DISCUSSIONS

The Government intends to evaluate proposals and award a contract without discussions with Offerors (except clarifications as described in FAR 15.306(a)). The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. In addition, 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.

1.3 BASIS OF AWARD

An overall non-cost factors rating must be at least "ACCEPTABLE" in order to be eligible for award. An "UNACCEPTABLE" rating in any factor results in the overall non-cost factors proposal being rated "UNACCEPTABLE" unless corrected through discussions. An overall non-cost factor rating of "UNACCEPTABLE" makes a proposal ineligible for award.

Definitions:

Technical Acceptable/Unacceptable Ratings:

-Acceptable: Proposal clearly meets the minimum requirements of the solicitation.

-Unacceptable: Proposal does not clearly meet the minimum requirements of the solicitation.

Past Performance Acceptable/Unacceptable Ratings:

-Acceptable: Based on the Offeror's performance record, the Government has a reasonable expectation that the offeror will successfully perform the required effort, or the Offeror's performance record is unknown. Note: In the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available or so sparse that no meaningful past performance rating can be reasonably assigned, the Offeror may not be evaluated favorably or unfavorably on past performance (see FAR 15.305(a)(2)(iv)). Therefore, the Offeror shall be determined to have unknown past performance. In the context of acceptability/unacceptability "unknown" shall be considered "acceptable.".

-Unacceptable: Based on the Offeror's performance record, the Government has no reasonable expectation that the Offeror will be able to successfully perform the required effort.

PART II - EVALUATION FACTORS FOR AWARD

2.1 EVALUATION CRITERIA

- a. The contract resulting from this solicitation will be awarded to the responsible Offeror whose offer, conforming to the solicitation, is determined to be the lowest price technically acceptable (LPTA) proposal based on the evaluation factors set forth in the solicitation.
- b. "Relevant" means similar to the acquisition in terms of size, scope, and complexity and nature of the work being solicited. The Government will only consider projects for construction services of the type described in non-cost factor 1 - Offeror Experience, below.
- c. Past performance information on "relevant projects" meeting the definition in paragraph (b) will constitute the primary consideration in the Government's evaluation under non-cost factor 2 - Past Performance. The Government may, however, review and consider past performance information on other projects as made available to the Government from other sources such as the Contractor Performance Assessment Reporting System (CPARS) and inquiries with previous clients / owners. The Government will determine the relevance of the past performance information received on other projects, as well as consider the source, context and currency of such information in its evaluation.
- d. Offerors who submit past performance and experience information of a parent, sister, predecessor, subcontractor, or other affiliated company must describe what involvement such company will have on the acquisition. The proposal should clearly indicate how the resources of the parent, sister, predecessor or other affiliated company - its workforce, management, facilities, or other resources - will be provided or relied upon for contract performance.
- e. The Contracting Officer may discount favorable past performance and experience of a subcontractor unless the prime contractor clearly provides, in its proposal, evidence of a binding teaming agreement or other contractual agreement which creates legal responsibility on the part of the subcontractors.
- f. In the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available or so sparse that no meaningful past performance rating can be reasonably assigned, the Offeror may not be evaluated favorably or unfavorably on past performance (see FAR 15.305(a)(2)(iv)). Therefore, the Offeror shall be determined to have unknown past performance. In the context of acceptability/unacceptability "unknown" shall be considered "acceptable."
- g. The Government, in compliance with FAR 15.305(a)(2)(ii), Offerors are authorized to provide information on problems encountered on the identified contracts and the Offeror's corrective actions. The Government shall consider this information, as well as information obtained from any other sources, when evaluating the Offeror's past performance.

2.2 PRICE EVALUATION

The price proposal will be evaluated to determine the reasonableness and completeness of the Offeror's proposal. The Contracting Officer may conduct price realism if the Contracting Officer determined that it is necessary. Unrealistically low (or high) proposed price or unbalanced prices, may be grounds for eliminating a proposal from competition either on the basis that the Offeror does not understand the requirement or has made an unrealistic or unreasonable proposal.

2.3 EVALUATION FACTORS AND PROPOSAL SUBMISSION REQUIREMENTS

- a. The Offeror's proposal shall contain a response to each of the following evaluation factors and shall be in the form prescribed by this solicitation. The solicitation requires the evaluation of price and non-cost factors in two volumes listed below:

Volume 1: Price Factor

Volume 2: Non-Cost Factor 1 - Offeror Experience

Non-Cost Factor 2 - Past Performance

Non-Cost Factor 3 - Safety

Non-Cost Factor 4 - Technical Solution

- b. The distinction between past performance and Offeror experience is experience pertains to the types of work and volume of work completed by a contractor that are comparable to the types of work covered by this requirement, in terms

of size, scope, and complexity. Past performance relates to how well a contractor has performed.

c. The following describes each evaluation factor, submittal requirements and basis for assigning ratings:

Volume 1:

(1.1) Price Factor

(a) Solicitation Submittal Requirements:

- i. Provide Standard Form 1442 of Blocks 14 through 20c completed, signed, and dated;
- ii. Acknowledge all amendments issued by filling out Block 19 of Standard Form 1442 or signing and dating each Standard Form 30;
- iii. Provide a completed Price Schedule for all CLINs;
- iv. Provide a completed Bill of Quantities (BOQ, Enclosure 4) showing price breakdown for CLINs; Provide in both PDF and Excel formats;
- v. Provide Completed Representations and Certifications, to include a copy of the electronic annual representations and certifications thru System for Awards Management (SAM) at www.sam.gov;
- vi. Provide Responsibility Determination and Financial Capability requirements specified in Paragraph 4;

(b) Basis of Evaluation: The Government will evaluate price based on the total price of all priced CLINS. Analysis will be performed by one or more of the following techniques to ensure a fair, reasonable and realistic price:

- i. Comparison of proposed prices received in response to this RFP;
- ii. Comparison of proposed prices with the Independent Government Estimate (IGE);
- iii. Comparison of proposed prices with available historical information.

Volume 2:

(2.1) Non-Cost Factor 1 - Offeror Experience:

(a) Submittal Requirements: Submit a minimum of three (3) and a maximum of five (5) relevant construction projects for the Offeror that best demonstrates Offeror experience on relevant projects that are similar size, scope, and complexity to the RFP. For purposes of this evaluation, a relevant project is further defined as similar design-build construction with the following relevant characteristics for all projects unless otherwise stated:

- i. Similar in Size: Design-build construction projects between \$300,000 and \$2,500,000 in final construction cost. Any project outside this range may not be considered.
- ii. Similar in Scope: Design-build construction of pavement and/or gravel work with a minimum size of 10,000 square meters (SM). Pavement and/or gravel work includes, but not limited to, roads, taxiways, aprons, parking spaces, yards, or concrete/asphalt pads.
- iii. Similar in Complexity: Construction projects involving pavement and/or gravel work performed in Southeast Asia, Nepal, Maldives, or Timor Leste.

Projects submitted for the Offeror shall be completed within the past (5) years of the date of issuance of this RFP. If submitting an ongoing construction project, the project shall be at least 80% complete at the time of proposal submission. A project is defined as a construction project performed under a single contract.

The Offeror Experience Project Data Sheet in the form of Enclosure 2 is MANDATORY and SHALL be used to submit project information. Except as specifically requested, the Government will not consider information submitted in addition to this form. Individual blocks on the form may be expanded; however, total length for each Offeror Experience Project Data Sheet shall not exceed one (1) double-sided page (or two (2) single-sided pages) claimed for past performance. Data sheets for each project shall not exceed two (2) pages minimum 11 size font.

For all submitted projects, the description of the project shall clearly describe the scope of work performed and the relevancy to the project requirements of this RFP (i.e., unique features, area, construction methods).

If the Offeror is a Joint Venture (JV), relevant project experience shall be submitted for projects completed by the Joint

Venture entity or the Joint Venture partners. Offerors are still limited to a total of five (5) projects combined.

If an Offeror is utilizing experience information of affiliates/subsidiaries/parent/LLC/LTD member companies (name is not exactly as stated on the SF1442), the proposal shall clearly demonstrate that the affiliate/subsidiary/parent firm will have meaningful involvement in the performance of the contract in order for the past performance information of the affiliate/subsidiary/parent/LLC/LTD member companies to be considered. The proposal shall state specific commitments of technical resources (e.g., personnel, equipment) that the affiliate/subsidiary/parent/LLC/LTD member companies commit to the performance of this contract. In particular, the proposal will clearly state the specific commitments of resources of the affiliate/subsidiary/parent/LLC/LTD member that will be located at the worksites and company offices in the city/area of the project. The proposal shall also describe specific roles of the affiliate /subsidiary/ parent/LLC/LTD member companies in terms of the work it will either self-perform or manage on behalf of the Offeror in performance of the contract. Any projects submitted in excess of the five (5) will not be considered.

(b) Basis of Evaluation: The basis of evaluation will include the Offeror's demonstrated experience and depth of experience in performing similar design-build construction projects with the relevant characteristics defined in the solicitation submittal requirements for this non-cost factor above. The assessment of the Offeror's relevant experience will be used as a means of evaluating the capability of the Offeror to successfully meet the requirements of the RFP. The Government will only review up to five (5) projects. Any projects submitted in excess of the five (5) for Offeror experience will not be considered. The Government will not evaluate information exceeding the first two (2) pages for each Project Data Sheet.

i. Acceptable. The contractor has demonstrated construction experience in performing similar design- build construction projects with the relevant characteristics defined in the solicitation submittal requirements for this non- cost factor.

ii. Unacceptable. The contractor did not submit Offeror Experience Project Data Sheets, the submitted data sheets did not demonstrate relevant construction experience performing similar design-build construction projects with the relevant characteristics defined in the solicitation submittal requirements for this non-cost factor, or the Offeror submitted less than three (3) relevant projects.

(2.2) Non-Cost Factor 2 - Past Performance:

(a) If a completed Contractor Performance Assessment Reporting System (CPARS) evaluation is available, it shall be submitted with the proposal for each project included in Factor 1 Offeror Experience. If there is not a completed CPARS evaluation, then submit Past Performance Questionnaires (Enclosure 3) for each project included in Factor 1. The Offeror shall provide either the CPARS or completed Past Performance Questionnaires (PPQ) in the proposal. Offerors shall not incorporate CPARS or PPQs previously submitted for other RFPs by reference into their proposal. This requirement to submit CPARS and PPQs does not preclude the Government from utilizing previously submitted CPARS and PPQ information in the past performance evaluation. If the Offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the Offeror shall complete and submit with the proposal the first page of the PPQ, which will provide contract and client information for the respective project(s). The Government may make reasonable attempts to contact the client for that project(s) to obtain the PPQ information. However, Offerors shall follow-up with clients/references to help ensure timely submittal of questionnaires. If the client requests, questionnaires may be submitted directly to the Government's point of contact; which is the Contract Specialist.

Offerors may provide any information on problems encountered and the corrective actions taken on projects submitted under Factor 1 - Offeror Experience. Offerors may also address any adverse past performance issues.

Explanations shall not exceed two (2) double-sided pages (or four (4) single-sided pages) in total with a minimum 11 size font.

The Government reserves the right to contact references for verification or additional information. The Government's inability to contact any of the Offeror's references or the references unwillingness to provide the information requested may affect the Government's evaluation of this factor.

Performance awards or additional information submitted will not be considered.

(b) Basis of Evaluation: This evaluation will consider how well the Offeror's team performed on relevant projects submitted under Factor 1 - Offeror Experience and may also consider past performance on other projects currently

documented in known sources. In addition to the above, the Government reserves the right to obtain information for use in the evaluation of past performance from any and all sources including sources outside of the Government. Other sources may include, but are not limited to, past performance information retrieved through the Past Performance Information Retrieval Systems (PPIRS) using all Commercial and Government Entity (CAGE)/Unique Entity Identifier (UEI) numbers of Contractors who are part of a partnership or joint venture 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.

The Government will consider the recency and relevance of the information, the source of the information, context of the data, and general trends in the Contractor's performance. This evaluation is separate and distinct from the Contracting Officer's responsibility determination. The assessment of the Offeror's team's past performance will be used as a means of evaluating the Offeror's team's probability to successfully meet the requirements of the RFP.

- i. Acceptable. The Offeror has satisfactory or better ratings in the Contractor Performance Assessment Reporting System (CPARS) or on Past Performance Questionnaires (PPQ) (Enclosure 3) for at least three (3) projects rated acceptable in Factor 1. In the case of an Offeror without a record of recent and relevant past performance or for whom information on past performance is not available or so sparse that no meaningful past performance rating can be reasonably assigned, the Offeror may not be evaluated favorably or unfavorably on past performance. Therefore, the Offeror shall be determined to have "unknown" past performance. In the context of acceptability/unacceptability, "unknown" shall be considered "acceptable." Intentionally withholding information does not constitute non-availability of that information.
- ii. Unacceptable. The Offeror was not rated satisfactory or better in the Contractor Performance Assessment Reporting System (CPARS) or on Past Performance Questionnaires (PPQ) (Enclosure 3) for at least three (3) of the projects determined to be relevant and acceptable under Factor 1 - Offeror Experience, or the Government has found less than satisfactory documentation for the contractor's performance using Government databases or other sources. Additionally, Offerors will be rated unacceptable if they do not provide a CPARS if it exists for any project submitted under Factor 1 - Offeror Experience. Submitting a PPQ in place of a CPARS when a CPARS exists, will result in unacceptable rating. Offerors that do not provide the first page of the PPQ with accurate customer contact information when there is no CPARS, will be determined unacceptable. The Contractor cannot be determined unknown, to be considered neutral and therefore acceptable, if the proposal does not include the required documentation for the US Government to evaluate. If the first page of the PPQ is not completed and submitted, the contractor will be determined non-compliant and unacceptable.

(2.3) Non-Cost Factor 3 - Safety:

(a) Submittal Requirements: The Offeror shall submit a safety narrative that fully describes the safety management system that they will use to oversee the safety compliance and performance of self-performed and subcontractor (if utilized) performed work. The narrative shall describe any innovative methods that will be employed to ensure and monitor safe work practices at self-performed and all subcontractor (if utilized) performed work. Additionally, the narrative shall describe the methods Offeror will use to execute an effective safety program including mishap prevention techniques and processes, encouraging employee reporting of unsafe conditions, and preventing unsafe work activities that could lead to near-miss or injury mishaps. The technical approach to safety narrative shall be limited to five (5) pages.

(b) Basis of Evaluation: The Government will evaluate the narrative to determine how the Offeror will implement and oversee its safety program for protection of the prime contractor and subcontractor (if utilized) personnel. The Government will evaluate the Offeror's plan to monitor safety performance of the prime contractor and all subcontractors (if utilized) during contract performance, with a focus on specific management practices that will be utilized for providing deliberate safety program management and mishap prevention. The Government will only evaluate up to the first five (5) pages submitted.

- i. Acceptable. The Offeror demonstrates an understanding of the requirement to provide for the safety of prime and subcontractor (if utilized) personnel, the narrative describes the methods Offeror will use to execute an effective program that includes mishap prevention techniques and processes, encouraging employee reporting of unsafe conditions, and prevents unsafe work activities that could lead to near-miss or injury mishaps.
- ii. Unacceptable. The Offeror's narrative does not demonstrate an understanding of the requirement to provide for the safety of prime and subcontractor (if utilized) personnel, the narrative does not describe the methods Offeror will use to execute an effective program that includes mishap prevention techniques and processes, encouraging employee reporting

of unsafe conditions, and does not prevent unsafe work activities that could lead to near-miss or injury mishaps, or the Offeror did not submit a sufficient narrative within the first five (5) pages.

(2.4) Non-Cost Factor 4 - Technical Solution:

(a) Submittal Requirements:

i. Provide a narrative describing the technical solution to the project that meets the requirements of the RFP. Include the following:

1. Construction means and methods for completing the project, including site preparation, grading, and installation of reinforced concrete low-water crossings. The narrative shall describe the approach to improving the access road and low-water crossings, including a phasing plan, the estimated construction time per one (1) kilometer length of the access road, and the construction strategy for maintaining progress during the rainy season.

Narrative shall not exceed two (2) double-sided pages (or four (4) single-sided pages) minimum 11 size font.

ii. Provide the following conceptual design drawing details:

1. Site layout plan showing the footprint of the proposed logistic resupply point concrete pad.

2. Site layout plan showing the access road, the location of low-water crossings, and concept cross-section details of the access road and concrete-slab fords for low-water crossings.

(b) Basis of Evaluation: The Government will evaluate the narrative, and conceptual drawing considering whether the Offeror demonstrates a clear understanding of the architectural and engineering requirements of the project. The Government will evaluate the Offeror's technical solution to determine adherence to the technical requirements of the RFP.

i. Acceptable. The narrative accurately describes a technical solution that meets the requirements, the drawings address all key aspects of the project and are adequate to use for creating detailed design drawings, The Offeror illustrates understanding of the statement of the requirements.

ii. Unacceptable. The Offeror did not submit a narrative, all required drawings or the drawings submitted do not address all key aspects of the project or are not adequate to use for creating detailed design drawings. The Offeror did not illustrate understanding of the statement of the requirements.

2.4 FINAL SELECTION

All Offerors will be evaluated for each of the technical (non-cost) Factors and the responsible Offeror submitting the lowest priced technically acceptable offer will be selected for contract award. A responsibility determination shall be made for each presumed awardee. A presumed awardee may be determined to be non-responsible if it has an excessive amount of current awards or ongoing projects, is currently behind or has excessive rework issues on existing contracts, or is otherwise deemed an increased risk to the US Government for unsuccessful performance.

Section 00 45 00 - Representations and Certifications

REQUEST FOR PROPOSAL NUMBER: N6274225R6502

Name and Address of Offeror:

CAGE / NCAGE: _____

Point of Contact: _____

Business Phone Number: _____

Email Address: _____

The following clauses are from the Federal Acquisition Regulations (FAR) and Department of Defense Federal Acquisition Regulation Supplement (DFARS). Complete the paragraphs below and return with the bid forms.

FAR Clauses Incorporated by Reference

Number	Title	Effective Date	Alternate/ Deviation	Variation Effective Date
52.203-2	Certificate of Independent Price Determination.	Apr 1985		
52.203-11	Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions.	Sep 2024		

DFARS Clauses Incorporated by Reference

Number	Title	Effective Date	Alternate/ Deviation	Variation Effective Date
252.204-7008	Compliance with Safeguarding Covered Defense Information Controls.	Oct 2016		

FAR Clauses Incorporated by Full Text

52.204-8 Annual Representations and Certifications.**(Jan 2025)**

Annual Representations and Certifications (Jan 2025)

(a)

(1) The North American Industry Classification System (NAICS) code for this acquisition is 237310.

(2) The small business size standard is \$45 million.

(3) The small business size standard for a concern that submits an offer, other than on a construction or service acquisition, but proposes to furnish an end item that it did not itself manufacture, process, or produce is 500 employees, 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.

(b)

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

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

(i) ☐ Paragraph (d) applies.(ii) ☐ Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)

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

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless-

(A) The acquisition is to be made under the simplified acquisition procedures in part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) 52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation. This provision applies to all solicitations.

(iv) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(v) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that-

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(vi) 52.204-26, Covered Telecommunications Equipment or Services-Representation. This provision applies to all solicitations.

(vii) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations-Representation.

(viii) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(ix) 52.209-11, Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.

(x) 52.214-14, Place of Performance-Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(xi) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(xii) 52.219-1, Small Business Program Representations (Basic, Alternates I, and II). This provision applies to solicitations when the contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied part 19 in accordance with 19.000(b)(1)(ii).

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(C) The provision with its Alternate II applies to solicitations that will result in a multiple-award contract with more than one NAICS code assigned.

(xiii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied part 19 in accordance with 19.000(b)(1)(ii).

(xiv) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xv) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xvi) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial products or commercial services.

(xvii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of biobased products in USDA-designated product categories; or include the clause at 52.223-2, Reporting of Biobased Products Under Service and Construction Contracts.

(xviii) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA-designated items.

(xix) 52.223-22, Public Disclosure of Greenhouse Gas Emissions and Reduction Goals-Representation. This provision applies to solicitations that include the provision at 52.204-7.

(xx) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xxi) 52.225-4, Buy American-Free Trade Agreements-Israeli Trade Act Certificate. (Basic, Alternates II and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than \$50,000, the basic provision applies.

(B) If the acquisition value is \$50,000 or more but is less than \$100,000, the provision with its Alternate II applies.

(C) If the acquisition value is \$100,000 or more but is less than \$102,280, the provision with its Alternate III applies.

(xxii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xxiii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan-Certification. This provision applies to all solicitations.

(xxiv) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-Representation and Certifications. This provision applies to all solicitations.

(xxv) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]

☐ (i) 52.204-17, Ownership or Control of Offeror.

☐ (ii) 52.204-20, Predecessor of Offeror.

☐ (iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

☐ (iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment- Certification.

☐ (v) 52.222-52, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Certification.

☐ (vi) 52.227-6, Royalty Information.

☐ (A) Basic.

☐ (B) Alternate I.

☐ (vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

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

FAR Clause #	Title	Date	Change
=====			

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

DFARS Clauses Incorporated by Full Text

252.204-7007 Alternate A, Annual Representations and Certifications.

(Oct 2024) Alternate A (Oct 2024)

ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (OCT 2024)

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 \$150,000 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)

Section 00 70 00 - Conditions of the Contract

52.217-7 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 unilaterally by modification to the Contractor within ninety (90) calendar days from contract award for Option Items 0001. 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)

FAR Clauses Incorporated by Reference

Number	Title	Effective Date	Alternate/ Deviation	Variation Effective Date
52.203-3	Gratuities.	Apr 1984		
52.203-5	Covenant Against Contingent Fees.	May 2014		
52.203-6	Restrictions on Subcontractor Sales to the Government.	Jun 2020		
52.203-7	Anti-Kickback Procedures.	Jun 2020		
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity.	May 2014		
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity.	May 2014		
52.203-12	Limitation on Payments to Influence Certain Federal Transactions.	Jun 2020		
52.203-18	Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation.	Jan 2017		
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.	Jan 2017		
52.204-3	Taxpayer Identification.	Oct 1998		
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards.	Jun 2020		
52.204-12	Unique Entity Identifier Maintenance.	Oct 2016		
52.204-13	System for Award Management Maintenance.	Oct 2018		
52.204-18	Commercial and Government Entity Code Maintenance.	Aug 2020		
52.204-19	Incorporation by Reference of Representations and Certifications.	Dec 2014		
52.204-20	Predecessor of Offeror.	Aug 2020		
52.204-22	Alternative Line Item Proposal.	Jan 2017		
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab Covered Entities.	Dec 2023		
52.204-24	Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.	Nov 2021		
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.	Nov 2021		
52.204-26	Covered Telecommunications Equipment or Services-Representation.	Oct 2020		
52.204-27	Prohibition on a ByteDance Covered Application.	Jun 2023		
52.204-29	Federal Acquisition Supply Chain Security Act Orders-Representation and Disclosures.	Dec 2023		
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, Proposed for Debarment, or Voluntarily Excluded	Jan 2025		
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters.	Oct 2018		
52.209-10	Prohibition on Contracting with Inverted Domestic Corporations.	Nov 2015		
52.209-13	Violation of Arms Control Treaties or Agreements-Certification.	Nov 2021		
52.211-13	Time Extensions.	Sep 2000		
52.215-1	Instructions to Offerors-Competitive Acquisition.	Nov 2021		
52.215-2	Audit and Records-Negotiation.	Jun 2020		
52.215-6	Place of Performance.	Oct 1997		
52.215-8	Order of Precedence-Uniform Contract Format.	Oct 1997		
52.215-11	Price Reduction for Defective Certified Cost or Pricing Data-Modifications.	Jun 2020		
52.215-13	Subcontractor Certified Cost or Pricing Data-Modifications.	Jun 2020		
52.215-16	Facilities Capital Cost of Money.	Jun 2003		
52.215-19	Notification of Ownership Changes.	Oct 1997		
52.215-20	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data.	Nov 2021		
52.217-5	Evaluation of Options.	Jul 1990		
52.222-38	Compliance with Veterans' Employment Reporting Requirements.	Feb 2016		
52.222-50	Combating Trafficking in Persons.	Nov 2021		
52.222-56	Certification Regarding Trafficking in Persons Compliance Plan.	Oct 2020		
52.225-13	Restrictions on Certain Foreign Purchases.	Feb 2021		
52.225-14	Inconsistency between English Version and Translation of Contract.	Feb 2000		

52.225-20	Prohibition on Conducting Restricted Business Operations in Sudan-Certification.	Aug 2009		
52.225-25	Prohibition on Contracting With Entities Engaging in Certain Activities or Transactions Relating to Iran-Representation and Certifications.	Jun 2020		
52.226-8	Encouraging Contractor Policies to Ban Text Messaging While Driving.	May 2024		
52.229-6	Taxes-Foreign Fixed-Price Contracts.	Feb 2013		
52.232-17	Interest.	May 2014		
52.232-18	Availability of Funds.	Apr 1984		
52.232-27	Prompt Payment for Construction Contracts.	Jan 2017		
52.232-28	Invitation to Propose Performance-Based Payments.	Mar 2000		
52.232-33	Payment by Electronic Funds Transfer-System for Award Management.	Oct 2018		
52.232-39	Unenforceability of Unauthorized Obligations.	Jun 2013		
52.232-40	Providing Accelerated Payments to Small Business Subcontractors.	Mar 2023		
52.233-1	Disputes.	May 2014		
52.233-3	Protest after Award.	Aug 1996		
52.233-4	Applicable Law for Breach of Contract Claim.	Oct 2004		
52.236-2	Differing Site Conditions.	Apr 1984		
52.236-3	Site Investigation and Conditions Affecting the Work.	Apr 1984		
52.236-5	Material and Workmanship.	Apr 1984		
52.236-6	Superintendence by the Contractor.	Apr 1984		
52.236-7	Permits and Responsibilities.	Nov 1991		
52.236-8	Other Contracts.	Apr 1984		
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements.	Apr 1984		
52.236-10	Operations and Storage Areas.	Apr 1984		
52.236-11	Use and Possession Prior to Completion.	Apr 1984		
52.236-12	Cleaning Up.	Apr 1984		
52.236-13	Accident Prevention.	Nov 1991		
52.236-15	Schedules for Construction Contracts.	Apr 1984		
52.236-16	Quantity Surveys.	Apr 1984		
52.236-17	Layout of Work.	Apr 1984		
52.236-21	Specifications and Drawings for Construction.	Feb 1997		
52.236-26	Preconstruction Conference.	Feb 1995		
52.236-28	Preparation of Proposals-Construction.	Oct 1997		
52.240-1	Prohibition on Unmanned Aircraft Systems Manufactured or Assembled by American Security Drone Act-Covered Foreign Entities.	Nov 2024		
52.242-13	Bankruptcy.	Jul 1995		
52.242-14	Suspension of Work.	Apr 1984		
52.243-4	Changes.	Jun 2007		
52.244-6	Subcontracts for Commercial Products and Commercial Services.	Jan 2025		
52.246-12	Inspection of Construction.	Aug 1996		
52.246-21	Warranty of Construction.	Mar 1994		
52.247-5	Familiarization with Conditions.	Apr 1984		
52.247-15	Contractor Responsibility for Loading and Unloading.	Apr 1984		
52.247-16	Contractor Responsibility for Returning Undelivered Freight.	Apr 1984		
52.247-34	F.o.b. Destination.	Nov 1991		
52.247-68	Report of Shipment (REPSHIP).	Feb 2006		
52.249-2	Termination for Convenience of the Government (Fixed-Price).	Apr 2012		
52.249-2	Termination for Convenience of the Government (Fixed-Price). (Alternate I)	Apr 2012	Alternate I	Sep 1996
52.249-10	Default (Fixed-Price Construction).	Apr 1984		
52.253-1	Computer Generated Forms.	Jan 1991		

DFARS Clauses Incorporated by Reference

Number	Title	Effective Date	Alternate/ Deviation	Variation Effective Date
252.201-7000	Contracting Officer's Representative.	Dec 1991		
252.203-7000	Requirements Relating to Compensation of Former DoD Officials.	Sep 2011		
252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies.	Jan 2023		
252.203-7002	Requirement to Inform Employees of Whistleblower Rights.	Dec 2022		
252.203-7005	Representation Relating to Compensation of Former DoD Officials.	Sep 2022		
252.204-7003	Control of Government Personnel Work Product.	Apr 1992		
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting.	May 2024		
252.204-7016	Covered Defense Telecommunications Equipment or Services-Representation.	Dec 2019		
252.204-7017	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services-Representation.	May 2021		
252.204-7018	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services.	Jan 2023		
252.209-7004	Subcontracting with Firms that are Owned or Controlled by the Government of a Country that is a State Sponsor of Terrorism.	May 2019		
252.215-7013	Supplies and Services Provided by Nontraditional Defense Contractors.	Jan 2023		
252.222-7002	Compliance with Local Labor Laws (Overseas).	Jun 1997		
252.222-7006	Restrictions on the Use of Mandatory Arbitration Agreements.	Jan 2023		

252.223-7008	Prohibition of Hexavalent Chromium.	Jan 2023
252.225-7005	Identification of Expenditures in the United States .	Jun 2005
252.225-7012	Preference for Certain Domestic Commodities.	Apr 2022
252.225-7028	Exclusionary Policies and Practices of Foreign Governments.	Apr 2003
252.225-7031	Secondary Arab Boycott of Israel .	Jun 2005
252.225-7041	Correspondence in English.	Jun 1997
252.225-7042	Authorization to Perform.	Apr 2003
252.225-7048	Export-Controlled Items.	Jun 2013
252.227-7002	Readjustment of Payments.	Sep 2019
252.227-7033	Rights in Shop Drawings.	Apr 1966
252.231-7000	Supplemental Cost Principles	Dec 1991
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports.	Dec 2018
252.232-7008	Assignment of Claims (Overseas).	Jun 1997
252.232-7010	Levies on Contract Payments.	Dec 2006
252.232-7015	Performance-Based Payments-Representation.	Dec 2022
252.233-7001	Choice of Law (Overseas).	Jun 1997
252.236-7000	Modification Proposals--Price Breakdown.	Dec 1991
252.242-7006	Accounting System Administration.	Jan 2025
252.243-7001	Pricing of Contract Modifications.	Dec 1991
252.243-7002	Requests for Equitable Adjustment.	Dec 2022
252.244-7000	Subcontracts for Commercial Products or Commercial Services.	Nov 2023
252.246-7004	Safety of Facilities, Infrastructure, and Equipment for Military Operations.	Oct 2010
252.247-7023	Transportation of Supplies by Sea.	Oct 2024

FAR Clauses Incorporated by Full Text

52.211-10 Commencement, Prosecution, and Completion of Work.

(Apr 1984)

Commencement, Prosecution, and Completion of Work (Apr 1984)

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work for both Base Bid and Option items ready for use not later than three hundred eighty (380) calendar days after Contract Award. The time stated for completion shall include final cleanup of the premises.

-CLIN 0001 Construct Logistics Resupply Pad (LRP) - Three hundred eighty (380) calendar days

-CLIN 0002 Improve 15 KM Access Road - Three hundred eighty (380) calendar days

-CLIN 0003 Option 0001 - Improve 6 KM Access Road - If any Option Item is awarded/exercised, the contract period of performance will not be extended.

(End of clause)

52.211-12 Liquidated Damages-Construction.

(Sep 2000)

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 for each calendar day of delay until the work is completed or accepted.

-CLIN 0001 Construct Logistics Resupply Pad (LRP) \$70 per day

-CLIN 0002 Improve 15 KM Access Road \$310 per day

-CLIN 0003 Option 0001 - Improve 6 KM Access Road \$120 per day

(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)

52.216-1 Type of Contract.

(Apr 1984)

Type of Contract (Apr 1984)

The Government contemplates award of a Firm Fixed Price contract resulting from this solicitation.

(End of provision)

52.225-19 Contractor Personnel in a Designated Operational Area or Supporting a Diplomatic or Consular Mission Outside the United States. (May 2020)

CONTRACTOR PERSONNEL IN A DESIGNATED OPERATIONAL AREA OR SUPPORTING A DIPLOMATIC OR CONSULAR MISSION OUTSIDE THE UNITED STATES (MAY 2020)

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

Chief of mission means the principal officer in charge of a diplomatic mission of the United States or of a United States office abroad which is designated by the Secretary of State as diplomatic in nature, including any individual assigned under section 502(c) of the Foreign Service Act of 1980 (Public Law 96-465) to be temporarily in charge of such a mission or office.

Combatant commander means the commander of a unified or specified combatant command established in accordance with 10 U.S.C. 161.

Designated operational area means a geographic area designated by the combatant commander or subordinate joint force commander for the conduct or support of specified military operations.

"Supporting a diplomatic or consular mission" means performing outside the United States under a contract administered by Federal agency personnel who are subject to the direction of a chief of mission.

(b) *General.*

(1) This clause applies when Contractor personnel are required to perform outside the United States-

(i) In a designated operational area during-

(A) Contingency operations;

(B) Humanitarian or peacekeeping operations; or

(C) Other military operations; or military exercises, when designated by the Combatant Commander; or

(ii) When supporting a diplomatic or consular mission-

(A) That has been designated by the Department of State as a danger pay post (see <https://aoprals.state.gov/>); or

(B) That the Contracting Officer has indicated is subject to this clause.

(2) Contract performance may require work in dangerous or austere conditions. Except as otherwise provided in the contract, the Contractor accepts the risks associated with required contract performance in such operations.

(3) Contractor personnel are civilians.

(i) Except as provided in paragraph (b)(3)(ii) of this clause, and in accordance with paragraph (i)(3) of this clause, Contractor personnel are only authorized to use deadly force in self-defense.

(ii) Contractor personnel performing security functions are also authorized to use deadly force when use of such force reasonably appears necessary to execute their security mission to protect assets/persons, consistent with the terms and conditions contained in the contract or with their job description and terms of employment.

(4) Service performed by Contractor personnel subject to this clause is not active duty or service under 38 U.S.C. 106 note.

(c) *Support.* Unless specified elsewhere in the contract, the Contractor is responsible for all logistical and security support required for Contractor personnel engaged in this contract.

(d) *Compliance with laws and regulations.* The Contractor shall comply with, and shall ensure that its personnel in the designated operational area or supporting the diplomatic or consular mission are familiar with and comply with, all applicable-

(1) United States, host country, and third country national laws;

(2) Treaties and international agreements;

(3) United States regulations, directives, instructions, policies, and procedures; and

(4) Force protection, security, health, or safety orders, directives, and instructions issued by the Chief of Mission or the Combatant Commander; however, only the Contracting Officer is authorized to modify the terms and conditions of the contract.

(e) *Preliminary personnel requirements.*

(1) Specific requirements for paragraphs (e)(2)(i) through (e)(2)(vi) of this clause will be set forth in the statement of work, or elsewhere in the contract.

(2) Before Contractor personnel depart from the United States or a third country, and before Contractor personnel residing in the host country begin contract performance in the designated operational area or supporting the diplomatic or consular mission, the Contractor shall ensure the following:

- (i) All required security and background checks are complete and acceptable.
 - (ii) All personnel are medically and physically fit and have received all required vaccinations.
 - (iii) All personnel have all necessary passports, visas, entry permits, and other documents required for Contractor personnel to enter and exit the foreign country, including those required for in-transit countries.
 - (iv) All personnel have received-
 - (A) A country clearance or special area clearance, if required by the chief of mission; and
 - (B) Theater clearance, if required by the Combatant Commander.
 - (v) All personnel have received personal security training. The training must at a minimum-
 - (A) Cover safety and security issues facing employees overseas;
 - (B) Identify safety and security contingency planning activities; and
 - (C) Identify ways to utilize safety and security personnel and other resources appropriately.
 - (vi) All personnel have received isolated personnel training, if specified in the contract. Isolated personnel are military or civilian personnel separated from their unit or organization in an environment requiring them to survive, evade, or escape while awaiting rescue or recovery.
 - (vii) All personnel who are U.S. citizens are registered with the U.S. Embassy or Consulate with jurisdiction over the area of operations on-line at <http://www.travel.state.gov>.
- (3) The Contractor shall notify all personnel who are not a host country national or ordinarily resident in the host country that-
- (i) If this contract is with the Department of Defense, or the contract relates to supporting the mission of the Department of Defense outside the United States, such employees, and dependents residing with such employees, who engage in conduct outside the United States that would constitute an offense punishable by imprisonment for more than one year if the conduct had been engaged in within the special maritime and territorial jurisdiction of the United States, may potentially be subject to the criminal jurisdiction of the United States (see the Military Extraterritorial Jurisdiction Act of 2000 (18 U.S.C. 3261 *et seq.*);
 - (ii) Pursuant to the War Crimes Act, 18 U.S.C. 2441, Federal criminal jurisdiction also extends to conduct that is determined to constitute a war crime when committed by a civilian national of the United States; and
 - (iii) Other laws may provide for prosecution of U.S. nationals who commit offenses on the premises of United States diplomatic, consular, military or other United States Government missions outside the United States (18U.S.C.7(9)).
- (f) *Processing and departure points.* The Contractor shall require its personnel who are arriving from outside the area of performance to perform in the designated operational area or supporting the diplomatic or consular mission to-
- (1) Process through the departure center designated in the contract or complete another process as directed by the Contracting Officer;
 - (2) Use a specific point of departure and transportation mode as directed by the Contracting Officer; and
 - (3) Process through a reception center as designated by the Contracting Officer upon arrival at the place of performance.
- (g) *Personnel data.*
- (1) Unless personnel data requirements are otherwise specified in the contract, the Contractor shall establish and maintain with the designated Government official a current list of all Contractor personnel in the areas of performance. The Contracting Officer will inform the Contractor of the Government official designated to receive this data and the appropriate system to use for this effort.
 - (2) The Contractor shall ensure that all employees on this list have a current record of emergency data, for notification of next of kin, on file with both the Contractor and the designated Government official.
- (h) *Contractor personnel.* The Contracting Officer may direct the Contractor, at its own expense, to remove and replace any Contractor personnel who fail to comply with or violate applicable requirements of this contract. Such action may be taken at the Government's discretion without prejudice to its rights under any other provision of this contract, including termination for default or cause.
- (i) *Weapons.*
- (1) If the Contracting Officer, subject to the approval of the Combatant Commander or the Chief of Mission, authorizes the carrying of weapons-

- (i) The Contracting Officer may authorize an approved Contractor to issue Contractor-owned weapons and ammunition to specified employees; or
- (ii) The _____ [Contracting Officer to specify individual, e.g., Contracting Officer Representative, Regional Security Officer, etc.] may issue Government-furnished weapons and ammunition to the Contractor for issuance to specified Contractor employees.
- (2) The Contractor shall provide to the Contracting Officer a specific list of personnel for whom authorization to carry a weapon is requested.
- (3) The Contractor shall ensure that its personnel who are authorized to carry weapons-
 - (i) Are adequately trained to carry and use them-
 - (A) Safely;
 - (B) With full understanding of, and adherence to, the rules of the use of force issued by the Combatant Commander or the Chief of Mission; and
 - (C) In compliance with applicable agency policies, agreements, rules, regulations, and other applicable law;
 - (ii) Are not barred from possession of a firearm by 18U.S.C. 922; and
 - (iii) Adhere to all guidance and orders issued by the Combatant Commander or the Chief of Mission regarding possession, use, safety, and accountability of weapons and ammunition.
- (4) Upon revocation by the Contracting Officer of the Contractor's authorization to possess weapons, the Contractor shall ensure that all Government-furnished weapons and unexpended ammunition are returned as directed by the Contracting Officer.
- (5) Whether or not weapons are Government-furnished, all liability for the use of any weapon by Contractor personnel rests solely with the Contractor and the Contractor employee using such weapon.
- (j) *Vehicle or equipment licenses.* Contractor personnel shall possess the required licenses to operate all vehicles or equipment necessary to perform the contract in the area of performance.
- (k) *Military clothing and protective equipment.*
 - (1) Contractor personnel are prohibited from wearing military clothing unless specifically authorized by the Combatant Commander. If authorized to wear military clothing, Contractor personnel must wear distinctive patches, armbands, nametags, or headgear, in order to be distinguishable from military personnel, consistent with force protection measures.
 - (2) Contractor personnel may wear specific items required for safety and security, such as ballistic, nuclear, biological, or chemical protective equipment.
- (l) *Evacuation.*
 - (1) If the Chief of Mission or Combatant Commander orders a mandatory evacuation of some or all personnel, the Government will provide to United States and third country national Contractor personnel the level of assistance provided to private United States citizens.
 - (2) In the event of a non-mandatory evacuation order, the Contractor shall maintain personnel on location sufficient to meet contractual obligations unless instructed to evacuate by the Contracting Officer.
- (m) *Personnel recovery.*
 - (1) In the case of isolated, missing, detained, captured or abducted Contractor personnel, the Government will assist in personnel recovery actions.
 - (2) Personnel recovery may occur through military action, action by non-governmental organizations, other Government-approved action, diplomatic initiatives, or through any combination of these options.
 - (3) The Department of Defense has primary responsibility for recovering DoD contract service employees and, when requested, will provide personnel recovery support to other agencies in accordance with DoD Directive 2310.2, Personnel Recovery.
- (n) *Notification and return of personal effects.*
 - (1) The Contractor shall be responsible for notification of the employee-designated next of kin, and notification as soon as possible to the U.S. Consul responsible for the area in which the event occurred, if the employee-
 - (i) Dies;
 - (ii) Requires evacuation due to an injury; or
 - (iii) Is isolated, missing, detained, captured, or abducted.
 - (2) The Contractor shall also be responsible for the return of all personal effects of deceased or missing Contractor personnel, if appropriate, to next of kin.
- (o) *Mortuary affairs.* Mortuary affairs for Contractor personnel who die in the area of performance will be handled as follows:

(1) If this contract was awarded by DoD, the remains of Contractor personnel will be handled in accordance with DoD Directive 1300.22, Mortuary Affairs Policy.

(2)

(i) If this contract was awarded by an agency other than DoD, the Contractor is responsible for the return of the remains of Contractor personnel from the point of identification of the remains to the location specified by the employee or next of kin, as applicable, except as provided in paragraph (o)(2) (ii) of this clause.

(ii) In accordance with 10 U.S.C. 1486, the Department of Defense may provide, on a reimbursable basis, mortuary support for the disposition of remains and personal effects of all U.S. citizens upon the request of the Department of State.

(p) *Changes.* In addition to the changes otherwise authorized by the Changes clause of this contract, the Contracting Officer may, at any time, by written order identified as a change order, make changes in place of performance or Government-furnished facilities, equipment, material, services, or site. Any change order issued in accordance with this paragraph shall be subject to the provisions of the Changes clause of this contract.

(q) *Subcontracts.* The Contractor shall incorporate the substance of this clause, including this paragraph (q), in all subcontracts that require subcontractor personnel to perform outside the United States-

(1) In a designated operational area during-

(i) Contingency operations;

(ii) Humanitarian or peacekeeping operations; or

(iii) Other military operations; or military exercises, when designated by the Combatant Commander; or

(2) When supporting a diplomatic or consular mission-

(i) That has been designated by the Department of State as a danger pay post (see <https://aoprals.state.gov/>); or

(ii) That the Contracting Officer has indicated is subject to this clause.

(End of clause)

52.232-5 Payments under Fixed-Price Construction Contracts.

(May 2014)

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 8 thday 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 of 1940 (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)

52.232-19 Availability of Funds for the Next Fiscal Year.

(Apr 1984)

Availability of Funds for the Next Fiscal Year (Apr 1984)

Funds are not presently available for performance under this contract beyond FY25. The Government's obligation for performance of this contract beyond that date 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 for performance under this contract beyond FY25, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

52.248-3 Value Engineering-Construction.

(Oct 2020)

VALUE ENGINEERING-CONSTRUCTION (OCT 2020)

(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 \$75,000 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)

Clauses Incorporated By Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<https://acquisition.gov>

- or -

<https://www.acq.osd.mil/dpap/dars/about.html>

(End of clause)

DFARS Clauses Incorporated by Full Text

252.211-7002 Availability for Examination of Specifications, Standards, Plans, Drawings, Data Item Descriptions, and Other Pertinent Documents. (Dec 1991)

AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS, STANDARDS, PLANS, DRAWINGS, DATA ITEM DESCRIPTIONS, AND OTHER PERTINENT DOCUMENTS (DEC 1991)

The specifications, standards, plans, drawings, data item descriptions, and other pertinent documents cited in this solicitation are not available for distribution but may be examined at the following location:

<u>NAVFAC Far East Site Thailand (ROICC) 7 Sathorn Tai Rd. Bangkok 10120 Thailand</u>

(End of provision)

252.215-7008 Only One Offer. (Dec 2022)

ONLY ONE OFFER (DEC 2022)

(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 FAR 15.403-3); 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 15.403-1(b)(2) through (5) does not apply, certify all cost or pricing data in accordance with paragraph (c) of DFARS provision 252.215-7010, 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 FAR 15.404-1).

(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 15.403-3(a)(1) with the notification].

(4) As specified in FAR 15.403-3(a)(4), 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)

252.229-7001 Tax Relief.

(Apr 2020)

TAX RELIEF-BASIC (APR 2020)

(a) Prices set forth in this contract are exclusive of all taxes and duties from which the United States Government is exempt by virtue of tax agreements between the United States Government and the Contractor's government. The following taxes or duties have been excluded from the contract price:

NAME OF TAX: <u>Not applicable for this project, DOD has been unable to obtain VAT waivers for contractors performing in this area. All offers should include VAT as applicable.(Offeror insert)</u>	RATE (PERCENTAGE): <u>applicable. Not applicable for this project, DOD has been unable to obtain VAT waivers for contractors performing in this area. All offers should include VAT as applicable.(Offeror insert)</u>
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(b) Invoices submitted in accordance with the terms and conditions of this contract shall be exclusive of all taxes or duties for which relief is available. The Contractor's invoice shall list separately the gross price, amount of tax deducted, and net price charged.

(c) When items manufactured to United States Government specifications are being acquired, the Contractor shall identify the materials or components intended to be imported in order to ensure that relief from import duties is obtained. If the Contractor intends to use imported products from inventories on hand, the price of which includes a factor for import duties, the Contractor shall ensure the United States Government's exemption from these taxes. The Contractor may obtain a refund of the import duties from its government or request the duty-free import of an amount of supplies or components corresponding to that used from inventory for this contract.

(End of clause)

252.232-7006 Wide Area WorkFlow Payment Instructions.

(Jan 2023)

WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (JAN 2023)

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

"Department of Defense Activity Address Code (DoDAAC)" is a six position code that uniquely identifies a unit, activity, or organization.

"Document type" means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

"Local processing office (LPO)" is the office responsible for payment certification when payment certification is done external to the entitlement system.

"Payment request" and "receiving report" are defined in the clause at 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(b) *Electronic invoicing.* The WAWF system provides the method to electronically process vendor payment requests and receiving reports, as authorized by Defense Federal Acquisition Regulation Supplement (DFARS) 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) *WAWF access.* To access WAWF, the Contractor shall-

- (1) Have a designated electronic business point of contact in the System for Award Management at <https://www.sam.gov>; and
- (2) Be registered to use WAWF at <https://wawf.eb.mil/> following the step-by-step procedures for self-registration available at this web site.

(d) *WAWF training.* The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at <https://wawf.eb.mil/>

(e) *WAWF methods of document submission.* Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) *WAWF payment instructions.* The Contractor shall use the following information when submitting payment requests and receiving reports in WAWF for this contract or task or delivery order:

(1) *Document type.* The Contractor shall submit payment requests using the following document type(s): **NAVCON**

(i) For cost-type line items, including labor-hour or time-and-materials, submit a cost voucher.

(ii) For fixed price line items-

(A) That require shipment of a deliverable, submit the invoice and receiving report specified by the Contracting Officer.

(Contracting Officer: Insert applicable invoice and receiving report document type(s) for fixed price line items that require shipment of a deliverable.)

(B) For services that do not require shipment of a deliverable, submit either the Invoice 2in1, which meets the requirements for the invoice and receiving report, or the applicable invoice and receiving report, as specified by the Contracting Officer.

(Contracting Officer: Insert either "Invoice 2in1" or the applicable invoice and receiving report document type(s) for fixed price line items for services.)

(iii) For customary progress payments based on costs incurred, submit a progress payment request.

(iv) For performance based payments, submit a performance based payment request.

(v) For commercial financing, submit a commercial financing request.

(2)) Fast Pay requests are only permitted when Federal Acquisition Regulation (FAR) 52.213-1 is included in the contract.

[Note: The Contractor may use a WAWF "combo" document type to create some combinations of invoice and receiving report in one step.]

(3) *Document routing.* The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

<i>Field Name in WAWF</i>	<i>Data to be entered in WAWF</i>
Pay Official DoDAAC	N68732
Issue By DoDAAC	N62742
Admin DoDAAC	N62742/THAI
Inspect By DoDAAC	N62742/THAI
Ship To Code	N62742/THAI
Ship From Code	N/A

Mark For Code	N/A
Service Approver (DoDAAC)	N62742/THAI
Service Acceptor (DoDAAC)	N62742/THAI
Accept at Other DoDAAC	N/A
LPO DoDAAC	N62742/THAI
DCAA Auditor DoDAAC	N/A
Other DoDAAC(s)	N/A

(4) *Payment request.* The Contractor shall ensure a payment request includes documentation appropriate to the type of payment request in accordance with the payment clause, contract financing clause, or Federal Acquisition Regulation 52.216-7, Allowable Cost and Payment, as applicable.

(5) *Receiving report.* The Contractor shall ensure a receiving report meets the requirements of DFARS Appendix F.

(g) *WAWF point of contact.*

NAVFAC_PAC_WAWF_THAI@us.navy.mil

Mr. Rondel Williams
Contracting Officer
Email: williamsrg@state.gov

Mr. Nitiwate Dissanont
Contract Specialist
Email: nitiwate@state.gov

Ms. Kannikar Pakhunthot
Admin Associate
Email: Kannikar@state.gov

Mr. Pornsak Thongchai
Contracting Officer's Representative
Email: ThongchaiP@state.gov

(1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

Mr. Jason Ho

Procurement Analyst

jason.w.ho.civ@us.navy.mil

(2) Contact the WAWF helpdesk at 866-618-5988, if assistance is needed.

(End of clause)

Section 00 71 00 - Contracting Definitions**FAR Clauses Incorporated by Reference**

Number	Title	Effective Date	Alternate/ Deviation	Variation Effective Date
52.202-1	Definitions.	Jun 2020		

Section 00 73 00 - Supplementary Conditions

PAPERLESS CONTRACTING

The U.S. Navy (hereafter referred to as the Government) intends to administer any contract awarded under this solicitation using paperless contracting methods to the greatest extent practicable. Paperless contracting involves the use of an electronic medium such as the Internet, computer diskettes, CDROM, DVDROM, or electronic mail (email) in place of paper documents to award, solicit, or administer a contract.

In order to facilitate the use of paperless contracting methods, the Contractor shall possess the capability to communicate and exchange authenticated documents with the Government electronically during the contract performance period. Such capability shall include the ability to receive, acknowledge, reply to, and send documents via electronic mail. Additionally, such capability shall not require or be contingent upon any modification or upgrade to existing Government software. The Contractor also agrees to maintain such capability notwithstanding any changes or modifications to existing Government software during the contract performance period so long as the Government provides reasonable notice and any equipment and/or software required to maintain such capability is commercially available.

The Contractor shall utilize the paperless contracting capability described above as directed by the contracting officer during the contract performance period. Documents, which may be required to be exchanged electronically, include, but are not limited to, task orders, modifications, requests for cost proposals, and other routine correspondence. Exceptions to the contracting officer's direction may be granted in unusual circumstances with the prior approval of the contracting officer.

Both the Contractor and the Government agree to share all such technical information as is necessary to facilitate efficient and reliable electronic communications during the period of contract performance. Such information may include such data as e-mail addresses, available software, and mutually agreed procedures, but shall not include any information the disclosure of which would violate any applicable licenses or other agreements. In case of any technical difficulties precluding the use of electronic communications, both the Government and the Contractor agree to work in good faith to resolve any such difficulties.

For informational purposes, the Government anticipates that its contracting personnel will utilize the following computer software programs during the administration of this contract: Microsoft Office (Excel, Word, and Project), Adobe Acrobat, and AutoCAD.

HOST NATION REQUIREMENTS

Contractor Licensing and Hiring Requirements

Contractors must be duly authorized to operate and conduct business in any host country and must fully comply with all laws, decrees, labor standards, and regulations of the host country during the performance of the contract. The United States has established international agreements with the host nation that include provisions relating to the procurement of supplies, employment preferences and use of local and U.S. contractors, as well as restrictions on hiring of third country nationals or utilization of third country contractors. Offerors are expected to comply with all controlling international agreements and with the laws of host nations whether the United States Government provides notice of the existence of such requirements. The contractor will not be permitted use of third country personnel or contractors in the performance of this contract without a demonstration that reasonable efforts to employ citizens, nationals, and permanent residents of host nation and the United States, or contractors of the host nation and the United States, have been made and that wages competitive with or higher than those being paid for similar work performed in the host nation by citizens of the host nation or of the United States are being offered. The contractor shall not employ third country personnel or contractors without written notification of United States approval from the Contracting Officer.

Permit Compliance

The United States does not directly hold environmental permits in the host nation. The contractor shall comply with environmental permits held by the host nation for the benefit of a DoD project even if the contractor is not named in the permit. Contractor shall document general procedures and their implementation for compliance with permit conditions,

Best Management Practices, and required mitigations. Contractor shall be responsible for any required corrective actions. Contractor shall provide permit compliance and corrective action documentation to the COR and any additional Government and Host Nation representatives as requested by the COR.

Temporary Construction Facilities Physical Appearance

Be aware of local sensitivities and cultural values. Temporary facilities and visible components thereof shall be of solid color without visible markings, graphics, and/or text.

Biosecurity for Construction Contracts

Invasive species can be purposefully or inadvertently moved with construction equipment, personal protective equipment and hand tools, foot traffic, vehicles and vessels, raw construction materials, and packing materials. Invasive species can become pests and affect the economy, ecology, and human health. It is critically important to be aware of ways to prevent the movement of invasive species and implement best management practices. The Contractor shall take all practicable measures to prevent introduction or spread of invasive species in association with contract performance, including importation of supplies, equipment or personnel and movement of supplies, equipment, or personnel between locations. At a minimum, all activities shall comply with U.S. and host nation biosecurity laws and regulations, shall include 100 percent inspection of equipment and supplies. If the contract performance results in introduction or spread of invasive species, the contractor shall be responsible for taking appropriate measures, in consultation with appropriate authorities, to contain and prevent contract related spread of such species at no additional cost to the government. In addition, the Contractor shall:

- a. Comply with all necessary inspections of raw construction materials, equipment, and vehicles for invasive and pest species prior to entering of the project site and prior to moving equipment offsite. The Contractor is responsible for any cleaning or inspection fees.
- b. Non-native invasive species can be inadvertently moved with construction equipment, Personal protective equipment, hand tools, foot traffic, vehicles, vessels, raw construction materials, and packing materials.
- c. Conduct vehicle washdown and inspection for soil and other material to prevent the inadvertent movement of invasive species from the project site to other locations. Establish appropriate facilities that comply with all environmental laws and regulations, and promptly take corrective or preventative actions for noncompliance. Include these details in a biosecurity /Hazard Analysis and Critical Control Point (HACCP) plan and environmental briefs.
- d. Submit a biosecurity/HACCP Plan, prepared in accordance with USFWS HACCP Manual for all imported equipment and imported construction materials and supplies. The HACCP plan must address, as a minimum, the identification and control of invasive and non-native species in construction equipment and construction materials and supplies.
- e. Implement and update the HACCP plan accordingly to reduce the risk of spreading invasive species. The HACCP development team should include at least two members, one member with biological expertise with invasive species and one member from the project team who has a clear understanding of the project activities and requirements. Contractor is responsible for training all personnel on the project specific HACCP requirements once the plan is approved by the Government.
- f. The Contractor must compile all supporting documentation (e.g. reports, checklists and logs) required under their HACCP Plan and submit such documents to the Contracting Officer on a monthly basis. Once all HACCP plan activities are complete, bound hardcopies of the plan and all supporting documentation and submit to the Contracting Officer.

CONTRACTING OFFICER AUTHORITY

1. No person other than the Contracting Officer has authority to bind the Government with respect to this contract.
2. No action or omission of any government employee or representative other than the Contracting Officer shall increase or decrease the scope of this contract or shall otherwise modify the terms and conditions of this contract.
3. In no event shall any of the following be effective or binding on the Government or imputed to the Contracting Officer with respect to this contract:
 - (a) An understanding or agreement between the Contractor and anyone other than the Contracting Officer;
 - (b) A purported modification or change order issued by anyone other than the Contracting Officer;
 - (c) A promise by anyone other than the Contracting Officer to provide additional funding or make payments; or
 - (d) An order, direction, consent, or permission from anyone other than the Contracting Officer to:
 - (i) Incur costs in excess of a specified estimated cost, allotment of funds, or other ceiling; or
 - (ii) Expend hours in excess of a specified level of effort.
4. If an individual other than the Contracting Officer attempts to make changes to the terms and conditions of this contract, you shall not proceed with the changes and shall immediately notify the Contracting Officer.

Overall Contract Delivery Period

From date of lead time event to completion of performance

380 Calendar Days

Date of Award Receipt

From date of lead time event to beginning of performance

10 Calendar Days

Date of Award Receipt

Section 01 00 00 - General Requirements

Requirements

D/B Construct Logistics Resupply Pad and Improve Access Road at Bahn Di Lang Range, Lopburi, Thailand

PART 2

GENERAL REQUIREMENTS

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PART 2

GENERAL REQUIREMENTS

1. DEFINITIONS:

As used throughout the contract, the following terms shall have the meaning set forth below:

- a. Contracting Officer (KO): The individual designated to administer the contract. Throughout this contract this individual will be responsible and possess the authority to act on behalf of the Government with respect to the specific contract. The only person that may make any change to the contract.
- b. Contracting Officer Representative (COR): The individual designated by the Contracting Officer as the authorized representative of the Contracting Officer. The COR will provide periodic site inspections and resolve questions or problems of a technical nature.
- c. Contractor: The term Contractor refers to both the prime Contractor and subcontractors, including the Designer of Record. Responsible for the design and construction of the facility in accordance with contract requirements. Responsible for obtaining the necessary permits, certificates, material or component approvals at its own expense.
- d. Designer of Record (DOR): Licensed architects and engineers working as subcontractor to or partner with the prime Contractor who provides design for this contract. Shall remain directly involved during the construction process and be responsible for providing on-site inspections to ensure the facility is constructed in accordance with the approved final design documents.
- e. Government: The Government of United states of America or its authorized representative.
- f. Host Nation: The country in which the project is located. Representative from the Host Nation may act as end-user if no other end-user is identified.
- g. Quality Control (QC): Contractor's system to control the quality of design, material, equipment and construction.
- h. Quality Assurance (QA) Program: Government's program to evaluate the effectiveness of the Contractor's quality control. The Government's QA Program is not a substitute for the Contractor's QC Program.

2. REQUEST FOR PROPOSAL PARTS:

- a. RFP PART 1 – PROPOSAL FORMS AND DOCUMENTS
Part 1 includes instructions to offers, evaluation factors, representations and certification requirements, contract clauses, and special contract requirements.
- b. RFP PART 2 – GENERAL REQUIREMENTS
Part 2 includes the traditional "Division 01" documents that address the administrative, safety, design processes, construction processes, and project closeout instructions for the project. These documents inform the contractor on how to do business with the local military base or locality where the project is located and the NAVFAC Component awarding/managing the contract.
- c. RFP PART 3 – STATEMENT OF WORK
Part 3 provides the functional project requirements. This is the heart of the RFP and describes what the user of the facility needs and what NAVFAC wants to receive in the completed project. RFP Part 3 is divided into six chapters. RFP Part 3, Chapters 1-3 are in paragraph format describing design and site requirements; Chapters 4 and 5 are mostly tabular descriptions of the building and each room or space within the building; and Chapter 6 describes the engineering choices that are made by the RFP editor. Chapter 6 utilizes the Unifomat/ Work Breakdown

Structure to allow systems descriptions of the facility and parallel the information structure and requirements of RFP Part 4.

d. **RFP PART 4 – PERFORMANCE TECHNICAL SPECIFICATIONS**

Part 4 describes the performance and level of quality of the materials and systems of the facility. This RFP Part utilizes the Unifomat/ Work Breakdown Structure to allow systems performance requirements to be used. The RFP Editor must add materials and systems that are required for the facility but are not present in the DB template chosen but is not required to further edit this RFP Part.

e. **RFP PART 5 – PRESCRIPTIVE SPECIFICATIONS**

Part 5 is a place holder for UFGS Specifications in the situation that a facility has a prescriptive requirement. This Part is used judiciously in a situation that a facility has specific Navy or Marine Corps requirements that are not routinely used in the commercial market.

f. **RFP PART 6 – ATTACHMENTS**

Includes related information that supports the project, for example, surveys, studies, soils reports, environmental documentation, as-built drawings, existing conditions, forms, weather data, etc.

3. GOVERNMENT APPROVAL:

Government review or approval of any portion of the proposal or final design shall not relieve the Contractor from responsibility for errors or omissions with respect thereto.

4. POST AWARD KICKOFF MEETING (PAK) AND DESIGN PRESENTATION / DEVELOPMENT:

Prior to the PAK contractor shall submit a baseline schedule. The Baseline schedule must include detailed design activities, Host Nation design acceptance activities, and a general approach to construction, including summary activities for required phasing and definable areas. Prior to commencement of design, and within fifteen (15) calendar days of award, the Contractor shall meet with representatives of the Contracting Officer, installation, and client to present the concept design for discussion and acceptance. The specific time shall be determined by the Contracting Officer. The Contractor shall plan for a 1-day event or virtual meeting, as a minimum, coordinated with the USG. The purpose of this meeting is to discuss the concept design; develop a mutual understanding relative to the approved proposal, safety program, quality control procedures, design and construction schedule, submittal reviews, RFI and resolution of comments, establish clear lines of communication and points of contact for Government and Contractor team members.

The following Contractor key personnel must attend the PAK at the expense of the Contractor: Project Manager, QC Manager, Lead Designer-of-Record (DOR), Design Staff responsible for each architectural/engineering discipline when facility design is discussed. Optional attendees encouraged to attend include Superintendent, major subcontractors and specialized supplemental QC personnel.

As part of the Design Presentation / Development, the Contractor must lead discussions to develop an understanding of the concept design. The Design Presentation / Development shall take place on the day of the PAK. The Contractor shall develop site plans, floor plans, exterior finish materials, and building elevations to conduct working sessions with the Government meeting attendees and to confirm the appropriateness of the facility design and develop acceptable alternatives if changes are needed. The Contractor must anticipate that Government Facility Users represented at the PAK Meeting will provide additional functional information. The Contractor shall incorporate functional design changes into the facility design as required to meet the needs of the Users. At the end of the PAK Meeting, the Contractor must provide either assurance that the updated design can be built within the budget or identify potential cost modification items to finalize a design that will include trade-offs to bring the project within the budget.

The Contractor will not be given additional time if the Contractor is unable to coordinate and attend the PAK meeting within the required time at no fault of the Government.

5. DESIGN:

Designate a lead host nation licensed professional engineer or architect to be responsible and in charge to coordinate the design effort of the entire project. This lead engineer or architect shall coordinate all design segments of the project to ensure consistency of design across all design disciplines. Perform topographical survey, soil investigations, field investigations and verification of existing site conditions as may be required to support the development of the design and construction of the project.

- a. Prior to commencing construction, contractor shall submit a complete design package for review and concurrence by the COR. The Government will have 14 calendar days to review each design submittal and provide review comments (if any). Construction drawings shall be finalized only after a complete basis of design and calculations have been developed for all required aspects of the project. Construction shall not commence until construction drawings are approved.
- b. All design work will be completed under the supervision of a host nation licensed professional architects and engineers. These design professionals shall properly endorse/approve each portion of the design applicable to their discipline prior to the COR review.
- c. Advisory Provisions: The advisory provisions of all codes, requirements, and standards shall be mandatory; substitute words such as “shall”, “must”, or “required” for words such as “should”, “may”, or “recommended,” wherever they appear. The results of these wording substitutions incorporate these code and standard statements as requirements. Reference to the “authority having jurisdiction” shall be interpreted to mean Contracting Officer or Contracting Officer Representative. Comply with the required and advisory portions of the current edition of the standard at the time of contract solicitation.
- d. Seals and Signatures on Documents: All final Contractor-originated design drawings shall be signed, dated, and bear the seal of the registered architect or the registered engineer of the respective discipline and comply with equivalent Host Nation requirement for certification of design drawings. Indicate the Contractor's company name and address on the drawing coversheets of each design submittal.
- e. Drawings and Specifications: The Contractor is encouraged to make product, material, and system selections during the design phase and indicate these choices on the design documents. Accomplish this by submitting design drawings and specifications that include proprietary information such as manufacturers name, product names, model numbers, product data, manufactures information, optional features, appropriate connections, fabrication, layout, and product specific drawings. Adherence to RFP submittal requirements and provision of DOR approved construction submittal information on the design submittals - eliminates the need for follow-on traditional construction submittals after the final design is approved.
- f. At a minimum, the following documents shall be submitted by the DOR for review by the USG:
 - a. Basis of Design and complete design calculations for work under each discipline or system or installation as required.
 - b. Completed construction drawings with plans, elevations, sections, and details in sufficient detail to ensure the project will be constructed per this statement of work and all applicable codes and regulations.
 - c. Material and installation specifications.
- g. Design Submittals: See Part 3 for required design intervals. The contractor shall incorporate a government review period of 14 calendar days for each Design submittal required. Additionally,

the government will be afforded 14 calendar days for resubmissions of rejected design submissions. The Contractor shall make no part of the time lost due to rejected design submittals the subject of claim for extension of time, additional or excess costs, or damages.

- h. Design drawings may be prepared more like shop drawings to minimize construction submittals after final designs are approved therefore the Contractor is encouraged to prepare and submit with the design drawings, appropriate connection, fabrication, layout, and product specific drawings.
- i. Submittal Copies: See Part 3 for required design submittal copies. Addresses for mailing will be furnished at the PAK meeting.
- j. RFP Deviations: Design changes that the Contractor considers to be beyond the requirements of the contract, must be identified as a proposed design change during the early stages of the design development. Design changes that result in extra costs or schedule extensions identified after the first design submittal review will not be considered unless justification is provided and approved by the contracting officer.
- k. Design-Build Contract - Order of Precedence
 - 1. In the event of a conflict or inconsistency between any of the below described portions of the conformed contract, precedence shall be given in the following order:
 - a) Any portions of the proposal or final design that exceed the requirements of the solicitation.
 - (1) Any portion of the proposal that exceeds the final design.
 - (2) Any portion of the final design that exceeds the proposal.
 - (3) Where portions within either the proposal or the final design conflict, the portion that most exceeds the requirements of the solicitation has precedence.
 - b) The requirements of the solicitation, in descending order of precedence:
 - (1) Standard Form 1442, Price Schedule.
 - (2) Part 1 - Contract Clauses.
 - (3) Part 2 - General Requirements.
 - (4) Part 3 - Project Program Requirements.
 - (5) Part 4 - Performance Specifications exclusive of prescriptive specifications.
 - (6) Part 5 - Not Applicable
 - (7) Part 6 - Attachments (Concept Drawings).
 - 2. Government review or approval of any portion of the proposal or final design shall not relieve the contractor from responsibility for errors or omissions with respect thereto.

6. SUPERVISION:

The Project Superintendent for this contract will be responsible for production and schedule. Approval of on-site Project Superintendent is required prior to start of construction. Provide resumes for the proposed on-site Project Superintendent describing their experience with references and qualifications to the Contracting Officer for approval before the pre-construction meeting. The Contracting Officer and their representatives reserve the right to interview the proposed on-site Project Superintendent at any time in order to verify the submitted qualifications. 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. The Contracting Officer may issue an order stopping all or part of the work if needed do address non-compliance issues until satisfactory corrective action has been taken. The Contractor shall not claim additional time, excess costs, or any other damages for lost time due to such stop orders. The Project Superintendent is not allowed to be assigned to any other contracts as primary key personnel while assigned to this contract unless otherwise authorized in Part 3 of this RFP but may be appointed at an alternate key personnel on

another contract. The Contractor must notify the COR if the Project Superintendent is assigned as an alternate to any other project. The on-site Project Superintendent must be on site during all production work.

- a. **Qualifications:** The Project Superintendent must have a minimum 5 years combined experience as a project manager, superintendent, QC manager, construction manager, or inspector of which at least two years were as superintendent on projects similar in size, scope, and complexity type construction contracts which included the major trades that are part of this contract. A graduate of a four-year accredited college or university program in one of the following disciplines: Engineering, Architecture Construction Management, Engineering Technology, Building Construction, or Building Science. Education may be substituted with relevant experience at the discretion of the Contracting Officer. The individual must be familiar with the requirements of the EM 385-1-1 and have experience in the areas of hazard identification and safety compliance. The on-site Project Superintendent must be able to communicate in both written and spoken English language. The Contracting Officer reserves the right to interview the proposed on-site Project Superintendent at any time in order to verify the submitted qualifications. For projects where the superintendent is permitted to also serve as the QC manager or Site Safety Health Officer, the superintendent must have qualifications in accordance with those sections.
- b. **Alternate on-site Project Superintendent Duties and Qualifications:** Designate an alternate on-site Project Superintendent to serve in the event of the designated on-site Project Superintendent's absence. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year. The qualification requirements for the alternate on-site Project Superintendent shall be the same as for the on-site Project Superintendent.
- c. **Notification of Changes:** Notify the COR, in writing, of any proposed change to the Project Superintendent a minimum of seven calendar days prior to the proposed change. The contractor must submit the resume and qualifications of an individual who meets or exceeds the qualifications of the contract. Proposed changes shall be subject to the acceptance by the Contracting Officer.

7. QUALITY CONTROL:

The Contractor has the responsibility to control the quality of the work. The primary emphasis of the QC System is on controlling the work to prevent quality problems, rather than inspection to discover problems after they occur. The QC System, including the Three Phases of Control, is the baseline program that the contractor is required to use to control the quality of the work. Control and inspection of the work to ensure that the work meets the requirements of the contract is required of the Contractor under the QC System.

The contractor shall be required, under this contract to have a full Quality Control program in place that meets the requirements of the attached Quality Control Program Requirements.

8. QUALITY CONTROL PROGRAM REQUIREMENTS:

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

- a. **Acceptance:** Acceptance of the QC plan 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 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.

- b. Notification of Changes: Notify the COR, in writing, of any proposed change, including changes in the QC organization personnel, a minimum of seven calendar days prior to a proposed change. Proposed changes shall be subject to the acceptance by the COR.

8.1 QC ORGANIZATION

Contractor shall fully staff the QC organization to ensure the requirements of the QC program are carried out as required. Design and construction quality control shall be in accordance with requirements of UFGS 01 45 00 The QC Manager shall meet the following requirements:

Provide one (1) dedicated on-site QC Manager for this contract who will be responsible for implementing and managing the QC program unless otherwise authorized in Part 3 of this RFP. Approval of on-site QC Manager is required prior to start of construction. Provide resumes for the proposed on-site QC Manager describing their experience with references and qualifications to the Contracting Officer for approval before the pre-construction meeting. The Contracting Officer and their representatives reserve the right to interview the proposed on-site QC Manager at any time in order to verify the submitted qualifications. The QC Manager is subject to removal by the Contracting Officer for non-compliance with requirements specified in the contract and for failure to manage the QC program adequately. The Contracting Officer may issue an order stopping all or part of the work if needed to address non-compliance issues until satisfactory corrective action has been taken. The Contractor shall not claim additional time, excess costs, or any other damages for lost time due to such stop orders. The QC Manager is not allowed to be assigned to any other contracts as primary key personnel while assigned to this contract but may be appointed as an alternate key personnel on another contract. The Contractor must notify the COR if the QC Manager is assigned as an alternate to any other project. The on-site QC Manager must be on site during all production work.

In addition to implementing and managing the QC program, the QC Manager is required to attend the PAK, preconstruction, Coordination and Mutual Understanding Meeting, conduct the QC meetings, 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 by others.

The QCM shall ensure that no construction begins before the DOR has finalized the design for that segment of work, and preconstruction submittals are approved as required. The QCM shall inspect all work and rework to ensure its compliance with contract requirements, maintain a rework log, and immediately stop any segment of work which does not comply with the contract requirements and direct the removal and replacement of any defective work.

- a. Qualifications: The Quality Control Manager must have a minimum 5 years combined experience as a project manager, superintendent, QC manager, construction manager, or inspector on projects similar in size, scope, and complexity type construction contracts which included the major trades that are part of this contract, and at least two years of experience as a Quality Control Manager. A graduate of a four-year accredited college or university program in one of the following disciplines: Engineering, Architecture Construction Management, Engineering Technology, Building Construction, or Building Science. Education may be substituted with relevant experience at the discretion of the Contracting Officer. The individual must be familiar with the requirements of the EM 385-1-1 and have experience in the areas of hazard identification and safety compliance. This QC Manager must be able to communicate in both written and spoken English language. The Contracting Officer reserves the right to interview the proposed on-site QC Manager at any time in order to verify the submitted qualifications. For projects where the QC

Manager is permitted to also serve as the Project Superintendent or Site Safety Health Officer, the QC Manager must have qualifications in accordance with those sections.

- b. Alternate QC Manager Duties and Qualifications: Designate an alternate QC Manager to serve in the event of the designated QC Manager's absence. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year. The qualification requirements for the Alternate QC Manager shall be the same as for the QC Manager.
- c. NOTIFICATION OF CHANGES: Notify the COR, in writing, of any proposed change to the QC Manager a minimum of seven calendar days prior to the proposed change. The contractor must submit the resume and qualifications of an individual who meets or exceeds the qualifications of the original QC Manager. Proposed changes shall be subject to the acceptance by the Contracting Officer.

8.2 QC PLAN

Provide, for acceptance by the COR, a QC plan submitted electronically that covers both on-site and off-site work and includes the following with a table of contents listing the major sections identified:

- a. QC ORGANIZATION: A chart showing the QC organizational structure and its relationship to the production side of the organization. The QC Manager will report directly to the company director (not to the project engineer or project manager – this is to prevent conflict of interest between issues of cost and quality).
- b. NAMES AND QUALIFICATIONS: In resume format, for each person in the QC organization.
- c. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONNEL: Of each person in the QC organization.
- d. OUTSIDE ORGANIZATIONS: A listing of outside organizations such as architectural and consulting engineering firms that will be employed by the Contractor and a description of the services these firms will provide. Provide names and qualifications of the designer of record and any other engineers who will be authorized to sign/approve construction drawings.
- e. APPOINTMENT LETTERS: Letters signed by an officer of the firm appointing the QC Manager and stating that he/she is responsible for managing and implementing the QC program as described in this contract. Include in this letter the QC Manager's authority to direct the removal and replacement of non-conforming work.
- f. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving, scheduling, and managing submittals, including those of subcontractors, designers of record, consultants, architect-engineers (AE), offsite fabricators, suppliers, and purchasing agents. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval.
- g. RFI LOG: Create and maintain a log of all RFIs and submit to COR monthly.
- h. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraphs "Accredited Laboratories" or "Testing Laboratory Requirements", as applicable.
- i. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required the frequency, and the person responsible for each test.
- j. PROCEDURES TO COMPLETE REWORK ITEMS: Procedures to identify, record, track, and complete rework items.
- k. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task, which is separate and distinct from other tasks, has the same control requirements and work crews. The list shall be cross-referenced to the Contractor's Construction Schedule and the specification sections.

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

- l. **PROCEDURES FOR PERFORMING THREE PHASES OF CONTROL:** For each DFW provide Preparatory and Initial Phase Checklists. Each list shall include a breakdown of quality checks that will be used when performing the quality control functions, inspections, and tests required by the contract documents. The preparatory and initial phases shall be conducted with a view towards obtaining quality construction by planning ahead and identifying potential problems.
- m. **PROCEDURES FOR COMPLETION INSPECTION:** See the paragraph entitled "Project Completion".

8.3 QC PROGRAM PROCEDURES

8.3.1 REQUIRED MEETINGS

- a. **Coordination And Mutual Understanding Meeting:** During the Pre-Construction conference and prior to the start of construction, discuss the QC program required by this contract. The purpose of this meeting is to develop a mutual understanding of the QC details, including documentation, administration for on-site and off-site work, and the coordination of the Contractor's management, production and the QC personnel. At the meeting, the Contractor will be required to explain how three phases of control will be implemented for each DFW. Contractor personnel required to attend shall include the QC Manager, project manager, and superintendent. Minutes of the meeting will be prepared by the QC Manager and signed by both the Contractor and the COR. The Contractor shall provide a copy of the signed minutes to all attendees. Repeat the coordination and mutual understanding meeting when a new QC Manager is appointed.
- b. **QC MEETINGS:** After the start of construction, the QC Manager shall conduct QC meetings once every week at the work site with the superintendent and the foreman responsible for the ongoing and upcoming work. The QC Manager shall prepare the minutes of the meeting and provide a copy to the COR with the weekly reports. As a minimum, the following shall be accomplished at each meeting:
 1. Review the minutes of the previous meeting.
 2. Review the schedule and the status of work and rework.
 3. Review the status of submittals.
 4. Review the rework list.
 5. Review the work to be accomplished in the next two weeks and documentation required.
 6. Resolve QC and production problems (RFIs, etc.).
 7. Address items that may require revising the QC plan.
 8. Review Accident Prevention Plan (APP).

8.3.2 THREE PHASES OF CONTROL

The three phases of control for both on-site and off-site work shall include the following for each DFW.

- a. **PREPARATORY PHASE:** Notify the COR at least two workdays in advance of each preparatory phase. Conduct the Preparatory Phase with the superintendent and the foreman responsible for the DFW. Document the results of the preparatory phase actions in the CQC Report and in the QC checklist.

Perform the following prior to beginning work on each DFW:

1. Review each paragraph of the applicable specification sections.
 2. Review the contract drawings.
 3. Verify that appropriate shop drawings and submittals for materials, equipment and RFIs have been submitted and approved. Verify receipt of approved factory test results, when required.
 4. Review the testing plan and ensure that provisions have been made to provide the required QC testing.
 5. Examine the work area to ensure that the required preliminary work has been completed.
 6. Examine the required materials, equipment, and sample work to ensure that they are on hand and conform to the approved shop drawings, submitted data and RFIs.
 7. Review the APP and appropriate Activity Hazard Analysis (AHA) to ensure that applicable safety requirements are met; and
 8. Discuss specific controls used and the construction methods and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each DFW.
- b. INITIAL PHASE: Notify the COR at least two workdays in advance of each initial phase. When construction crews are ready to start work on a DFW, conduct the Initial Phase with the foreman responsible for that DFW. Observe the initial segment of the work to ensure that it complies with contract requirements. Document the results of the Initial Phase in the CQC Report and in the QC checklist.
- Perform the following for each DFW:
1. Establish the quality of workmanship required.
 2. Resolve conflicts.
 3. Ensure that testing is performed by the approved laboratory; and
 4. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.
- c. FOLLOW-UP PHASE: Perform the following for on-going work daily or more frequently as necessary, until the completion of each DFW and document in the CQC Report and in the QC checklist:
1. Ensure the work is in compliance with contract requirements.
 2. Maintain the quality of workmanship required.
 3. Ensure that testing is performed by the approved laboratory.
 4. Ensure that rework items are being corrected; and
 5. Assure manufacturers' representatives have performed necessary inspections, if required.
- d. ADDITIONAL PREPARATORY AND INITIAL PHASES: Additional preparatory and initial phases shall be conducted on the same DFW 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 DFW is resumed after substantial period of inactivity, or if other problems develop.
- e. NOTIFICATION OF THREE PHASES OF CONTROL FOR OFF-SITE WORK: Notify the COR at least two weeks prior to the start of the preparatory and initial phases.

8.3.3 TESTING

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

- a. ACCREDITATION REQUIREMENTS: Construction materials testing laboratories must be accredited by a laboratory accreditation authority by the host nation and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation. The laboratory's scope of accreditation must include the testing for which the lab is accredited to do.

- b. **LABORATORY ACCREDITATION AUTHORITIES:** Laboratory Accreditation Authorities must be acceptable to the Contracting Officer.
- c. **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.
- d. **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 COR immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable. Test results shall be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the COR.

8.3.4 QC CERTIFICATIONS

- a. **CONTRACTOR QUALITY CONTROL REPORT CERTIFICATION:** Each CQC Report shall contain the following statement: "On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used, and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report."
- b. **COMPLETION CERTIFICATION:** Upon completion of work under this contract, the QC Manager shall furnish a certificate to the COR attesting that "the work has been completed, inspected, tested and is in compliance with the contract."

8.3.5 COMPLETION INSPECTIONS

- a. **PUNCH OUT INSPECTION:** Near the completion of all work or any increment thereof, the QC Manager shall conduct an inspection of the work and develop a punch list of items which do not conform to the approved drawings and specifications. Include in the punch list any remaining items of the "Rework Items List", which were not corrected prior to the Punch-Out inspection. The punch list shall include the estimated date by which the deficiencies will be corrected. A copy of the punch list shall be provided to the COR. The QC Manager or staff shall make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government in writing seven (7) days in advance that the facility is ready for the Government "Pre-Final Inspection". This 7-day notification must be accompanied by the punch list report demonstrating that all deficiencies identified have been corrected. KTR shall consider the 30-day lead time requirement for Government travel arrangements and discuss future inspection plans with the COR to ensure proper scheduling.
- b. **PRE-FINAL AND SPECIAL INSPECTION:** The Government and QC manager will perform this inspection to verify that the facility is complete and ready to be occupied. A Government pre-final punch list may be developed as a result of this inspection. The QC Manager shall ensure that all items on this list are corrected prior to notifying the Government in writing seven (7) days in advance that a "Final" inspection with the customer and stakeholders can be scheduled. KTR shall consider the 30-day lead time requirement for Government travel arrangements and discuss future inspection plans with the COR to ensure proper scheduling. Any items noted on the "Pre-Final" inspection shall be corrected in a timely manner and shall be accomplished before the contract completion date for the work or any particular increment thereof if the project is divided into increments by separate completion dates. Failure of the Contractor to have all contract work acceptably complete for this inspection will cause the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with Contract Clause 52.246-12 Inspection of Construction which states, "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.

- c. **FINAL ACCEPTANCE INSPECTION:** The QC Manager, the superintendent, or other Contractor management personnel and the COR will attend this inspection. Additional Government personnel may be in attendance. The final acceptance inspection will be formally scheduled by the COR based upon results of the "Pre-Final Inspection" and written request from the QC Manager. KTR shall consider the 30-day lead time requirement for Government travel arrangements and discuss future inspection plans with the COR to ensure proper scheduling. Failure of the Contractor to have all contract work acceptably complete for this inspection will cause the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with Contract Clause 52.246-12 Inspection of Construction which states, "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."

8.4 DOCUMENTATION

- a. **RECORDS:** 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. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. The reporting of work shall be identified by terminology consistent with the construction schedule. In the "remarks" section in this report which will contain pertinent information including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given, and corrective actions taken, delays encountered and a record of visitors to the work site. For each remark given, identify the Schedule Activity No. that is associated with the remark.
- b. **FORMS:** Prior to commencing work on construction, the Contractor may obtain electronic copies of the current report forms from the COR. The report forms will consist of the following:
 - 1. Contractor Production Report,
 - 2. Contractor Production Report (Continuation Sheet),
 - 3. Contractor Quality Control (CQC) Report,
 - 4. CQC Report (Continuation Sheet),
 - 5. Preparatory Phase Checklist,
 - 6. Initial Phase Checklist,
 - 7. Rework Items List, and
 - 8. Testing Plan and Log
- c. **REPORTS:** Deliver the following to the COR during the course of the project:
 - 1. CQC Report: Submit electronically with Weekly Reports, one CQC report for each week of work performed. Unless otherwise instructed by the COR, CQC report is due at noon on Mondays.
 - 2. Contractor Production Report: Submit electronically with Weekly Reports, one CQC report for each week of work performed. Production report is due at noon on Mondays.
 - 3. Preparatory Phase Checklist: Submit electronically attached to the CQC Report.
 - 4. Initial Phase Checklist: Submit electronically attached to the CQC Report.
 - 5. Test Reports: Submit electronically, within the week after the test is performed, attached to the CQC Report.
 - 6. QC Meeting Minutes: Submit electronically along with the Weekly reports.
 - 7. QC Certifications: As required by the paragraph entitled "QC Certifications."

- d. **QUALITY CONTROL VALIDATION:** Establish and maintain the following in a series of three ring binders. Binders shall be divided and tabbed as shown below. These binders shall be readily available to the Government's Quality Assurance Team at the project site.
 - 1. All completed Preparatory and Initial Phase Checklists, arranged by specification section.
 - 2. All milestone inspections, arranged by Activity/Event Number.
 - 3. A current up-to-date copy of the Testing and Plan Log with supporting field test reports, arranged by specification section.
 - 4. Copies of all contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.
 - 5. A current up-to-date copy of the Rework Items List.
 - 6. Maintain up-to-date copies of all punch lists issued by the QC Staff on the Contractor and Sub-Contractors and all punch lists issued by the Government.
- e. **AS-BUILT DRAWINGS:** The QC Manager is required to review the as-built drawings to ensure that they are kept current on a daily basis and marked to show deviations, which have been made from the Contract drawings. Ensure each deviation has been identified with the appropriate modifying documentation, e.g., modification number. The QC Manager shall initial each deviation or revision. Upon completion of work, the QC Manager shall submit a certificate attesting to the accuracy of the as-built drawings prior to submission to the COR.

8.5 NON-COMPLIANCE

The COR will notify the Contractor of any detected non-compliance with the general requirements and may issue a non-compliance notice. The Contractor shall take immediate corrective action. Such notice, when delivered to the Contractor at the work site, shall be 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. The Contractor shall not claim additional time, excess costs, or any other damages for lost time due to such stop orders.

9. SUBMITTAL REVIEW AND APPROVAL:

All submittals as listed in 9.1-9.3 shall be submitted and approved prior to starting the construction phase. A "G" following a submittal item indicates approval by the Government is required.

Provide design and construction submittals, prior to construction, approved in accordance with (IAW) QC Plans, the DOR or QCM Specialist are the approving authority for submittals as listed in 8.1 and 8.3. A copy of all DOR or QCM approved submittals will be sent to the Government for record.

DOR/QCM-approved design and construction submittals identified in 9.1, 9.3, and 9.5 for Government surveillance shall be stamped "FOR SURVEILLANCE ONLY." Submit Surveillance submittals to the Government prior to starting work for that item. Submittals required for surveillance will be returned only if corrective actions are required.

Government will review and approve for the submittals as listed in 9.2. **PRECONSTRUCTION SUBMITTALS.** The Contractor needs to submit submittals at least 14 calendar days in advance of beginning work on a submitted item (earlier if specifically required by the COR); the 14 days are to ensure the Government representative has adequate time to review the submittals to avoid causing any delays to the Contractor. A copy of all approved submittals shall be kept on the construction site at all times during the construction phase of the project. All submittals shall be in the English language, however, should the contractor need to translate the documents so the employees can properly understand them, this shall be done at no additional cost to the government and the Contractor shall ensure that they are translated per the approved document accurately.

Scheduling For Government Approved Submittals: For construction scheduling purposes add additional time to the identified minimum review time periods to allow for the following scheduling conditions:

- a. Allow review period, beginning when Government receives submittal from the QC organization, of 14 calendar days for return of submittal to the Contractor. Period of review for submittals requiring Government approval begins when Government receives submittal from QC organization.
- b. Submittals received after 12:00 pm will be logged in on the following business day.
- c. Submittals received on non-business day will be logged in on the next business day.
- d. Host Nation and US holidays, including the period between Christmas and New Year's Day, will be considered non-working/non-business days for Government personnel in reviewing submittals and attending design related meetings.
- e. Period of review for a resubmittal is the same as the initial submittal. Review time for resubmittals caused by non-conformance, do not result in a change in contract duration or cost.

9.1 DESIGN SUBMITTALS REQUIRED

Contractor DOR shall review and approve design calculation and drawing as listed in a. and b. and submit to the Government (G) for approval as noted. The contractor shall use a Request for Information (RFI) form to get approval from the COR to start any site work required to prepare predesign submittals.

Design drawings shall be prepared more like shop drawings to minimize construction submittals after final designs are approved therefore the Contractor is encouraged to prepare and submit with the design drawings, appropriate connection, fabrication, layout, and product specific drawings.

General guidance for preparation of design submittals is provided in FC 1-300-09N Navy and Marine Corps Design Procedures and UFGS 01 33 16.00 10 Design Data (Design After Award).

At a minimum, the following design submittals shall be provided:

- a. Basis for all design and complete calculations shall be submitted for all required aspects of the project. Including but not limited to:
 1. Geotechnical report; G
 2. Topographical and utilities survey and report; G
 3. Design analysis and structural calculations; G
 4. Electrical systems calculations and single line diagrams; G
 5. Calculations for Mechanical/HVAC, plumbing and sewerage systems including pump requirements; G
 6. Water tank storage size, water distribution, basis of design and flow calculations.; G
 7. Wastewater treatment system to include flow requirements as well as effluent quality requirements; G
 8. DOR engineering license/professional certification; G
- b. Electronic Design Deliverables shall be provided in accordance with FC 1-300-09N. Complete construction plans including site plan, architectural, structural, plumbing, mechanical, and electrical drawings shall be provided in accordance with FC 1-300-09N. These drawings shall include all plans, elevations, sections, and details necessary to completely describe the work (but not limited to):

No.	Minimum Drawing Requirements
1	<p>Civil Drawings</p> <ul style="list-style-type: none"> a. Notes, Legend, and Abbreviations b. Site Map (Project Location) c. Site layout (temporary road, temporary utilities, and temporary facilities are required) d. Building footprint e. Utilities plan (water source supply, sanitary sewer facilities, solid waste disposal areas) f. Cut/fill work (if required) g. Road/parking area h. Drainage system plan
2	<p>Architectural Plans</p> <ul style="list-style-type: none"> a. Notes, legends, and abbreviations b. Fire Protection Summary c. Floor plans indicating names and complete dimension including type of wall, floor and ceiling (reflected ceiling plans may be required to illustrate complicated installation of the ceiling) d. Roof plan of all roof areas, indicating direction of slope and method of drainage e. Building elevations – All building elevations indicating all exterior materials area required f. Building sections – Minimum two building sections indicating heights g. Doors and window schedules indicating detailed dimension including type and materials h. Typical wall section indicating all materials i. Finish schedule indicating all proposed finishes j. Furniture plan including Cable tray layout k. Equipment plan
3	<p>Structural Plans</p> <ul style="list-style-type: none"> a. Notes, legends, and abbreviations b. Inspection Requirements c. Foundation plans d. Framing plans e. Roof Framing plans f. Structural details (include water tank tower)
4	<p>Electrical System Plans</p> <ul style="list-style-type: none"> a. Notes, legends, and abbreviations b. Site plan c. Lighting plans d. Power plans & Details e. Lightning protection system plan f. Single line diagrams for electrical system g. Power single line diagrams h. Load schedules

5	Mechanical & Air-conditioning System Plans <ol style="list-style-type: none"> Notes, legends, and abbreviations Air-conditioning system including air duct supply (if applicable) Fans and exhaust fans plans Ventilation system
6	Plumbing & Sanitary Plans <ol style="list-style-type: none"> Notes, legends, and abbreviations Site plan indicating method of drainage Plumbing plans Riser diagrams for water supply system Detailed drawings for wastewater treatment system

c. **Code Compliance Certification.**

Design of all disciplines shall comply with the applicable U.S. & Host Nation norms, regulations, and all applicable criteria. Plans and Specifications shall be certified by a Host Nation architect or engineer, registered on the country's professional rolls, for compliance with all applicable codes and laws.

The certification shall be provided on the cover sheet of project drawings and specifications. The code compliance certification shall be provided as indicated below, and dated, signed and stamped accordance with the requirements set forth in FC 1-300-09N.

HAVING PARTICIPATED IN THE DESIGN OF PROJECT No. (Identify contract number, project title, location), AND HAVING THOROUGHLY REVIEWED THE COMPLETED PROJECT DOCUMENTS, I DECLARE THAT THE FACILITY DESIGN INCLUDED HEREIN COMPLIES WITH ALL APPLICABLE US AND HOST NATION CODES AND LAWS.

Date Signature (Professional Seal)

9.1.1 PRECONSTRUCTION SUBMITTALS; G

Government (G) will review and approve the following submittals:

- Project specific Accident Prevention Plan (refer to EM 385-1-1 Safety and Health Requirements Manual Appendix A). This plan shall include at a minimum:
 - Company policy statement regarding safety program.
 - Contractor team key personnel listing by name and description of duties and authorities.
 - Listing of required AHAs for the project.
 - Procedures for various aspects of the safety program such as:
 - Safety program enforcement
 - Employee training requirements
 - Reporting requirements
 - Inspection requirements
 - Emergency information to include:
 - Contact information and map to nearest medical provider.
 - Contact information for key personnel on the project.
 - Contact information for nearest law enforcement.
 - Contact information for UXO removal and other required specialists (if applicable).
- Activity Hazard Analysis (AHAs) for required activities.
- Construction progress schedule: Provide detailed design schedule and preliminary construction

- schedule, due prior to Post Award Kickoff Meeting (PAK) or PRECON meeting.
- d. Project Specific Quality Control Plan (refer to Quality Control Program Requirements)
- e. Schedule of Prices.
- f. Submittal Register.
- g. Finish material and sample board.
- h. Environmental Protection Plan.
- i. Waste Management Plan.

9.1.2 MATERIAL SUBMITTALS REQUIRED

Contractor DOR/QCM shall review and approve material submittals listed below and submit to government for surveillance. A "G" following a submittal item indicates approval by the Government is required. Provide for all definable features of work required by the statement of work, (others may be required) as specified below, catalogue cut, illustration, schedule, diagram, performance chart, instruction and brochure, illustrating size, physical appearance and other appearance and other characteristic of material along with samples for acceptance or variance selection as follows:

- a. Concrete mix design
- b. Aggregate and sand samples
- c. Reinforcing steel certifications
- d. Structural Steel certifications
- e. Cement catalog data
- f. Concrete sealant catalog data
- g. Paint and primer catalog data
- h. Paint color samples
- i. Roof cover and accessories catalog data
- j. Roof cover and accessories samples
- k. Ceramic tile catalog data
- l. Ceramic tile Samples
- m. Ceramic tile grout catalog data
- n. Ceramic tile grouts sealant catalog data
- o. Door samples and catalog data
- p. Door hardware samples and catalog data
- q. Window samples and catalog data
- r. Window hardware samples and catalog data
- s. Toilet catalog data
- t. Lavatory and faucet catalog data
- u. Plumbing fixtures catalog data
- v. Water pipe and accessories catalog data
- w. Water storage tank (if it is not reinforcing steel tank) catalog data
- x. Water distribution pump catalog data
- y. Main distribution board and load center catalog data
- z. Lighting fixtures, emergency light and exit sign sample and catalog data
- aa. Electrical conduit, conduit accessories sample and catalog data
- bb. Electrical cable & accessories sample and catalog data
- cc. Switch, receptacle, communication outlet sample and catalog data
- dd. Oscillating fan catalog data
- ee. Exhaust fan catalog data
- ff. Lightning air terminal, down conductor and earth electrodes sample and catalog data
- gg. Furniture (applicable) shop drawings, catalog data, and samples

9.2 POST-CONSTRUCTION SUBMITTALS

Contractor QCM shall review and approve POST-CONSTRUCTION SUBMITTALS as listed in below and submit a record copy to government for surveillance. Submittals marked "G" require Government approval.

Post-construction submittals shall be submitted to the COR prior to Beneficial Occupancy of the project. Therefore, it is critical that the contractor prepare these well in advance of the scheduled completion.

Provide (2) complete set copies include electronic files on CD of all AutoCAD and PDF drawings and all related submittals.

- a. Complete set of As-Built drawings. These shall be endorsed by the Designer of Record (DOR). - inclusive of marked prints (As-Built Marked Prints) indicating construction deviations from the Final Design Contract Documents.
- b. Operations and Maintenance Manuals (O&M), if applicable.
- c. Warranty Management Plan; G
- d. Manufacturer Warranties
- e. Functioning controls for all equipment installed. This includes remote controls as well (batteries included).
- f. End user training for all systems, scheduled through the COR.
- g. Electronic files of complete project photo documentation. The total number of photos shall be at least 50 times the number of weeks of the construction period. Photos shall cover every aspect of the project. Photos shall be the original size as taken by the digital camera. Photos shall be good quality, clear, and not distorted or blurred. Photos shall include:
 1. Details of materials being installed to show dimensions, materials being used, and quality.
 2. Completed portions of the project to document completed specific installations as well as the facility/project as a whole.
 3. The entire site taken from the same location (one every week). At the beginning of the project, establish this location with the COR.

9.3 OTHER SUBMITTALS

Contractor QCM shall review and approve submittals listed below when required by the Statement of Work and submit to government for surveillance:

- a. Design of all structural elements necessary for construction
- b. Pile and load testing, if applicable
- c. Controlled fill or backfill material tests.
- d. Concrete compressive strength testing.
- e. Mechanical and electrical testing.
- f. Material Safety Data Sheets (MSDS) as applicable.
- g. Contractor Safety Self-Evaluation Checklist, which shall be attached in contractor monthly progress reports.
- h. Licenses and permits related to local authorizations in accordance with current laws prior to project start.
- i. Installation authorizations for any utilities interruption and digging permits.
- j. Demolition Plan: Project and site specific when applicable
- k. Monthly Network Analysis Updates
- l. 3-week look ahead schedule, shall be included in each contractor weekly report

10. COMMUNICATIONS:

All Contractor design, submittal information, proposals, and other contract documentation shall be provided to the Government in the English Language. However, the contractor has the burden to properly communicate with other entities to include employees, subcontractors, Host Nation government and residents. Where required, the contractor shall be required to communicate in the local language, either written or oral. The effort and cost of doing this shall be the responsibility of the contractor.

11. PROJECT SCHEDULE AND TIME CONSTRAINT:

Provide Design and Construction Schedule adequate for Contractor to efficiently manage project and for Government to efficiently manage QA and scheduling interfaces. Include construction phasing and any work restrictions (such as occupied spaces, special hours, potential work disruptions, historical weather impacts, U.S. Federal and Host Nation holidays, and other schedule impacting information).

Schedule shall contain DFOWs and dates for completion of each task including material procurement, Government review time, and construction activities.

The Contractor shall be required to commence work under this contract immediately following receipt of the Award. The Contractor shall prosecute the work diligently and complete all the work requirements, ready for occupational use by the owner within the period of performance stated in the contract award and FAR 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984) unless otherwise modified through contract modification by the Contracting Officer. The performance period includes preparation of all design and preconstruction submittals, government review, material procurement, mobilization, construction, inspection & acceptance, demobilization, and other contract requirements.

A detailed construction schedule, using industry accepted scheduling software, shall be prepared by the Contractor and submitted to the Government for approval at least two weeks before the Contractor begins any construction work on-site. The Contractor is required to provide monthly project schedule update during construction to keep the Government apprised of the current construction plan and progress. The Contractor must schedule all work to cause the least amount of interference with normal operations to the occupants of the areas surrounding the project site. The COR must be notified fifteen (15) calendar days in advance for any service interruptions or events requiring disruption to occupants and shall receive prior approval by the COR.

The schedule shall clearly show the activities of the critical path. 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. Once an activity exists on the schedule it may not be deleted and must remain in the logic. No more than 20 percent of the activities may be critical or near critical. Critical will be defined as having zero days of Total Float. "Near critical" will be defined as having Total Float in the range of 1 to 14 days. The initial activity on the schedule shall be "Contract Duration" to show the entire period of performance to capture overall float. Show the following information on the diagrams for each activity:

- a. Activity ID
- b. Activity Description
- c. Original Duration in Workdays
- d. Remaining duration
- e. Actual Duration in Workdays
- f. Early Start Date
- g. Early Finish Date
- h. Total Float

Construction activities shall include, but are not limited to: Tasks related to mobilization or demobilization; the installation of temporary or permanent work by tradesman; testing and inspections of installed work by technicians, inspectors or engineers; start-up and testing of equipment; commissioning of building and related systems; scheduling of specified manufacture's representatives;

Punch Out Inspection; Pre-Final Inspection, Final Acceptance Inspection; final clean-up; training to be provided; and administrative tasks necessary to start, proceed with, accomplish or finalize the contract. No onsite construction activity shall have a duration in excess of 20 working days. Contractor activities will be driven by calendars that reflect Saturdays, Sundays and all US Federal holidays and Host Nation holidays as non-workdays.

Monthly Updates - The Contractor shall update the schedule monthly and provide to the COR.

Anticipated Weather Delays - Any activity duration, which could be impacted by normally anticipated adverse weather (precipitation, high or low temperature, wind, etc.), due to the time period that the Contractor has scheduled the work, shall include an adjustment to include the anticipated weather delay. A lost workday, due to weather conditions is defined as a day in which the Contractor's workforce cannot work 50 percent or more of the day. The Contractor shall immediately notify the Contracting Officer when a lost day has occurred due to weather and will record on the daily/weekly reports, the occurrence of adverse weather and resultant impact to the normally scheduled work. If the number of actual adverse weather delay days exceeds the number of days anticipated, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair-weather workdays and issue a modification in accordance with the contract clauses. The Contractor shall submit a request for additional time with supporting documentation to include a time impact analysis (TIA), the baseline schedule, a revised schedule showing all impacts, weather reports showing higher than average, and any other supporting documentation.

A lost workday, due to any other denial to the site for any other reason such as, but not limited to, base operations, a base exercise, or ceremony, is defined as a day in which the Contractor's workforce cannot work 50 percent or more of the day.

The Time Impact Analysis (TIA) method shall be used by the Contracting Officer and Contractor in determining if a time extension is justified. The Contractor shall provide a Time Impact Analysis to the Contracting Officer for any proposed contract change or as support for a Variance Request, Claim or Request for Equitable Adjustment by the Contractor illustrating the influence of each change or delay on the Contract Completion Date or milestones. Each TIA shall demonstrate how the Contractor proposes to incorporate the impact into the project schedule. The TIA shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. The Contractor shall provide a narrative report describing the effects of new activities and relationships to interim and contract completion dates, with each TIA.

Schedule Float - Float is the length of time the start of an activity can be delayed without delaying the start of a successor activity. Total Float is the length of time along a given path that the actual start and finish an activity(s) can be delayed without delaying the project completion date. Project Float is the length of time between the Contractor's Early Completion (or Substantial Completion or similar activity) and the Contract Completion Date. Ownership of Float available in the schedule, at any time shall not be considered for the exclusive use of either the Government or the Contractor. During the course of contract execution, any float generated due to the efficiencies of either party is not for the sole use of the party generating the float; rather it is a shared commodity to be reasonably used by either party. Efficiencies gained as a result of favorable weather within a calendar month, where the number of days of normally anticipated weather is less than expected, will also contribute to the reserve of float. A schedule showing work completing in less time than the Contract time, and accepted by the Government, will be considered to have Project Float. Project Float will be a resource available to both the Government and the Contractor. No time extensions will be granted nor delay damages paid unless a delay occurs which impacts the Project's critical path, consumes all available float or contingency time, and extends the work beyond the Contract Completion Date. Negative Float

will not be a basis for requesting time extensions. Scheduled completion date(s) that extend beyond the contract [or phase] completion date(s) (evidenced by negative float) may be used in computations for assessment of payment retention. The use of this computation is not to be construed as a means of acceleration.

Three-Week Look Ahead Schedule - To provide a more detailed day-to-day planning of upcoming construction work, the Contractor shall prepare, and issue detailed work plans that coordinate with and supplement the defined schedule. The work plans shall be keyed to the CPM activity numbers and shall be submitted each week and shall show the project activities that will occur during the current and following two-week interval. Additionally, the critical path activities are to be identified on the 3-Week Look Ahead Schedule. The schedule will be a bar chart type schedule prepared by the Contractor in sufficient detail to define the work to be accomplished, the crews, construction tools and equipment to be used during the current and next two-week interval. The bar charts shall be formatted to allow reproduction on Letter (US) or A4 sheets. The bar chart schedules shall be delivered to the Contracting Officer [not less than 3 work hours prior to the start of the weekly coordination meeting].

12. COMMENCEMENT OF WORK:

Contractor shall commence construction only upon the approval of all submittals listed in sections 9.1, 9.2, and 9.3 by the government and prior to that contractor shall obtain all local permitting required by law. Contractor shall coordinate with local utility providers to ensure permission to remove or to provide temporary utilities are approved. Contractor shall coordinate with facility end user and any affected residents in the area of the construction site for construction coordination and interruption of services and access. Contractor shall participate in a Pre-Construction Conference at a location identified by the Government. The contractor is responsible for protecting any public or private property and utilities outside the scope of this project from damage and interruption. The contractor shall promptly repair any damage to such property or utilities should it occur. Contractor is responsible for constructing barricades, fencing, or other means to ensure protection and safety of the residents and workers from harm due to the construction operations. Contractor shall install temporary facilities only as approved by the government.

13. PRECONSTRUCTION CONFERENCE:

Prior to construction or demolition start, meet with Contracting Officer Representative (COR) to discuss, and develop mutual understanding relative to administration of the safety programs, environmental issues, safety of building occupants and surrounding area, hazardous materials, waste disposal, construction QC procedures, construction schedule, labor provisions and other construction phase contract procedures. The Preconstruction Conference shall reinforce partnering philosophy initially established during the PAK. The Contractor shall participate in the conference at a location identified by the government before commencement of the work.

14. CONTRACTOR'S PRODUCTION REPORTS:

Submit Contractor Production Reports on forms furnished for this purpose. Contractor's Production reports shall be provided weekly unless otherwise requested by the Contracting Officer or Contracting Officer Representative. Reports shall include:

- a. Date
- b. Project Number and Title
- c. Updated Submittal Register and RFI Log
- d. Updated Project Schedule
- e. Worker hours by classification, move-on and move-off of construction equipment furnished by the prime, subcontractor or the Government, and materials and equipment delivered to the site.
- f. Safety training, meetings, checks and inspections.
- g. Quality Control Program Reports: Submit all documentation required by the attached Quality Control Program Requirements.

- h. Design and Construction Services: Including, but not necessarily limited to:
 - 1. Check all Contract Documents for correctness and correlation. If the Contractor notes any discrepancy or ambiguity, immediately submit RFI to notify the COR.
 - 2. Examine the work site as to conditions affecting the work. Field verifies the site and scope of work, including but not limited to, the measurement and location of all significant items required to perform the work. Failure by the Contractor to familiarize oneself with available information regarding these conditions shall not relieve the Contractor from the responsibility of successfully completing the work.
- i. Photo Documentation of the previous week's progress. Photos shall be high quality and not distorted. Minimum of 16 photos per report week including panoramic photos.

15. SCHEDULE OF PRICES:

Submit a schedule of prices on forms furnished by the Government. Include a detailed breakdown of the contract price, with quantities for each kind of work. Include General Conditions, profit, and overhead in the unit prices. No invoices shall be paid until this has been submitted and approved. Once approved, the Schedule of Prices shall be used as basis for contractor invoices in the form of a Field Pay Estimate. The Contractor will propose completion percentages for DFOW on the Field Pay Estimate and submit to the COR for concurrence.

16. CONTRACTOR INVOICES:

Requests for payment will be processed in accordance with the Contract Clause FAR 52.232-27 Prompt Payment for Construction Contracts and FAR 52.232-5 Payments Under Fixed-Price Construction Contracts. Invoices not completed in accordance with contract requirements will be returned to the Contractor for correction of the deficiencies. The requests for payment shall include the documents listed below.

- 1. The Contractor Performance Statement
- 2. Contractor Certification
- 3. Quality Control Certification
- 4. Updated Schedule if not already submitted per section 10 Project Schedule and Time Constraint.
The contracting officer may reject or withhold approval of progress payments until an updated schedule has been received and approved.
- 5. Final invoice shall be accompanied by Final Release Form
- 6. Safety self-evaluation

All invoices must be submitted using the NAVFAC Forms 7300-30 and 7300-31. The final determination of percentage of completion is the Contracting Officer's responsibility and will be commensurate with work accomplished, which meets the quality standards established under the contract. The contractor may also request the Contracting Officer to authorize payment for material delivered on the site. Invoices for these materials must be accompanied by proof that the materials have been paid for and are being properly stored in the contractor's possession to safeguard against theft and protection from the weather. The value of materials shall then be subtracted from the total contract value and future progress payments shall be calculated based on the remaining contract value.

The obligation of the Government to make payments required under the provisions of this contract will, at the discretion of the Contracting Officer, be subject to reductions and/or suspensions permitted under the FAR and agency regulations including the following in accordance with "FAR 32.503-6:

- a. Reasonable deductions due to defects in material or workmanship.
- b. Claims which the Government may have against the Contractor under or in connection with this contract.
- c. Unless otherwise adjusted, repayment to the Government upon demand for overpayments made to the Contractor.
- d. Failure to maintain accurate "as-built" or record drawings in accordance with FAR 52.236.21.

Failing to comply with contract requirements is grounds for invoice rejection at the discretion of the Contracting Officer.

17. PROTECTION OF EXISTING PROPERTY:

The Contractor shall take special care to protect existing property. Return areas damaged as a result of construction under this contract to their original condition.

18. WORK RESTRICTIONS

18.1 EXISTING UNDERGROUND UTILITIES:

The Contractor shall verify on-site utilities and have them marked out by a utility locator service prior to the start of construction. Where existing piping, utilities, oil and gas lines, and underground obstructions of any type that are to remain are indicated in locations to be traversed by new piping, ducts, and other work provided herein, and such are not indicated or specified to be removed, the elevations of the existing utilities and obstructions shall be determined before the new work is laid closer than the nearest manhole or other structure at which an adjustment in grade could be made. Obtain required dig permits and notify the Contracting Officer 21 calendar days prior to any excavation.

18.2 SITE ACCESS

All Contractor employees, including subcontractors, subcontractors' employees, suppliers, and suppliers' employees are required to comply with the Host Nation Security Requirements regarding personnel, vehicle, and equipment security passes and access to the jobsite. Nothing in the contract is to be construed in any way to limit the authority of the Host Nation to prescribe new, or to enforce existing security regulations governing the admission or exclusion of persons and the conduct of persons while aboard the station, including but not limited to, the rights of search of all persons or vehicles aboard the station.

Coordinate with the Host Nation for specific security and access requirements.

- a. Access to Buildings / Occupied Buildings: The Contractor may work in or around existing occupied buildings. The Contractor is responsible to obtain access to building and facilities and arrange for them to be opened and closed. Do not enter the building(s) without prior approval of the Host Nation. Keep the existing buildings and their contents secure at all times. Provide temporary closures as required to maintain security. Contract personnel will not be permitted in security-regulated buildings or areas unless cleared by the Host Nation.
- b. Passes and Badges: Contractor employees and representatives performing work under this contract are required to be either Host Nation citizens or documented legal residents (status verified by prime contractor). All Contractor employees must obtain the required employee and vehicle passes. Failure to obtain security and access passes must not be a cause for contract performance time extension.
- c. Contractor Vehicles: All vehicles must display a valid license plate and must be maintained in good repair. The company name must be displayed in a clearly visible manner and size on each Contractor vehicle used in the course of work.

19. LICENSES/PERMITS:

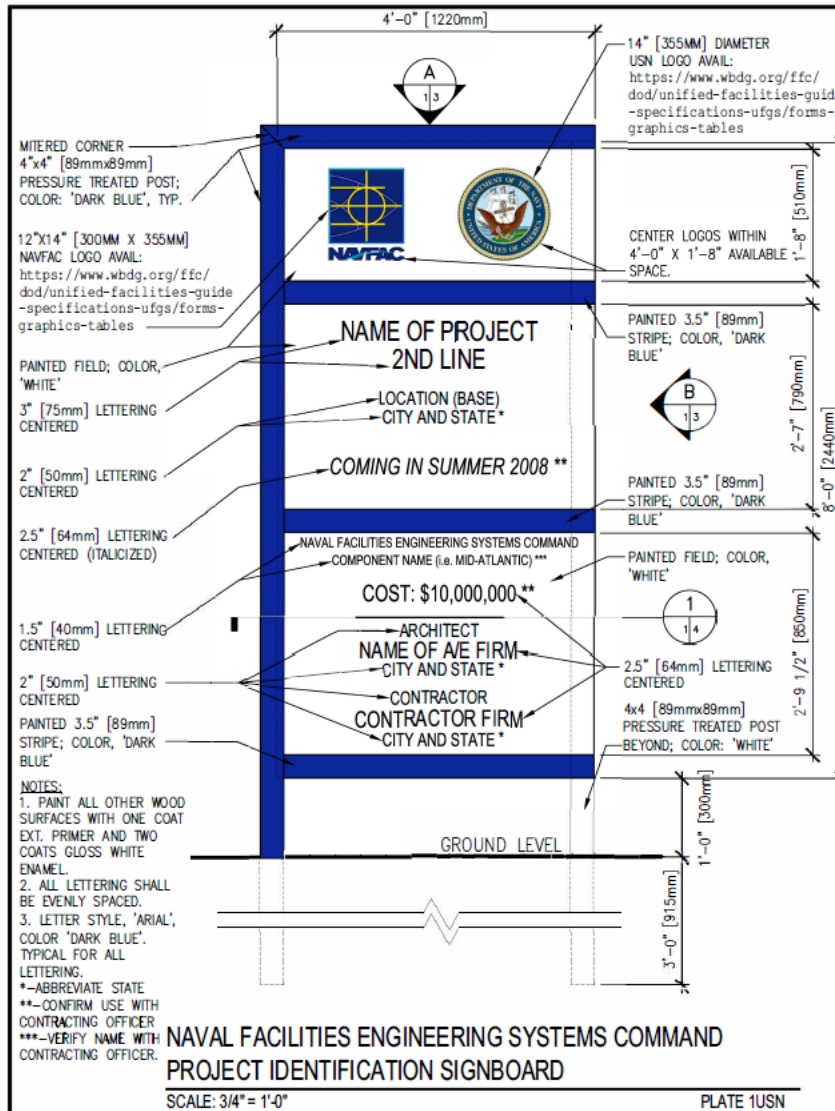
The Contractor shall obtain all appointments, licenses, and permits required to perform work under this contract at no additional expense to the Government. Comply with all applicable local laws, and

other specific regulations and procedures. Provide evidence of such permits and licenses to the Contracting Officer before work commences and at other times as requested by the Contracting Officer (see FAR 52.236-7, *Permits and Responsibilities*). Contractor shall determine correct permit fees and pay said fees. Contractor is exclusively responsible for full compliance with patent laws and shall affirm that the company is licensed to use equipment and processes the company shall employ in this project.

20. CONTRACTOR WORK SITE:

The Contractor shall limit use of the premises for work and for storage of material and equipment associated with the contract. Unless otherwise specified or separately agreed to, Government owned material handling equipment, transportation equipment or general tools will not be available for Contractor's use. Clean work area daily and after completion of the work, removing all loose debris and disposing of all non-permanent materials IAW the contractor's Waste Management Plan.

- a. Temporary Facilities: The Contractor may provide its own office facilities; coordinate and obtain advance approval from the Contracting Officer. Provide and maintain suitable sanitary facilities within the construction limits of the contract. Dispose of sanitary waste in accordance with the applicable laws and local regulation.
- b. Contractor-Furnished Equipment: Equipment is subject to the inspection and approval of the Contracting Officer Representative (COR), prior to and during the life of the contract. All equipment and vehicles shall display readily visible Contractor identification markings. Relocate stored Contractor equipment which may interfere with operations of the Government or with others on-site.
- c. Contractor-furnished Material: Protect and secure products stored at the construction site.
 1. All replacement units, parts, components, and materials to be used in the maintenance, repair and alteration of facilities and equipment shall be new and compatible with the existing equipment on which it is to be used, and shall comply with applicable Government, commercial, or industrial standards such as Underwriter's Laboratories, Inc., and National Electrical Manufacturers Association.
 2. In addition, submit a current certificate recognized by the local authority that states the Contractor has completed at least 10 hours of training in backflow preventer installations (if applicable).
- d. The contractor lay-down area will be limited due to space constraints, safety regulations, and the need to minimize impact on Host Nation's operations.
- e. The entire site must be fenced, and fence must be a minimum of 2.40 meters high.
- f. The worker camp shall be located outside the Host Nation's base/compound unless an on base camp is approved by the Host Nation.
- g. The contractor shall provide and install a project identification sign within 3 days after mobilization as shown here.



- h. The contractor shall post temporary signs tags, and labels to give workers and the public adequate warning and caution of construction hazards. Attach signs to the perimeter fencing every 50 meters.

21. TEMPORARY UTILITIES:

- a. The contractor shall provide temporary utility services (i.e., water, electric, etc.) required for construction and to support temporary facilities and bear all associated costs for connection, installation, and usage bills to include administration fees and coordination effort with local authorities.
- b. All labor, material, and equipment necessary to affect temporary utility tie-ins, including transformers, if necessary, shall be at the expense of the Contractor and under the surveillance of the Contracting Officer.
- c. The Contractor shall be responsible for any damages to Government, private or public facilities and property that may result from the installation and removal of these temporary utility tie-ins. Corrections and repairs shall be made at the Contractor's expense.

- d. The actual location and installation of the temporary tie-in, together with any interruptions of utilities systems, shall be identified and approved by the Contracting Officer prior to execution. Notify the COR 15 calendar days prior to any tie-ins.
- e. Permanent utility systems, when indicated, will be available for tie-in.
- f. Maintain utility services to existing facilities surrounding the site at all times during construction.
- g. Contractor shall install and certify back flow preventers on all connections to the potable water supply system.

22. RECORD DRAWINGS AND OPERATION & MAINTENANCE (O&M) DATA:

The Contractor shall furnish hard copy and electronic format for all As Built and O&M information. Record drawings shall incorporate all changes to the approved final design. Provide O&M data for as-built products, materials, and equipment, including data sheets, test reports, warranties, certificates, list of spare parts suppliers for all pieces of equipment, and approved construction submittals.

23. WARRANTY:

Per FAR 52.246-21 Warranty of Construction (APR 1984), the Contractor shall warranty all material and workmanship for a period of 12 months from the official acceptance date by the Government. In the event of a failure or defect discovered in the construction following acceptance and during the warranty period, the Contractor shall immediately repair or replace the defective item at the Contractor's cost. Any item corrected will be subject to an additional one-year warranty period commencing upon the date of the Government's acceptance of the repair or replacement. Original warranty documents shall be submitted to the Government upon acceptance of the work by the Government. In the event that a defect is found following the one-year warranty period that could not have reasonably been discovered previously, this shall be treated as a latent defect and shall also be promptly repaired or replaced as required by the contractor at no additional cost to the Government.

24. PERFORMANCE EVALUATIONS:

The Government will provide the Contractor a final performance evaluation as required by Contractor Performance Assessment Reporting System (CPARS) [<https://www.cpars.gov/cparsmain.htm>] but reserves the right to document Contractor performance for any contract value. The evaluation will take into account all aspects of the Contractor's performance. Performance evaluations may be completed any time during the contract to document significant events or Government concerns. The Government will provide a copy of the performance evaluation and an opportunity to discuss the evaluation. Final performance evaluations may have an impact on the award of future contracts.

25. SECURITY REQUIREMENTS:

All security requirements apply to all subcontractors and suppliers associated with this contract. The contractor shall also comply with the following:

- a. Do not publicly disclose any information concerning any aspect of the materials or services relating to this contract, without prior written approval from the Contracting Officer.
- b. Do not disclose or cause to be disseminated any information concerning the operations of the activity's security or interrupt the continuity of its operations.
- c. Do not disclose any information to any person not entitled to receive it.
- d. Direct all inquiries, comments, or complaints arising from any matter observed, experienced, or learned as a result of or in connection with the performance of this contract, the resolution of which may require the dissemination of official information to the Contracting Officer for resolution.

- e. Coordinate photography requirements with the Contracting Office. Some areas restrict or prohibit photographing Government property.

Deviations from or violations of any of the provisions of this paragraph, will, in addition to all other criminal and civil remedies provided by law, subject the Contractor to immediate termination for default and withdrawal of the Government's acceptance and approval of employment of the individuals involved.

26. PROPRIETARY RIGHTS:

All field notes, design drawings, specifications, and other documents collected and produced as part of this contract shall be considered property of the Government. These data shall not be used, in whole or part, published or unpublished, as a part of any technical or non-technical presentation without written pre-approval from the Contracting Officer.

27. ORAL MODIFICATION:

No oral statement by any person other than the Contracting Officer, as provided in the contract clause entitled, "CHANGES AND CHANGED CONDITIONS," will in any manner or degree modify or otherwise affect the terms of this contract. The Contractor shall notify the Contracting Officer immediately in writing if anyone other than the Contracting Officer provides the Contractor direction that impacts the contract's time, scope, or money.

28. NO WAIVER BY THE GOVERNMENT:

The failure of the Government in any one or more instances to insist upon strict performance to any of the terms of this contract or to exercise any option herein conferred shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon such terms or options on any future occasion.

29. EQUITABLE ADJUSTMENTS – WAIVER AND RELEASE OF CLAIMS:

- a. Whenever the Contractor submits a claim for equitable adjustment under a clause which provides for equitable adjustment of the contract, such claim shall include all types of adjustments in the total amounts to which the clause entitles the Contractor, including, but not limited to, adjustment arising out of delays or disruptions.
- b. Except as the parties may otherwise expressly agree, the Contractor shall be deemed to have waived: (1) any adjustments to which he otherwise might be entitled under the clause where such claim fails to request such adjustments; and (2) any increase in the amount of equitable adjustments additional to those requested in its claim.
- c. The Contractor agrees that, if required by the Contracting Officer, it shall execute a release, in form and substance satisfactory to the Contracting Officer, as part of the supplemental agreement setting forth the aforesaid equitable adjustment. The Contractor further agrees that such release shall discharge the Government, including its officers, agents, and employees, from any further claims, including, but not limited to, further claims arising out of delays or disruptions caused by the aforesaid change.

30. PROJECT COMPLETION:

All post construction submittals per section "POST-CONSTRUCTION SUBMITTALS" must be provided to the Government at or before the time of final inspection. All existing vegetation, works and services disturbed by the Contractor during the course of the construction works either to facilitate the construction or otherwise, shall be reinstated or replaced at the Contractor's own costs and to the satisfaction of the Government. All contractor equipment and excess materials shall be removed from

the site.

31. SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS:

1. Site Safety Health Officer (SSHO):

The Contractor shall provide a Site Safety Health Officer (SSHO) at the project site at all times during production to implement and administer the Contractor's safety program and government-accepted Accident Prevention Plan.

- a. The SSHO shall be dedicated to construction safety and shall not have any other job unless otherwise authorized in Part 3.
- b. The SSHO shall have a minimum of three (3) years safety experience in implementing and administering a safety program for projects of similar size and complexity.
- c. The SSHO must have completed a construction safety course applicable to the work to be performed and given by qualified instructors.
- d. The SSHO shall report to a corporate official.

2. Site Safety Program Management

- a. Provide a Competent Person for all hazards identified in the Contractor's accepted Accident Prevention Plan, on-site at all times when the work that presents the hazards associated with their professional expertise is being performed.
- b. Worksites with non-English speaking workers shall have a person(s), fluent in the language(s) spoken as well as English, onsite when work is being performed, to interpret and translate as needed.
- c. Accident Prevention Plans (APPs) shall be developed and submitted by the Contractor. The Contractor shall address each of the elements/sub-elements in the outline contained in EM 385-1-1 in the order that they are provided in the manual. If an item is not applicable because of the nature of the work to be performed, the Contractor shall state this exception and provide a justification.
- d. A copy of the most up-to-date Accident Prevention Plan (APP) and EM 385-1-1 shall be mounted on or adjacent to the bulletin board or a notice on the bulletin board shall state the location of the APP. If a site office is maintained by the contractor, a safety bulletin board shall be erected and maintained in an area commonly accessed by workers with the following documents posted as a minimum:
 - a) Map denoting route to the nearest emergency clinic or hospital.
 - b) Emergency phone numbers.
 - c) Copy of approved Activity Hazard Analyses (AHAs).
- e. Implement Good Catch Safety Communication Program. Record, report and communicate near miss incidents, unsafe/unhealthful conditions, or unsafe act/behavior to COR on a monthly basis. Minimum requirement is to:
 - a) Inform all project employees what the program means and how it is to be used throughout the project duration.
 - b) Maintain a log of all Good Catch reports and submit to COR monthly.
 - c) Provide and document continuous training to project all personnel by incorporating your Good Catches into your routine safety communication plan.
- f. All employees shall be provided with safety and health indoctrination prior to start of work as well as continuous safety and health training to enable them to perform their work in a safe manner. All training, meetings and indoctrinations shall be documented in writing by date, name, content and trainer.
- g. A visitor sign-in/log shall be maintained on site. The site manager shall maintain a roster of all authorized entrants that enter the site.

3. Incident Reporting:

- a. The Contractor shall report all accidents to Contracting Officer's Representative (COR) using the NAVFAC Pacific Commander's Critical Information Requirements (CCIRs) form shown in NAVFACPACINST 5214 series. The contractor shall submit an initial voice/SMS CCIR to the COR in 5 minutes after an incident occurs, followed by an initial CCIR in email format and a Contractor Significant Incident Report (CSIR), marked "Initial", to the COR within 24 hours. A completed CSIR is due within 5 days.

4. Sanitation:

- a. Provide potable drinking water for workers with individual drinking cups. Any container used to distribute drinking water shall be clearly marked "**DRINKING WATER**" and may not be used for other purposes.
- b. When permanent toilets are not available, contractor shall provide temporary sanitary toilets for use by workers. Hand soap or similar cleansing agents and adequate water shall be provided at toilet facilities.
- c. Solid and liquid wastes shall be removed from site daily.

5. Medical and First Aid Requirements:

- a. When a medical facility or physician is not accessible within five (5) minutes of an injury to a group of two (2) or more employees for the treatment of injuries, at least two (2) employees on each shift shall be qualified to administer first aid and CPR.
- b. A 16-unit first aid kit shall be available at jobsites during performance of work. Contents of first aid kits shall be checked by the employer every month.

6. Temporary Facilities:

- a. Temporary project fencing shall be provided on all projects located in areas of active use by members of the public or if specifically required by the contract documents.
- b. Temporary work camps:
 - a) Shall be adequately drained and not located near swamps, pools, sink holes or other surfaces that may collect water unless adequate mosquito control methods have been implemented.
 - b) Shall be sized to prevent overcrowding.
 - c) Grounds and open areas surrounding the shelters shall be maintained free of rubbish, debris, wastepaper, garbage, or other refuse.
 - d) Triple deck bunk beds are prohibited.
 - e) Floors shall be constructed of wood, asphalt, or concrete. Wooden floors shall be smooth and tight construction.

7. Personal Protective Equipment:

- a. As a minimum, the following is the allowed dress code in all projects:
 - a) Sleeved shirts.
 - b) Long pants.
 - c) Hard hats.
 - d) Enclosed shoes.
- b. Eye and Face Protection:
 - a) Depending on work being performed, use any of the following:
 1. Safety glasses.
 2. Safety goggles.
 3. Welding goggles.
- c. Hearing Protection and Noise Control:
 - a) When working with tools that may produce excessive noise (above 85 dB), use the

following:

1. Ear inserts devices to include disposable, preformed or custom molded earplugs.
2. Earmuffs, if available.
- d. Head Protection:
 - a) All persons working in or visiting hard-hat areas shall be provided with and required to wear hard hats.
 - b) No baseball caps, knit hoods, bandanas, shirts, or other headdresses shall be worn under the hard hat that would obstruct the fit of the hard hat.
- e. High Visibility Apparel/Vests:
 - a) High visibility apparel meeting, at minimum, ANSI/ISEA 107-2004 Performance Class 2 requirements or an approved equivalent shall be worn by workers exposed to vehicular traffic or equipment traffic.
 - b) The apparel background material color shall be either fluorescent yellow-green, fluorescent orange-red, or fluorescent red.
- f. Respiratory Protection:
 - a) When working in dusty environment, a dust mask is required.
- g. Personal Floatation Devices:
 - a) Inherently buoyant Type III, Type V, or better UCSG-approved personal flotation devices (PFDs) or an approved equivalent shall be provided and worn properly when working on floating pipelines, pontoons, rafts or stages, skiffs, small boats, or launches.
 - b) PFDs shall be worn when working on structures or equipment extending over or next to water except when guardrails, personal fall protection systems, or safety nets are provided.

8. Hazardous Substances, Agents, and Environments:

- a. Submit Safety Data Sheets (SDS) for all hazardous materials brought and used on site.
- b. Hot substances:
 - a) Heating devices or melting kettles shall be placed on firm ground to avoid accidental tipping. Whenever possible, kettles shall be placed downwind from workers or occupied buildings.
 - b) A fire extinguisher must be available where heating devices or melting kettles are in use.
- c. Confined Space:
 - a) When working in confined spaces, the following must be followed:
 1. Check for air content before entry.
 2. Ventilate confined space continuously during performance of work.
 3. As much as possible, do not use gas powered equipment in confined spaces.
 4. An attendant with no other duties shall be maintained at all time work is performed in confined spaces.
- d. Inclement Weather:
 - a) When there are warnings or indications of impending severe weather (heavy rains, damaging winds, hurricanes, typhoons, floods, etc.), weather conditions shall be monitored, and appropriate precautions taken to protect workers and property from the effects of the severe weather.

9. Lighting:

- a. While work is in progress, offices, facilities, access ways, working areas, construction roads, etc. shall be lighted sufficiently to allow work to be performed safely.
- b. Lamps and fixtures shall be guarded and secured to prevent injury. Open fluorescent fixtures shall be provided with wire guards.
- c. Lamps for general illumination shall be protected from accidental contact or breakage. Protection shall be provided by elevation of at least 7 feet (2.1m) from normal working surface.

10. Signs, Tags, Traffic Control:

- a. Safety signs may be used to indicate general instructions on safe work practices, proper safety procedures, and location of safety equipment.
- b. Hard hat signs shall be posted at all entrance to project sites.
- c. The contractor shall be responsible for providing, erecting, maintaining, and removal of all traffic signs, barricades, and other traffic control devices necessary to maintain traffic.
- d. The contractor shall coordinate with the Contracting Officer's Representative (COR) and obtain approval from local authorities prior to closing or restricting any roads.
- e. Barricades, danger, warning, and detour signs, as required, shall be erected before any roads are closed.

11. Fire Prevention and Protection:

- a. All sources of ignition shall be prohibited within 50 ft (15.2m) of operations with potential fire hazard. The area shall be conspicuously and legibly posted "**NO SMOKING, MATCHES, OR OPEN FLAMES**".
- b. Remove tall grass, brush, and weeds next to structures or facilities. A clearance of 3 feet (0.9 m.) wide shall be maintained around all structures.
- c. Flammable liquids shall be kept in closed containers or tanks when not in use.
- d. Portable fire extinguishers shall be provided where needed. Fire extinguishers shall be inspected monthly. Records shall be on a tag or label attached to the fire extinguisher indicating the date of inspection and initials of the person performing inspections.
- e. When working in areas where combustible materials are exposed to fire hazards (such as welding operations, hot metals, or open flames), a watcher shall be assigned to remain at the location for at least one hour after the exposure has ended.

12. Welding and Cutting:

- a. All welding equipment shall be inspected daily before each use.
- b. Provide non-flammable shielding when performing welding operations.
- c. Provide general mechanical or local exhaust ventilation whenever welding, cutting, or heating is performed in a confined space.
- d. Fire extinguishing equipment shall be provided in the immediate vicinity of welding or cutting operations.
- e. Remove gages and cap oxy-acetylene tanks when not in use. Tanks shall be stored upright, secured in place, and separated at least 25 feet apart.
- f. No splices or repaired insulation is allowed on arc welding cables 10 feet from the rod holder.

13. Electrical:

- a. Whenever possible, all equipment and circuits to be worked on shall be de-energized before work is started.
- b. For construction sites, all flexible cords shall be inspected daily by the contractor's Site Safety Health Officer.
- c. Electric wire and flexible cords passing through work areas shall be protected from damage by foot traffic, vehicles, sharp corners, and pinching.
- d. The frame of portable generators shall be grounded.
- e. All receptacle outlets that provide temporary electrical power during construction, remodeling, maintenance, repair, or demolition shall be connected to the Earth Leakage Circuit Breaker (ELCB). ELCB shall be provided on all circuits serving portable electric hand tools or semi-portable electric power tools.
- f. Do not use ELCB when using electric concrete vibrators.
- g. When working near energized lines or equipment, aerial lift trucks shall be grounded.

14. Lockout/Tagout:

- a. Lockout/tagout shall be performed only by authorized employees.
- b. Locks must always be used when the equipment is accessible by the public.

15. Hand and Power Tools:

- a. Hand and power tools shall be used, inspected by the contractor, and maintained in accordance with the manufacturer's instructions.
- b. Hand and power tools shall be in good working condition and with all required safety devices installed and properly adjusted.
- c. All tool guards must be functional.
- d. Power tools shall not be lowered or carried by its cord.
- e. Hoses shall not be used for hoisting or lowering pneumatic tools.
- f. Only qualified operators shall operate explosive- actuated tools.
- g. Chain saws shall have an automatic brake or kickback device.
- h. Pneumatic-driven nailers or staplers shall have a safety device on the muzzle to prevent the tool from ejecting fasteners unless the muzzle is in contact with the work surface.

16. Material Handling, Storage and Disposal:

- a. Employees shall be trained in proper lifting techniques. Avoid lifting loads above shoulder level.
- b. Materials shall not be moved over or suspended above workers.
- c. All material in bags, containers, bundles, or stored in tiers shall be stacked, blocked, and interlocked so that it is stable and secured against collapse.
- d. Material stored inside buildings under construction shall not be placed within 6 feet (1.8 m.) of any floor opening.
- e. Reinforcing steel shall be stored in orderly piles away from walkways and roadways and adequately protected from rain and moisture.
- f. All stairways, passageways, gangways, and accessways shall be kept free of materials, supplies, and obstructions at all times.
- g. Protruding nails in scrap boards, planks, and timbers shall be removed, hammered in, or bent over flush with the wood.
- h. Waste material and rubbish shall be placed in containers or if appropriate, in piles.

17. Rigging:

- a. Rigging equipment shall be inspected before each use to ensure that it is safe to use.
- b. Rigging equipment shall not be loaded in excess of its recommended safe capacity.

18. Machinery and Mechanized Equipment:

18.A General:

- a. Before any machinery or mechanized equipment is used, it shall be inspected and tested in accordance with the manufacturer's recommendations and certified in writing by a competent person (ex. Certified Mechanic).
- b. The contractor shall keep records of tests and inspections and shall be made available when requested by the Contracting Officer's representative.
- c. All machinery and equipment shall be inspected daily when in use to ensure safe operating conditions.
- d. The use of headphones for entertainment purposes (radio or cassette) while operating equipment is prohibited.
- e. All equipment and machinery shall have operable seat belts.
- f. All equipment shall be equipped with an audible reverse signal alarm.
- g. All mechanized equipment shall have at least one fire extinguisher with a rating per the

manufacturer's recommendations.

18.B Mobile Cranes:

- a. Before any crane or hoisting equipment is placed in use, it shall be inspected and tested and certified in writing by a competent person to be in accordance with the EM 385-1-1 (Rigging and Load Handling Equipment) and the manufacturer's recommendation. Written reports of tests, showing test procedures, and confirming the adequacy of repairs or alterations, shall be maintained with the crane and hoisting equipment or at the on-site project office. Contractor shall submit a P-1 form provided in the NAVFAC P-307.
- b. Inspection or determinations of road and shoulder conditions and structure conditions shall be made in advance to assure that clearances and load capacities are safe for the placing of any crane.
- c. Crane and hoisting equipment shall be operated only by designated qualified personnel. Proof of qualification shall be provided by the employer and shall be in writing.
- d. All signal persons must be qualified by either a third-party qualified evaluator or the employer's qualified evaluator.
- e. Using mobile cranes must comply with the safety regulation EM 385-1-1.
- f. Use of construction equipment (i.e., excavators, loaders) as Material Handling Equipment (MHE) must comply with EM 385-1-1.

19. Motor Vehicles:

- a. Every person operating a motor vehicle shall possess, at all times, a license/permit valid for the equipment being operated.
- b. Vehicles shall be checked daily by the operator to ensure safe operating condition.

20. Safe Access and Fall Protection:

- a. Safe access shall be provided to all work areas.
- b. Access ways shall be kept free of grease, mud, debris or other material or equipment that could obstruct passage and cause a tripping hazard.
- c. Employees exposed to fall hazards shall be protected by standard guardrails or personal fall protection devices on heights six feet (1.8m) or greater.
- d. Standard guardrails shall consist of top rails, mid rails, toe boards and posts.
- e. Personal fall arrest system shall include the following:
 - a) Full body harness
 - b) Six-foot-long lanyard
 - c) Lifelines.
- f. Personal fall arrest system shall not be attached to guardrail systems.
- g. All portable ladders shall be long enough to prevent workers from stretching.
- h. Portable ladders used as temporary access shall be extended at least 3 feet (0.9 m.) above the upper landing surface.
- i. Portable ladders shall be secured at the top and bottom to hold them rigidly in place.
- j. The top two steps of a step ladder shall not be used as a step.

21. Work Platforms and Scaffolding:

21.A General:

- a. Scaffold, platforms, or temporary floors shall be provided for all work except that can be performed safely from the ground or similar footing.
- b. Factory-fabricated scaffolds and components shall be designed and fabricated in accordance with the applicable national standard.
- c. Ladders may be used as work platforms only when use of small hand tools or handling of light material is involved.
- d. Ladder jacks, lean-to, and prop-scaffolds are prohibited.

- e. Emergency descent devices shall not be used as working platforms.
- f. Erection, moving, dismantling, or altering of work platforms shall be under the supervision of a Competent Person for Scaffolding per EM 385-1-1.
- g. Anyone involved in erecting, disassembling, moving, operating, using, repairing, maintaining, or inspecting a scaffold must be trained by a Competent Person to recognize any hazards associated with the work in question.
- h. Scaffolds and their components shall be capable of supporting without failure at least four times maximum anticipated load.
- i. Load-carrying timber members shall be a minimum of 1,500 lb-force/in² (10,341 kPa) (stress grade) construction lumber.
- j. Lumber shall be reasonably straight-grained and free of shakes, checks, splits, cross grains, unsound knots or knots in groups, decay and growth characteristics, any condition that would decrease the strength of the material.
- k. All lumber used for the scaffold may not have protruding nails (nail heads or nail points) or any other protruding foreign objects.
- l. Supporting members and foundations shall be of sufficient size and strength to safely distribute loading.
 - i. Supporting member shall be placed on a firm, smooth foundation that will prevent lateral displacement.
 - ii. Unstable objects such as barrels, boxes, loose bricks, or concrete blocks shall not be used as supports.
 - iii. Vertical members (i.e., poles, legs, or uprights) shall be securely braced to prevent swaying or displacement.
- m. Scaffolds shall include the following elements:
 - i. Toe Boards
 - ii. Guard Rails
 - iii. Cross & Diagonal Bracing
 - iv. Full Planking on work levels
 - v. Posts bearing on base plates that bear on mud sills
 - vi. Safe access
- n. The design and construction or selection of planking shall be in accordance with Table 21-1.

Table 21-1
MAXIMUM INTENDED LOAD

Rated Load Capacity	Maximum Intended Load
light duty	25 lb/ft ² (120 kg/m ²) applied uniformly over entire span area
medium duty	50 lb/ft ² (240 kg/m ²) applied uniformly over entire span area
heavy duty	75 lb/ft ² (360 kg/m ²) applied uniformly over entire span area

- o. Scaffolds shall be plumb and level.
- p. Scaffolds shall bear on baseplates that bear on mudsills (or other adequate foundation).
- q. Working levels of work platforms shall be planked or decked.

21.B Planking

- a. Platforms and walkways shall be at least 18" (45.7cm) wide.
- b. Planking shall be supported or braced to prevent excessive spring or deflection and secured to prevent displacement.
- c. An access ladder or equivalent safe access shall be provided. Climbing of braces is prohibited.
- d. The maximum permissible spans for 2-in x 10-in (5-cm x 25.4-cm) (nominal) or 2-in x 9-in (5-cm x 22.8-cm) (rough) solid sawn wood planks shall be as shown in Table 21-2.

Table 21-2
WOOD PLANK SELECTION

Maximum Intended Load lb/ft² (kg/m²)	Maximum Permissible Span - Full Thickness Undressed Lumber ft (m)	Maximum Permissible Span - Nominal Thickness Undressed Lumber ft (m)
<u>25 (122)</u>	<u>10 (3.0)</u>	<u>8 (2.4)</u>
<u>50 (244)</u>	<u>8 (2.4)</u>	<u>6 (1.8)</u>
<u>75 (366)</u>	<u>6 (1.8)</u>	n/a

21.C Guardrails

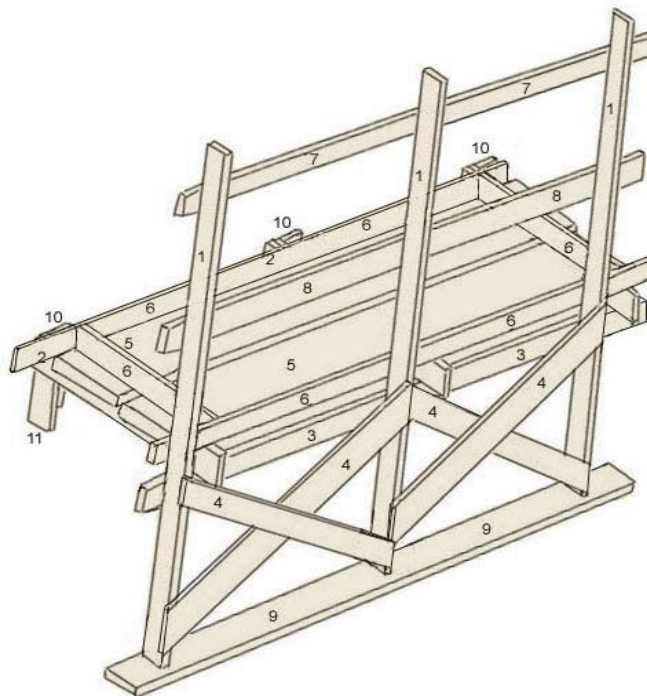
- a. Guardrail systems shall be installed along all open sides and ends of platforms. Guardrail systems shall include, at a minimum, a top rail, a midrail, and toe boards.
- b. The top edge height of top rails or equivalent member on supported scaffolds shall be installed between 38 inches (0.97 m) and 45 inches (1.2 m) above the platform surface. Top rails shall be equivalent in strength to 2 inches by 4-inch lumber.
- c. Midrails shall be installed at a height approximately midway between the top edge of the guardrail system and the platform surface.
- d. Each top rail or equivalent member of a guardrail system shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along its top edge of at least 200 pounds (890 n).
- e. Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members of a guardrail system shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along the midrail or other

- member of at least 150 pounds (666 n). Midrails shall be equivalent in strength to 1 inch by 6-inch lumber.
- f. Synthetic or natural fiber ropes shall not be used as top rails or midrails.
 - g. Steel cable (wire rope) may be used as top rails or midrails if tension in 6.25mm diameter steel cable is maintained to provide not more than 7.6cm deflection in any direction from the center line, under a 90.7kg load, if support posts are located not more than 2.4m apart and if the wire rope is flagged at not more than 1.8m intervals with high visibility material.
 - h. Toeboards shall be at least three and one-half inches (9 cm) high from the top edge of the toeboard to the level of the walking/working surface. Toeboards shall be securely fastened in place at the outermost edge of the platform and have not more than 1/4-inch (0.7 cm) clearance (gap) above the walking/working surface. Toeboards shall be equivalent in strength to 1 inch by 4-inch lumber.
 - i. Screen installed between toeboards and midrails or top rails shall consist of No. 18 gauge U.S. Standard wire one inch mesh.
 - j. Overhead protection shall consist of 2-inch nominal planking laid tight or 3/4-inch plywood.

21.D Single Pole Scaffolding

- a. Single Pole Scaffolding shall be constructed in accordance with Table 21-3.
- b. Figure 21-1 is provided as a reference for Single Pole Scaffold construction.

Figure 21-1
Single Pole Light Duty Wooden Scaffold



- | | | |
|------------|----------------------------|------------------------|
| 1. Pole | 5. Planking | 9. Mud Sill |
| 2. Bearers | 6. Toe Board | 10. Wall Scabs |
| 3. Ledgers | 7. Top Guard Rail | 11. Bearer Blocks |
| 4. Braces | 8. Intermediate Guard Rail | *Base Plates not shown |

Table 21-3
SINGLE WOOD POLE SCAFFOLDS
Minimum nominal size and maximum spacing of members of
single pole scaffolds

Description	Light duty Up to 20 feet high	Light-duty Up to 60 feet high	Medium duty Up to 60 feet high	Heavy Duty Up to 60 feet high
Max. Intended Load(lbs./sq.ft.)	25	25	50	75
Poles or Uprights	2 x 4 in. (5 x 10.1 cm)	4 x 4 in. (10.1 x 10.1 cm)	4 x 4 in. (10.1 x 10.1 cm)	4 x 6 in. (10.1 x 15.2 cm)
Max. pole spacing (longitudinal)	6 ft. (1.8 m)	10 ft. (3 m)	8 ft. (2.4 m)	6 ft. (1.8 m)
Max. Pole spacing (transverse)	5 (1.5 m)	5 (1.5 m)	5 (1.5 m)	5 (1.5 m)
Runners	1 x 4 in (2.5 x 10.2 cm)	1 ¼ x9 in. (3.1 x 22.8 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (5.1 x 25.4 cm)
Maximum spacing of bearers				
3 feet	2 x 4 in (5.1 x 10.1 cm)	2 x 4 in (5.1 x 10.1 cm)	2 x 10 in (5.1 x 25.4 cm) or 3 x 4 in. (7.6 x 10.1 cm)	2 x 10 in (5.1 x 25.4 cm) or 3 x 5 in. (7.6 cm x 12.7 cm)
5 feet	2 x 6 in (5.1 x 15.2 cm) or 3 in. x 4 in. (7.6 x 10.1 cm)	2 x 6 in (5.1 x 15.2 cm) or 3 in. x 4 in (7.6 x 10.1 cm) (rough)	2 x 10 in (5.1 x 25.4 cm) or 3 x 4 in. (7.6 x 10.1 cm)	2 x 10 in (5.1 x 25.4 cm) or 3 x 5 in. (7.6 x 12.7 cm).

Table 21-3 (Continued)
SINGLE WOOD POLE SCAFFOLDS

Description	Light duty	Light-duty	Medium duty	Heavy Duty
	Up to 20 feet high	Up to 60 feet high	Up to 60 feet high	Up to 60 feet high
6 feet			2 x 10 in (5.1 x 25.4 cm) or 3 x 4 in. (7.6 x 10.1 cm)	2 x 10 in (5.1 x 25.4 cm) or 3 x 4 in. (7.6 x 10.1 cm)
8 feet			2 x 10 in (5.1 x 25.4 cm) or 3 x 4 in. (7.6 x 10.1 cm)	
Planking	1 ¼ in. x 9 in. (3.1 x 22.8 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (5.1 x 25.4 cm)
Max. vertical spacing of horiz. members	7 ft (2.1 m)	9 ft (2.1 m)	7 ft (2.7 m)	6 ft 6 in (2 m)
Bracing, horizontal	1 in x 4 in (2.5 cm x 10.2 cm)	1 in x 4 in (2.5 cm x 10.2 cm)	1 in x 6 in (2.5 cm x 15.2 cm) or 1 ¼ in x 4 in (3.2 cm x 10.2 cm)	2 in x 4 in (5 cm x 10.2 cm)
Bracing, diagonal	1 in x 4 in (2.5 cm x 10.1 cm)	1 in x 4 in (2.5 cm x 10.1 cm)	1 in x 6 in or 1 ¼ in. x 4 in. (3.2 cm x 10.2 cm)	2 in x 4 in (5 cm x 10.2 cm)
Tie-ins	1 in x 4 in (2.5 cm x 10.2 cm)	1 in x 4 in (2.5 cm x 10.2 cm)	1 in x 4 in (2.5 cm x 10.2 cm)	1 in x 4 in (2.5 cm x 10.2 cm)

Note: All members are used on edge. All wood bearers shall be reinforced with 3/16 x 2 inch steel strip, or the equivalent, secured to the lower edges for the entire length of the bearer

21.E Independent Pole Scaffolding

- Figures 21-2 and 21-3 are provided as a reference for Independent Pole Scaffold construction.
- Independent Pole Scaffolding shall be constructed in accordance with Table 21-4.

Figure 21-2
Independent Wood Pole Scaffold

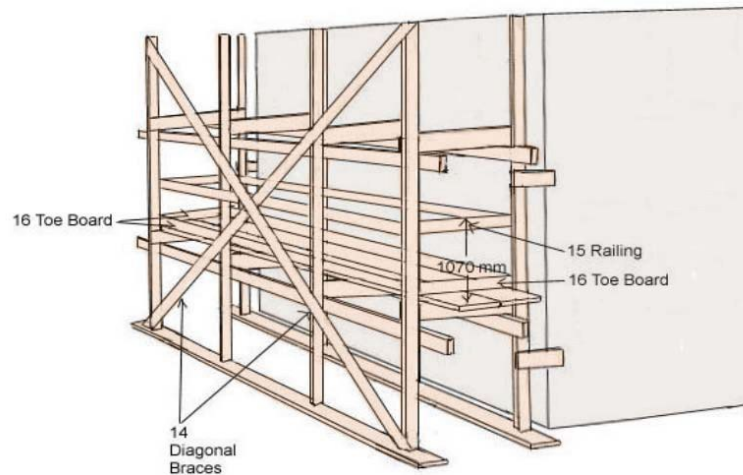
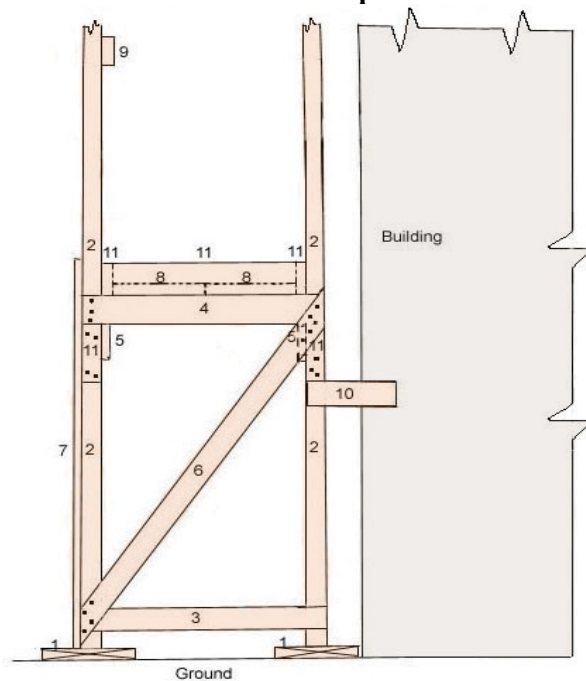


Figure 21-3
Components and Dimensions of an Independent Pole Wooden Scaffold



- Mud Sill
- Pole
- Tie
- Bearer

- Ledger
- End Brace
- Diagonal Brace
- Platform Plank

- Guard Rail
 - Cleat
 - Toe Board
- *Midrails and base plates are not shown

Table 21-4
INDEPENDENT WOOD POLE SCAFFOLDS

	6 feet	10 feet	8 feet	8 feet
Runners	1 ¼ x 4 in (3.2 cm x 10.2 cm)	1 ¼ x 9 in (3.2 cm x 22.8 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (5.1 x 25.4 cm)
Bearers				
3 feet	2 x 4 (5.4 x 10.2 cm)	2 x 4 (5.4 x 10.2 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (rough) (5.1 x 25.4 cm)
6 feet	2 x 6 in (5.4 x 15.2 cm) Or 3 x 4 in (7.6 x 10.2 cm)	2 x 10 in (rough) (5.4 x 25.4 cm) Or 2 x 4 in (5.1 x 10.2 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (rough) (5.1 x 25.4 cm)
8 feet	2 x 6 in (5.4 x 15.2 cm) Or 3 x 4 in (7.6 x 10.2 cm)	2 x 10 in (rough) (5.4 x 25.4 cm) Or 2 x 8 in (5.1 x 20.3 cm)	2 x 10 in. (5.1 x 25.4 cm)	
10 feet	2 x 6 in (5.4 x 15.2 cm) Or 3 x 4 in (7.6 x 10.2 cm)	2 x 10 in (rough) (5.4 x 25.4 cm) Or 3 x 3 in (7.6 x 7.6 cm)	2 x 10 in. (5.1 x 25.4 cm)	
Planking	1 ¼ x 9 in (3.2 cm x 22.8 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (5.1 x 25.4 cm)	2 x 10 in. (5.1 x 25.4 cm)
Max. vertical spacing of horizontal members	7 feet (2.1 x 2.1 cm)	7 feet (2.1 x 2.1 cm)	6 feet (1.8 x 1.8 cm)	6 feet (1.8 x 1.8 cm)
Bracing horizontal	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)	2 in x 4 in (5 cm x 10.2 cm)
Bracing vertical	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)	2 in x 4 in (5 cm x 10.2 cm)
Tie-ins	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)	1 x 4 in (2.54 x 10.2 cm)

Note: All members are used on edge. All wood bearers shall be reinforced with 3/16 x 2 inch steel strip, or the equivalent, secured to the lower edges for the entire length of the bearer.

22. Demolition:

- Prior to initiating demolition, contractors shall submit a demolition plan to the Contracting Officer or COR for the safe dismantling and removal of building components and debris.
- If asbestos or lead is present in structure to be demolished, such hazards shall be controlled or eliminated before demolition is started.
- All electric, gas, water, sewer, and other service lines shall be shut off, capped, or otherwise controlled outside the building line before demolition is started.
- All debris from demolition work shall be placed in a container or removed from site immediately.

23. Floor and Wall Holes and Openings:

- a. All floor and roof openings which a person can accidentally fall through shall be covered.
- b. All floor and roof holes that an equipment, material, or debris can fall shall be covered.

24. Excavations:

24.A General

- a. An Activity Hazard Analysis (AHA) shall be prepared by a Competent Person for Excavation or Registered Professional Engineer and submitted to the ROICC prior to the beginning of work. The AHA shall include:
 - i. The name and credentials of the Competent Person
 - ii. Diagram/sketch of the area where the work is to be done, with adjacent and nearby structures shown.
 - iii. Projected depth of the excavation.
 - iv. Projected soil type and method of testing to determine the soil type.
 - v. Planned type of shoring, sloping, or benching.
 - vi. Plan for management of excavated soil/asphalt/concrete.
 - vii. Plan for traffic control (if applicable).
- b. Prior to opening an excavation, underground utilities (sewer, communication lines, water, fuel, electric lines) shall be located and protected from damage or displacement.
- c. When required, the contractor shall obtain a digging permit prior to any excavation work.
- d. When persons will be working in an excavation, a competent person shall inspect the excavation, adjacent areas, and protective systems daily and during the workday if work is being done to change the conditions of the excavation.
- e. Excavations less than 5 feet (1.5 m.) in depth and determined to have no potential for cave-in do not require shoring, sloping, or benching.
- f. Employees shall not work in excavations with accumulated water. Diversion ditches or other means shall be used to prevent surface water from entering an excavation.
- g. Excavated material (spoil pile) shall be placed a minimum of 2 feet (0.6 m.) from the edge of an excavation. The material shall be placed more than 2 feet from the edge if required to prevent excessive loading on the face of the excavation. The material shall be placed to prevent it from falling back down into the excavation.
- h. Protection shall be provided to prevent personnel, vehicles, and equipment from falling into excavations.
- i. Where personnel are required to enter excavations/trenches over 4 ft (1.2m) in depth, sufficient stairs, ramps, or ladders shall be provided to require no more than 25 ft (7.6 m) of lateral travel. At least two means of exit shall be provided for personnel working in excavations. Ladders used as access ways shall extend from the bottom of the excavation to not less than 3 ft (0.9m) above the surface.
- j. All excavations shall be backfilled as soon as possible after work is complete.

24.B Soil Classification

- a. **Type A** means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:
 - i. The soil is fissured; or
 - ii. The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
 - iii. The soil has been previously disturbed; or
 - iv. The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or
 - v. The material is subject to other factors that would require it to be classified as a less stable material.

- b. **Type B** means:
 - i. Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or
 - ii. Granular cohesionless soils including angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
 - iii. Previously disturbed soils except those which would otherwise be classed as Type C soil.
 - iv. Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
 - v. Dry rock that is not stable; or
 - vi. Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.
- c. **Type C** means:
 - i. Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or
 - ii. Granular soils including gravel, sand, and loamy sand; or
 - iii. Submerged soil or soil from which water is freely seeping; or
 - iv. Submerged rock that is not stable, or
 - v. Material in a sloped, layered system where the layers dip into the excavation at a slope of four horizontal to one vertical (4H:1V) or steeper.
- d. "Unconfined compressive strength" means the load per unit area at which a soil will fail in compression. It can be estimated in the field by thumb penetration tests, and other methods.
- e. "Wet soil" means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

24.C Slope Configurations

- a. See Table 24-1 below for sloping and benching requirements by soil classification.

Table 24-1
Maximum Allowable Slopes

Soil or Rock Type	Maximum Allowable Slopes (H: V) For Excavations Less Than 20 Feet Deep
Stable Rock	Vertical (90°)
Type A	¾:1 (53°)
Type B	1:1 (45°)
Type C	1 ½:1 (34°)

Footnote (1) Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.

Footnote (2) A short-term maximum allowable slope of 1/2H:1V (63°) is allowed in excavations in Type A soil that are 12 feet (3.67 m) or less in depth. Short-term maximum allowable slopes for excavations greater than 12 feet (3.67 m) in depth shall be 3/4H:1V (53°).

b. Excavations made in Type A Soil

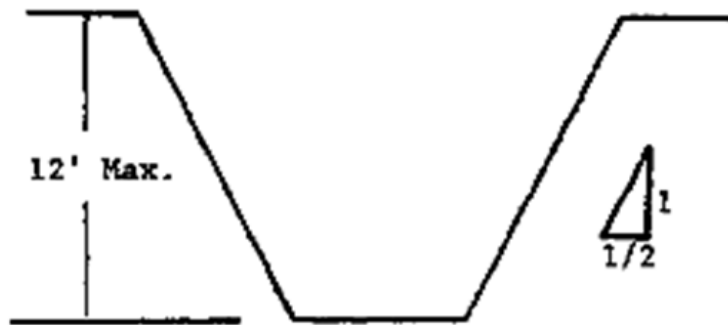
- i. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of $\frac{3}{4}$ to 1 as shown in Figure 24-1.

**Figure 24-1
Simple Slope General**



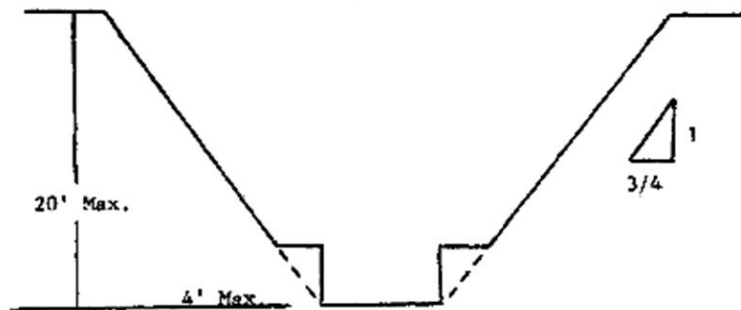
- ii. Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have a maximum allowable slope of $\frac{1}{2}$ to 1 as shown in Figure 24-2.

**Figure 24-2
Simple Slope – Short Term**



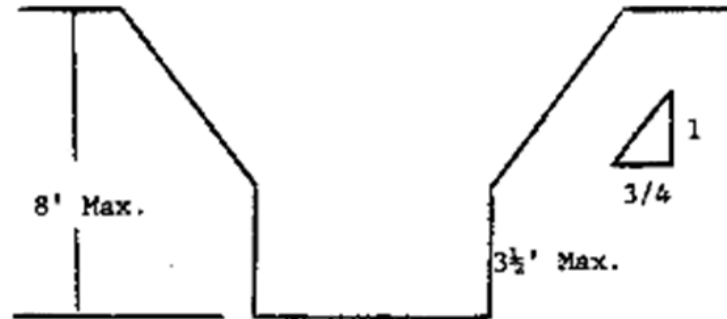
- iii. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of $\frac{3}{4}$ to 1 and maximum bench dimensions as shown in Figure 24-3.

**Figure 24-3
Simple Bench**



- iv. All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of $3\frac{1}{2}$ feet as shown in Figure 24-4.

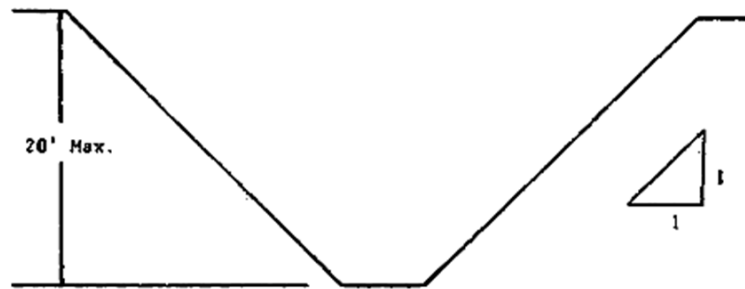
Figure 24-4
Unsupported Vertically Sided Lower Portion – Maximum 8 Feet in Depth



c. Excavations Made in Type B Soil

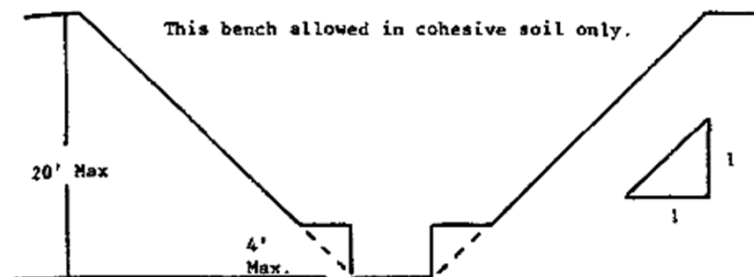
- i. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 as shown in Figure 24-5.

Figure 24-5
Simple Slope



- ii. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maximum bench dimensions as shown in Figure 24-6:

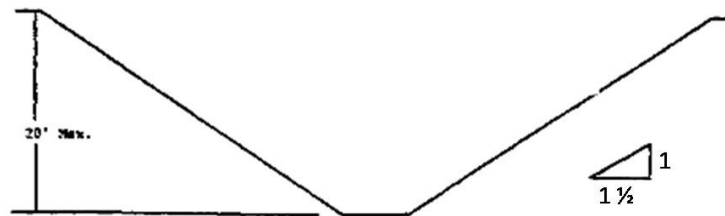
Figure 24-6
Single Bench



d. Excavations Made in Type C Soil

- i. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of $1\frac{1}{2}:1$ as shown in Figure 24-7. Type C Soil should not be benched.

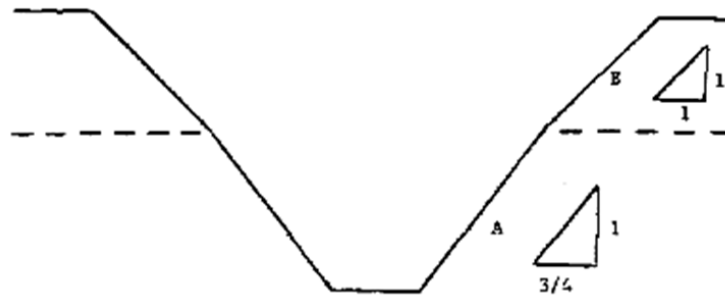
**Figure 24-7
Simple Slope**



e. Excavations Made in Layered Soils

- i. All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth in Figures 24-8 to 24-13 below.

**Figure 24-8
B Over A**



**Figure 24-9
C Over A**

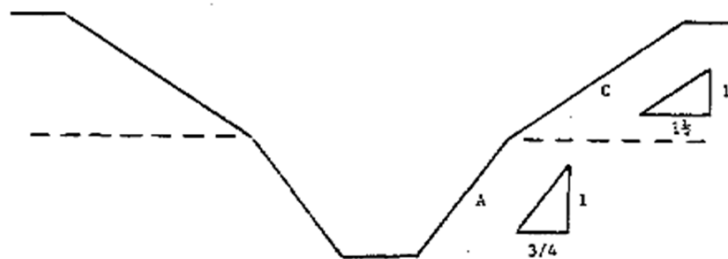


Figure 24-10
C Over B

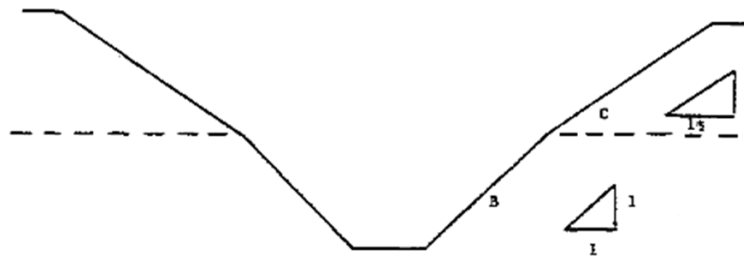


Figure 24-11
A Over B

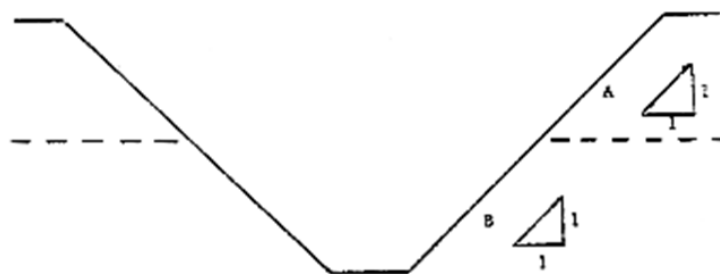


Figure 24-12
A Over C

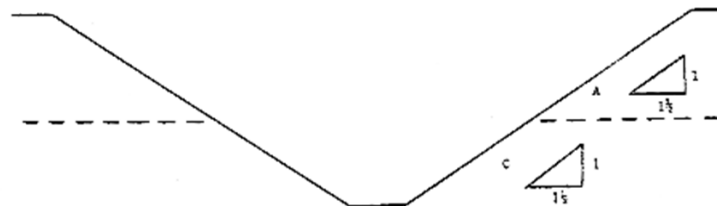
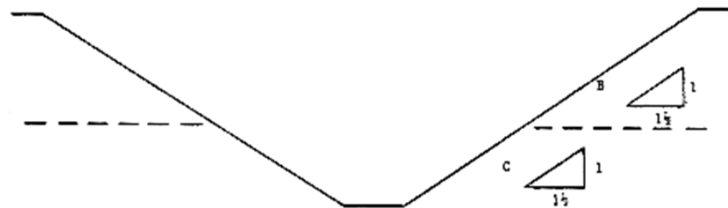


Figure 24-13
B Over C



25. Concrete and Masonry Construction and Steel Erection:

- a. Employees shall not be permitted to work above or in positions exposed to protruding reinforcing steel or other impalement hazards unless provisions have been made to control the hazard.
- b. Forms and shores (except those on slab on grade) shall not be removed until the concrete has gained sufficient strength to support its weight and all superimposed loads.
- c. Pre-cast concrete members shall be adequately supported to prevent overturning or collapse until permanent connections are complete.
- d. Prior to beginning erection of any structural steel, a steel erection plan shall be submitted to the Contracting Officer or COR for review and acceptance.
- e. Each employee engaged in a steel erection activity 6 feet (1.8 m.) or more above a lower level shall be protected from fall hazards by guardrail systems or personal fall arrest systems.
- f. All masonry walls over 8 feet (2.4 m.) in height shall be adequately braced to prevent overturning and collapse until permanent supporting elements are in place.
- g. Fall protection shall be provided to masonry workers exposed to falls of 6 feet (1.8 m.) or more.

26. Roofing:

- a. Prior to start of roofing work, an assessment of the roof shall be performed by the contractor to ensure that the roof deck capacity will not be exceeded.
- b. Work on roof shall stop during severe weather such as strong winds and heavy rain.
- c. Roof openings shall be provided with covers or guardrail systems on all exposed sides.
- d. Skylights shall be protected by guardrail systems.

-- End of Section --

PART 3 STATEMENT OF WORK

1. PROJECT DESCRIPTION:

This is a design-build project to provide a complete design and construction of a Logistics Resupply Point (LRP) concrete pad and improvements to the access road at Bahn Di Lang Range, Lopburi, Thailand.

The project includes a concrete pad for the LRP and a compacted crushed/gravel access road to the range. The access road is approximately 21 km long and requires grading, compaction, and a compacted crushed/gravel overlay to ensure heavy-wheeled vehicles can travel on it and to provide proper drainage to prevent ponding, which can damage the road surface. In addition, the road requires low water crossing points composed of reinforced concrete slab fords.

After contract award, this Statement of Work (SOW) may be modified as determined by the Contracting Officer to address unforeseen conditions or further refine the requirements to better accomplish the project objectives based on new information realized during the administration of the contract.

Period of Performance for complete design and construction:

CLIN 0001: BASE BID ITEM 0001 - CONSTRUCT A LOGISTICS RESUPPLY POINT LRP) CONCRETE PAD, 380 Calendar days.

CLIN 0002: BASE BID ITEM 0002 - IMPROVE 15 KM ACCESS ROAD, 380 calendar days, in concurrence with CLIN 0001.

CLIN 0003: OPTION ITEM 0001 - IMPROVE 6 KM ACCESS ROAD, 380 calendar days, in concurrence with CLIN 0001.

Once the final design has been approved by the Contracting Officer, the design package will be delivered to the Host Nation for their review and acceptance. Host Nation design review is scheduled for 120 calendar days after the design package is delivered. Mobilization and construction shall not begin until the Host Nation accepts the final design, the local installation commander authorizes the contractor permission to access the site for mobilization and construction, and the Contracting Officer agrees. The contractor may be allowed to mobilize sooner if design acceptance and installation access are granted sooner, all preconstruction submittals are completed, and the construction schedule is updated to reflect any additional float. The Contractor shall schedule work accordingly to cause the least amount of interference with normal base operations.

The contractor may work every day at construction site, 0800-1700, and the contractor can request to extend working time for critically consecutive work, such as concrete placement or others to complete all contract requirements on schedule. The contractor shall consider at least ten (10) days work's interruption due to base operations.

2. PROJECT OBJECTIVES:

The objective of this Design-Build project is to provide a fully functional, durable, and sustainable access road and Logistics Resupply Point (LRP) concrete pad to enhance the partner nation's operational capability. The project requires the design and construction of an access road to provide

year-round access for heavy-wheeled vehicles. Reinforced concrete slab fords shall be provided at designated low-water crossing points to enable safe and reliable passage during periods of flooding.

The constructed facilities shall meet all applicable standards of quality, safety, and environmental compliance, and be resilient against adverse weather conditions, including heavy rainfall during the rainy season. The contractor shall incorporate sustainable design principles to minimize long-term maintenance requirements and support environmental stewardship.

The completed project shall deliver an access route that is low-maintenance, durable, and capable of supporting the partner nation's logistics and operational readiness to build capacity, promote regional stability, and strengthen interoperability with U.S. forces and the partner nation.

2.1 APPLICABLE CODES AND STANDARDS

In addition to the codes and standards listed in Part 4, the design and construction shall be in accordance with the latest revision/edition of the following referenced codes and standards. The term "Latest Revision/Edition" is defined as the version in effect as of the project award date. It is the Contractor's responsibility to carry out the work such that the final completed facilities are structurally sound, safe, able to perform their intended function, and built according to local and/or International Building Codes (IBC) and subject to final acceptance by the Contracting Officer's Representative (COR). In the absence of specific local design codes and standards, the contractor shall refer to the following design codes and standards at a minimum:

- a. International Building Code
- b. AASHTO Guides and Standards
- c. ACI 318-14 Building Code Requirement for Structural Concrete
- d. ASCE 7-10 Minimum Design Loads for Building and Other Structures
- e. UFC 3-250-01 Pavement Design for Roads and Parking Areas
- f. Relevant standards by the Department of Highways, Thailand
- g. Relevant ASTM standard
- h. All applicable standards and codes required by the Host Nation Government

These standards and codes listed provide the minimum requirements that the contractor and its design agent must comply with in the absence of specific local design codes and standards. Other standards or codes shall be applied as required. Standards and codes of the locality must be met at a minimum in all cases. All other design, material, industrial, and testing standards and codes mentioned in this document also provide the minimum requirements that the contractor and its design agent must comply with in the absence of specific local design, material, industrial, and testing standards and codes. The more stringent of the requirements will apply in the case of a conflict in guidance between the various standards (local and US).

The contractor is required, as applicable, to file an Environmental Impact Assessment (EIA) Screening Application with the corresponding Department of Environment (DoE) office having regional jurisdiction. The contractor must comply with the requirements of this determination, including, as a minimum, the preparation of an Environmental Management Plan (EMP). The EMP shall be approved by the DoE, and the contractor shall comply with its provisions and conditions related to project construction activities, pollution prevention, and proper disposal of waste.

The contractor shall provide integrated sustainable design strategies and features to minimize the energy consumption of the facilities, conserve resources, minimize adverse effects to the

environment, and improve occupant productivity, health, and comfort. The materials and systems used in the project shall have sustainable characteristics and minimize energy consumption.

3. SITE ANALYSIS:

3.1 EXISTING SITE CONDITIONS

The LRP site is located at GPS coordinates N14.941667, E100.821889, Bahn Di Lang Range, Lopburi, Thailand. The existing access road starts at GPS coordinates N14.913139, E100.703194, and ends at the LRP site.

Site area: The LRP site consists of uneven ground with vegetation. The access road is a single-lane uneven dirt road with vegetation, and low-water crossings are present along certain sections.

External road: The LRP site is approximately 8 km north of public road No. 3333 and is currently accessible only by 4-wheel-drive vehicles.

Electrical line: Not available.

Water supply line: Not available.

The Contractor shall be responsible for providing the services of a geotechnical engineer to conduct any subsurface exploration, investigation, testing, and analysis that the Designer of Record deems necessary for the design and construction of the proposed building and site improvements. The geotechnical engineer shall be a registered Engineer and experienced with soil conditions in the region where the project site is located. The geotechnical engineer shall prepare a report addressing any elements of the work requiring his services. The report shall be submitted to the Contracting Officer Representative prior to commencing any work.

3.2 SITE DEVELOPMENT

- a. Grade and level site to provide positive drainage away from the project site.
- b. Conduct soils testing to determine if remedial soil importation and or compaction of existing earth condition is required and to determine viability of the structural and foundation design.
- c. Ensure adequate health, safety, noise, and dust pollution control measures are consistently implemented throughout the construction period.
- d. Implement suitable approved measures for drainage including siltation and contamination control of the site and surrounding waterways for the final end result of the project site and throughout the construction duration.

4. PROJECT REQUIREMENTS:

CLIN 0001: BASE BID ITEM 0001 - CONSTRUCT A LOGISTICS RESUPPLY POINT (LRP) CONCRETE PAD

CLIN 0002: BASE BID ITEM 0002 - IMPROVE 15 KM ACCESS ROAD

CLIN 0003: OPTION ITEM 0001 - IMPROVE 6 KM ACCESS ROAD

Engineering requirements are detailed in Section 6. Engineering System Requirement

Refer to the conceptual layout shown in Part 6. Information in Part 6 and Attachments are for reference only.

The RFP sets forth the minimum project requirements which shall be used by the DB Contractor to design, document, and construct a complete and useable facility. The concept drawings in PART 6 of this RFP package are for information only and are not intended to be final, complete, and coordinated designs. As the Designer of Record (DOR), the DB Contractor shall be responsible for providing a final, complete, and fully coordinated design in accordance with all applicable codes, regulations, and contract requirements. The DOR shall be responsible for professional quality, technical accuracy, and the coordination of all final designs, drawings, and specifications.

Note: Applicable codes and regulations in Parts 3 and 4 of the RFP will govern when there are conflicts with the concept design per PART 2, Order of Precedence Paragraph.

The plans, systems, and the associated details shown in Part 6 only show the approximate installation and system concepts. Dimensions and conceptual layouts shown are not warranted by the Government to completely meet the requirements of the end-user. The selected Contractor shall carry out detailed surveys of the site and prepare full basis of designs for each aspect of the project and final drawings for approval by the Contracting Officer's Representative (COR) before commencing construction. Some adjustments to the final arrangement, size and layout of the installations may be allowed or required if site constraints, good engineering, or construction practice deem it necessary. Each bidder shall provide enough detail in their proposal to show the Government exactly what the bidder is proposing to provide. Any significant deviations from the information provided in the concept drawings and the following pages must be clearly identified and explained to ensure the bidder demonstrates a firm understanding of what they are proposing compared to what the government is requesting. The materials specified herein are strict requirements for the construction. However, specific deviations may be approved after award of the project if the proposed substitution meets or exceeds performance of the specified material still meeting the project objectives.

The contractor and their design consultants shall be competent and knowledgeable in the type of engineering disciplines required by this project and shall be fully licensed to practice design and construction in the location of the project. The contractor shall have an understanding of the end use of the facilities being constructed and will take a reasonable approach to anticipating the total requirement. The contractor shall consider space and functional requirements of facilities, natural heat load reduction through facility placement and orientation, maximizing natural ventilation, elimination of water intrusion into the facilities, transportation of rainwater runoff around and off the site and facility, capacity and numbers of potential facility users, utility capacities and requirements, and other pertinent design concepts.

Prior to commencing construction, the Contractor shall submit a complete design package for review and concurrence by the COR. Construction drawings shall be prepared only after a complete basis of design or calculations have been developed and provided to the COR for all required aspects of the project. All design work shall be completed under the supervision of professional architects and engineers licensed for practice in the location of the project. These design professionals shall properly endorse/approve each portion of the design applicable to their disciplines prior to the COR review.

KEY PERSONNEL:

This project will require the following management personnel (check one):

- ☒ Dedicated Superintendent, Dedicated Quality Control Manager, and Dedicated Site Safety Health Officer (3 different people on site during production at all times)
- ☐ Dedicated Superintendent and Dedicated Quality Control Manager; Superintendent may serve as Site Safety Health Officer if qualified but not Quality Control Manager (2 different people on site during production at all times)
- ☐ Triple-Hat Superintendent, Quality Control Manager, and Site Safety Health Officer (1 person on site during production at all times)

DESIGN REQUIREMENTS:

Basis of design drawings or sketches, calculations and manufacturer's data shall be submitted in order to demonstrate compliance with contract requirements. The Contractor is encouraged to prepare design drawings more like shop drawings to minimize constructions submittals. The final design submittal must be professionally signed and sealed by the DOR and forwarded to the Contracting Officer prior to the start of construction.

Provide physical and electronic copies of design submittal package, to include half-size sketches/shop drawings and manufacturer cut sheets, to the following reviewers a week prior to the in-progress review meeting:

R	Duration After Award	Deliverable	ROICC KO	ROICC COR	ROICC	User
X	30 Days	Basis of design & Concept Design (15%)		X		X
X	45 Days	Design Development (50%)		X		X
X	60 Days	Pre-Final Design (100%)		X		X
X	75 Days	Final Design		X		X

Refer to Facility Criteria 1-300-09N Navy and Marine Corps Design Procedures for description of each deliverable.

* N/A - Not Applicable

** R - Required Deliverable

*** X under reviewers is equals 1 copy, any other number is that many copies

**** General guidance for preparation of design submittals are provided in Chapter 1, Paragraph 1-7 Facility Design of UFC 1-201-01

PROJECT RENDERING:

Provide one (1) full color 3-D rendering (24in. x 30in. Minimum inside mat dimension of 16in. x 20in.) of the proposed facility by a company that regularly does this type of work as a major component of their normal business. Use the final rendering to produce the image and digital file for the signboard and the framed photographic copies provided to the Contracting Officer.

PROJECT PLAQUE:

Provide a carved black granite plaque 120cm x 60cm x 2.5cm as per photo in part 6 which is permanently attached in a fixed location approved by the COR.

5. WORK/ROOM REQUIREMENTS:

5.1 CLIN 0001: BASE BID ITEM 0001 - CONSTRUCT A LOGISTICS RESUPPLY POINT (LRP) CONCRETE PAD

5.1.1 CIVIL WORK

- a. A topographic survey of the existing construction site is required. A registered surveyor's endorsed drawing showing existing ground profile with contours and spot elevations, drainage ditches, existing utilities, and other existing topographic features of the site shall be submitted upon completion of the site survey works. The results of this topographic and siting survey shall be used by the Contractor to plan and eventually construct suitable external facility works as well as specific exterior landscaping works for the areas surveyed. The survey must show the most economical and suitable locations for rainwater flow and discharge points for drainage around the new facility.
- b. Site clearance/cutting: Vegetation which does not impede/prevent construction of facilities shall be left in place for all structures. The contractor shall keep as many trees, bushes, and other vegetation as possible in place and not just clear-cut the entire area; the intent is to minimize erosion. Vegetation shall be cleared around all structures to a distance of five meters. The contractor shall submit a site clearance plan for COR approval before removing trees.
- c. Construction of external work shall include slope improvement, re-grading of slopes, pre-cast concrete drains so the site will drain, and general landscaping over areas disturbed by the construction work.
- d. Prior to starting work, physically verify the location of all existing utilities and obtain all additional survey data required to provide a quality final design. Verify the location of all utilities prior to construction.
- e. The Contractor is required to retain a Geotechnical Engineer experienced and licensed in the geographic region of the project to develop geotechnical requirements to support design and construction. The Contractor's Geotechnical Engineer must perform subsurface investigation/testing as required to adequately determine all applicable geotechnical factors related to type and capacity of the project foundations which are provided by the contractor DOR's.
- f. Prevent erosion from occurring by providing erosion control measures as required.

5.1.2 LRP CONCRETE PAD

Design and construct a reinforced concrete pad for the logistics resupply points (LRP). Concept site layout is as shown in Part 6. The minimum requirements shall include, but not limited to, the following:

- a. Pad dimensions: 200 m x 16 m.
- b. Pad thickness: To be designed by the DOR, with a minimum thickness of 250 mm.
- c. Top level of concrete pad: +0.20 m from the highest level of the existing site area.
- d. Materials and construction: Reinforced concrete pavement on grade.
- e. Access ramp: Concrete ramps with non-slip surface on all sides of the concrete pad.
- f. Pad capacity: Design to accommodate heavy-wheeled vehicles with a maximum weight of 25 tons and a live load of 10 kPa.
- g. Drainage: Design with an adequate slope to direct water away from the surface.

5.2 CLIN 0002: BASE BID ITEM 0002 - IMPROVE 15 KM ACCESS ROAD

5.2.1 CIVIL WORK

- a. A topographic survey of the existing construction site is required. A registered surveyor's endorsed drawing showing existing ground profile with contours and spot elevations, drainage ditches, existing utilities, and other existing topographic features of the site shall be submitted upon completion of the site survey works. The results of this topographic and siting survey shall be used by the Contractor to plan and eventually construct suitable external facility works as well as specific exterior landscaping works for the areas surveyed. The survey must show the most economical and suitable locations for rainwater flow and discharge points for drainage around the new facility.
- b. Site clearance/cutting: Vegetation which does not impede/prevent construction of facilities shall be left in place for all structures. The contractor shall keep as many trees, bushes, and other vegetation as possible in place and not just clear-cut the entire area; the intent is to minimize erosion. Vegetation shall be cleared around all structures to a distance of five meters. The contractor shall submit a site clearance plan for COR approval before removing trees.
- c. Construction of external work shall include slope improvement, re-grading of slopes, pre-cast concrete drains so the site will drain, and general landscaping over areas disturbed by the construction work.
- d. Prior to starting work, physically verify the location of all existing utilities and obtain all additional survey data required to provide a quality final design. Verify the location of all utilities prior to construction.
- e. The Contractor is required to retain a Geotechnical Engineer experienced and licensed in the geographic region of the project to develop geotechnical requirements to support design and construction. The Contractor's Geotechnical Engineer must perform subsurface investigation/testing as required to adequately determine all applicable geotechnical factors related to type and capacity of the project foundations which are provided by the contractor DOR's.
- f. Prevent erosion from occurring by providing erosion control measures as required.

5.2.2 ACCESS ROAD

Design and construct a 15 km access road from KM 0 to KM 15. Concept site layout is as shown in Part 6. The minimum requirements shall include, but not limited to, the following:

- a. Road width: 4 m.
- b. Thickness: To be designed by the DOR, with a minimum thickness of 200 mm.
- c. Materials and construction: Compacted crushed/gravel road.
- d. Road capacity: Design to accommodate the movement of Stryker and heavy wheeled vehicles with a maximum weight of 30 tons.
- e. Drainage: Include adequate roadside drainage ditches or culverts to manage stormwater and prevent erosion or waterlogging, during rainfall.

5.2.3 LOW-WATER CROSSING

Design and construct concrete-slab fords for three (3) low-water crossings. The construction type shall be reinforced concrete pavement, designed to accommodate the movement of Stryker and heavy wheeled vehicles with a maximum weight of 30 tons. The minimum requirements shall include, but no limited to, the following:

- a. Location 1: KM 1+600 (approximately)
 - 1. Width: 4 m
 - 2. Length: 20 m
 - 3. Thickness: To be designed by the DOR, with a minimum thickness of 250 mm.
- b. Location 2: KM 4+400 (approximately)
 - 1. Width: 4 m
 - 2. Length: 20 m
 - 3. Thickness: To be designed by the DOR, with a minimum thickness of 250 mm.
- c. Location 3: KM 14 (approximately)
 - 1. Width: 4 m
 - 2. Length: 50 m
 - 3. Thickness: To be designed by the DOR, with a minimum thickness of 250 mm.

5.3 CLIN 0003: OPTION ITEM 0001 - IMPROVE 6 KM ACCESS ROAD

5.3.1 CIVIL WORK

- a. A topographic survey of the existing construction site is required. A registered surveyor's endorsed drawing showing existing ground profile with contours and spot elevations, drainage ditches, existing utilities, and other existing topographic features of the site shall be submitted upon completion of the site survey works. The results of this topographic and siting survey shall be used by the Contractor to plan and eventually construct suitable external facility works as well as specific exterior landscaping works for the areas surveyed. The survey must show the most economical and suitable locations for rainwater flow and discharge points for drainage around the new facility.
- b. Site clearance/cutting: Vegetation which does not impede/prevent construction of facilities shall be left in place for all structures. The contractor shall keep as many trees, bushes, and other vegetation as possible in place and not just clear-cut the entire area; the intent is to minimize erosion. Vegetation shall be cleared around all structures to a distance of five meters. The contractor shall submit a site clearance plan for COR approval before removing trees.
- c. Construction of external work shall include slope improvement, re-grading of slopes, pre-cast concrete drains so the site will drain, and general landscaping over areas disturbed by the construction work.
- d. Prior to starting work, physically verify the location of all existing utilities and obtain all additional survey data required to provide a quality final design. Verify the location of all utilities prior to construction.
- e. The Contractor is required to retain a Geotechnical Engineer experienced and licensed in the geographic region of the project to develop geotechnical requirements to support design and construction. The Contractor's Geotechnical Engineer must perform

subsurface investigation/testing as required to adequately determine all applicable geotechnical factors related to type and capacity of the project foundations which are provided by the contractor DOR's.

- f. Prevent erosion from occurring by providing erosion control measures as required.

5.3.2 ACCESS ROAD

Design and construct a 6 km access road from KM 15 to KM 21. Concept site layout is as shown in Part 6. The minimum requirements shall, include but no limited to, the following:

- a. Road width: 6 m.
- b. Thickness: To be designed by the DOR, with a minimum thickness of 200 mm.
- c. Materials and construction: Compacted crushed/gravel road.
- d. Road capacity: Design to accommodate the movement of Stryker and heavy wheeled vehicles with a maximum weight of 30 tons.
- e. Drainage: Include adequate roadside drainage ditches or culverts to manage stormwater and prevent erosion or waterlogging, during rainfall.

5.3.3 LOW-WATER CROSSING

Design and construct concrete-slab ford for one (1) low-water crossing. The construction type shall be reinforced concrete pavement, designed to accommodate the movement of Stryker and heavy wheeled vehicles with a maximum weight of 30 tons. The minimum requirements shall include, but no limited to, the following:

- a. Location 4: KM 19+700 (approximately)
 - 1. Width: 6 m
 - 2. Length: 70 m
 - 3. Thickness: To be designed by the DOR, with a minimum thickness of 250 mm.

6. ENGINEERING SYSTEM REQUIREMENTS (ESR):

6.1 CLIN 0001: BASE BID ITEM 0001 - CONSTRUCT A LOGISTICS RESUPPLY POINT (LRP) CONCRETE PAD

A SUBSTRUCTURE

A10 FOUNDATIONS

A1030 SLAB ON GRADE

- a. Slab on grade shall be designed to suit subsurface conditions and shall be capable of transmitting all loads to the ground.
- b. Design and construction shall comply with Part 4, A1030 Slab on Grade.
- c. Slab on grade shall be reinforced concrete construction.

CONCRETE SLAB CONSTRUCTION

a. General

- 1) The concrete specifications provide the minimum requirements for a concrete slab. The specific concrete slab design for a selected installation will need to consider the enclosure location, the specific enclosure dimensions, the enclosure contents, and local codes. For exterior locations, in addition to the items previously mentioned, the concrete slab design will

- need to incorporate foundation requirements based on location, soil conditions, local codes, etc. The design shall also consider the need for a vapor barrier, either through a sub-slab barrier or concrete sealant. Concrete slab and foundation shall be designed by a licensed engineer based on the specific installation parameters. The concrete slab shall be 6" thick minimum concrete with compressive strength of 4500 PSI at 28 days. Provide 6" by 6", 10/10 welded wire fabric centered within the slab. Provide sub-base consisting of compacted soil with a minimum soil bearing capacity of 1500 PSF with ¾" stone, minimum 4" thick.
- 2) A geotechnical investigation should be performed if existing data is not available. Based on investigation, if uncontrolled fill exists, this is typically not suitable for direct support of a foundation. Uncontrolled fill could consolidate differentially under new building loads, resulting in unacceptable total and differential settlements. Where encountered, fill should be removed from within the proposed building area to natural soils and a controlled compacted fill be placed up to the proposed building subgrade elevation. The floor slab should be constructed as a slab-on-grade supported by the natural compacted soils and/or controlled compacted fills.
 - 3) The controlled compacted fill should be placed in accordance with the recommendations below and under the observation of a geotechnical engineer. Prior to placing any fill material in areas requiring fill to achieve the proposed subgrade elevation, the entire area should be proof-rolled with a large vibratory roller (minimum 10-ton static weight) under the observation of a qualified geotechnical engineer. The proof-rolling operation should consist of making a minimum of 4 complete coverages of the area. Any soft areas disclosed during the proof-rolling should be excavated to stable material and backfilled with suitable material in compacted lifts to achieve a minimum of 92 percent and an average of greater than 95 percent of Modified Proctor density (ASTM D 1557). The compaction/proof-rolling operations should be inspected by a qualified soils engineer. Fill should be placed in maximum 12-inch-thick lifts with each layer compacted to the required density using a large vibratory roller (minimum 10-ton static weight). Building area fills should be compacted to a minimum of 92 percent and an average of greater than 95 percent of the Modified Proctor density (ASTM D 1557).
 - 4) When a product or material is specified by name, as noted in these specifications, such specifications establish the standard type and quality considered most satisfactory for the particular purpose. Another product or material of the same type to meet the requirements may be submitted for consideration as a substitute.
 - 5) All concrete work (material and construction procedure) shall be in accordance with ACI Standard 318-83 (R-86). Concrete shall be capable of developing minimum compressive strength of 4,500 psi at 28 days.
 - 6) Add air entraining agency maximum 5% by volume to exposed concrete mix (ASTM C 260).
- b. Quality Assurance
- 1) Comply with provisions of the following codes, specifications, and standards, except where more stringent requirements are shown or specified.
 - ACI 301 "Specifications for Structural Concrete for Buildings"
 - ACI 318 "Building Code Requirements for Reinforced Concrete"
 - Concrete Reinforcing Steel Institute, "Manual of Standard Practice"

- 2) Materials and installed work may require testing and retesting, as directed by the Engineer, at any time during progress of work. Allow free access to material stockpiles and facilities.
- c. Material
 - 1) Portland Cement: ASTM C 150, Type as required.
 - 2) Fly Ash: ASTM C 618, Type C or F. Limit use of fly ash in concrete mix design to not exceed 25% of cement content by weight.
 - 3) Aggregates: ASTM C 33, except local aggregates of proven durability may be used when acceptable to Engineer.
 - 4) Water: Drinkable
 - 5) Air-Entraining Admixture: ASTM C 260
 - 6) Water-Reducing Admixture: ASTM C 494; type as required to suit project conditions. Only use admixture which has been tested and accepted in mix designs, unless otherwise acceptable.
 - 7) Forms: Provide form materials with sufficient stability to withstand pressure of placed concrete without bow or deflection.
 - 8) Exposed Concrete Surfaces: Suitable material to suit project conditions.
 - 9) Reinforcing Materials:
 - Deformed Reinforcing Bars: ASTM A 615, Grade 60, unless otherwise indicated.
 - Welded Wire Fabric: ASTM A 185, 6" x 6" 10/10.
 - 10) Expansion Joints: ½" rigid foam filler.
- d. Forming and Placing Concrete
 - 1) Ready-Mix Concrete: ASTM C 94
 - 2) Construct forms so that concrete members and structures are of correct size, shape, alignment, elevation, and position.
 - 3) Clean and adjust forms prior to concrete placement. Apply form release agents or wet forms, as required. Retighten forms during concrete placing if required to eliminate mortar leaks.
 - 4) Position, support, and secure reinforcement against displacement. Locate and support with metal chairs, as required. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.
 - 5) Install welded wire fabric in as long lengths as practicable, lapping at least one mesh and tying with wire ties.
 - 6) Provide construction, isolation, and control joints as indicated or required. Locate construction joints so not to impair strength and appearance of structure. Place isolation and control joints in slabs-on-ground to stabilize differential settlement and random cracking.
 - 7) Set and build into work anchorage devices and other embedded items required for other work that is attached to or supported by cast-in-place concrete. Use setting diagrams, templates and instructions provided by others for locating.
 - 8) Comply with ACI, placing concrete in a continuous operation within planned joints or sections. Do not begin placement until the work of other trades affecting concrete is completed.
 - 9) Consolidate placed concrete using mechanical vibrating equipment with hand rodding and tamping, so that concrete is worked around reinforcement and other embedded items and into forms.
 - 10) Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placement, and curing.
 - In cold weather comply with ACI 306.
 - In hot weather comply with ACI 305.
- e. Concrete Finishes:
 - 1) Slab Finish: Apply broom finish to monolithic slab surfaces that are exposed-to-view. Consolidate concrete surfaces by uniform in texture and appearances. Slope to drain for slab.

- 2) Curing: Begin initial curing as soon as free water has disappeared from exposed surfaces. Where possible, keep continuously moist for not less than 72 hours. Continue curing by use of moisture-retaining cover or membrane-forming curing compound. Cure formed surfaces by moist curing until forms are removed. Provide protections as required to prevent damage to exposed concrete surfaces.
- f. Quality Control Testing During Construction
 - 1) Identification of the testing laboratory and submittal of certified reports.
 - 2) Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
 - 3) Slump: ASTM C 143; one test for each concrete load at point of discharge; and one test for each set of compressive strength test specimens.
 - 4) Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete; ASTM C 231 pressure for normal weight concrete; one for each set of compressive strength test specimens.
 - 5) Concrete Temperature: Test hourly when air temperature is 40oF (4oC) and below, and when 80oF (27oC), and above; and each time a set of compression test specimens is made.
 - 6) Compression Test Specimen: ASTM C 31; one set of three (3) standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory cured test specimens except when field-cure test specimens are required.
 - 7) Compressive Strength Tests: ASTM C 39; one set for each day's pour exceeding five (5) cubic yards. One specimen tested at seven (7) days, one specimen tested at 28 days, and one specimen retained in reserve for later testing if required.
 - 8) When frequency of testing will provide less than 5 strength tests for a given class of concrete, conduct testing from at least 5 randomly selected batches or from each batch if fewer than 5 are used.
 - 9) Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength, and no individual strength test result falls below specified compressive by more than 500 psi.

F SPECIAL CONSTRUCTION AND DEMOLITION

F10 SPECIAL CONSTRUCTION

F1010 SPECIAL STRUCTURES

Provide a carved project granite plaque 120cm x 60cm x 2.5cm as per detailed in the conceptual drawing which is permanently attached in a fixed location approved by the COR.

G BUILDING SITEWORK

G10 SITE PREPARATION

- a. Conduct a topographic survey.
- b. Conduct a soil investigation.

G1010 SITE CLEARINGS

G101001 CLEARING

Remove obstacles and plants/trees in the footprint of the new construction. The contractor is responsible for acquiring the permit when it is required.

G101006 DEBRIS DISPOSAL

All grubbing and clearing residue, demolished material, rubbish, and debris generated by this project shall be hauled off-site and off station by the Contractor and disposed of properly in accordance with local requirements. Coordinate with the end user and COR prior to conduct this activity.

G1020 SITE DEMOLITION AND RELOCATION

Demolish and remove existing structures, utilities, pavements, and other obstructions within the construction area as required to prepare the site for new construction. Perform all work in accordance with applicable codes, regulations, and standards. Coordinate utility disconnections and ensure proper disposal of debris.

G1030 SITE EARTHWORK

G1030001 GRADING

- a. Grade and level site to provide positive drainage offsite.
- b. Finish floor elevations for new facilities shall be a minimum of 100 cm above the ground level.
- c. Conduct soils testing to determine if remedial soil importation and/or compaction of existing earth condition is required and to determine viability of the structural and foundation design.

X FIELD REQUIREMENTS

The contractor shall be responsible for the following.

- a. Obtain all construction permits and clearance.
- b. Perform mobilization and demobilization. At a minimum, this work shall include the following:
 1. Temporary fence and gate.
 2. Project identification signboard.
 3. Temporary site office.
 4. Temporary storage facility.
 5. Temporary toilets.
 6. Worker's accommodation.
- c. Repair damages caused by construction activities and restore the project site to existing condition.
- d. Provide technical training to the end user and provide video footage of the training to the COR and the end user for record.

6.2 CLIN 0002: BASE BID ITEM 0002 - IMPROVE 15 KM ACCESS ROAD

F SPECIAL CONSTRUCTION AND DEMOLITION

F10 SPECIAL CONSTRUCTION

F1010 SPECIAL STRUCTURES

Provide a carved project granite plaque 120cm x 60cm x 2.5cm as per detailed in the conceptual drawing which is permanently attached in a fixed location approved by the COR.

G BUILDING SITEWORK

G10 SITE PREPARATION

- a. Conduct a topographic survey.
- b. Conduct a soil investigation.

G1010 SITE CLEARINGS

G101001 CLEARING

Remove obstacles and plants/trees in the footprint of the new construction. The contractor is responsible for acquiring the permit when it is required.

G101006 DEBRIS DISPOSAL

All grubbing and clearing residue, demolished material, rubbish, and debris generated by this project shall be hauled off-site and off station by the Contractor and disposed of properly in accordance with local requirements. Coordinate with the end user and COR prior to conduct this activity.

G1020 SITE DEMOLITION AND RELOCATION

Demolish and remove existing structures, utilities, pavements, and other obstructions within the construction area as required to prepare the site for new construction. Perform all work in accordance with applicable codes, regulations, and standards. Coordinate utility disconnections and ensure proper disposal of debris.

G1030 SITE EARTHWORK

G1030001 GRADING

- a. Grade and level site to provide positive drainage offsite.
- b. Conduct soils testing to determine if remedial soil importation and/or compaction of existing earth condition is required and to determine viability of the structural and foundation design.

G20 SITE IMPROVEMENTS

Provide site improvements as required to make a useable facility that meets functional and operational requirements.

G2010 ROADWAYS

REINFORCED CONCRETE PAVEMENT

Reinforced concrete pavement shall comply with standard drawings for highway design and construction by the Department of Highways, Thailand and other relevant codes and standards in Section 2.1.

COMPACTED CRUSHED/GRAVEL ROAD

Compacted crushed/gravel road shall comply with standard no. DH-S 201/2544 by the Department of Highways, Thailand, and other relevant codes and standards in Section 2.1.

LOW-WATER CROSSING

Install water depth gauges on both sides of each low-water crossing, with a minimum of two gauges per crossing and additional gauges spaced every 10 meters for crossings exceeding 20 meters in length. Gauges must be securely installed and clearly marked with visible units and color-coded thresholds for safe vehicle operation.

X FIELD REQUIREMENTS

The contractor shall be responsible for the following.

- a. Obtain all construction permits and clearance.
- b. Perform mobilization and demobilization. At a minimum, this work shall include the following:
 1. Temporary fence and gate.
 2. Project identification signboard.
 3. Temporary site office.
 4. Temporary storage facility.
 5. Temporary toilets.
 6. Worker's accommodation.
- c. Repair damages caused by construction activities and restore the project site to existing condition.
- d. Provide technical training to the end user and provide video footage of the training to the COR and the end user for record.

6.3 CLIN 0003: OPTION ITEM 0001 - IMPROVE 6 KM ACCESS ROAD

G BUILDING SITEWORK

G10 SITE PREPARATION

- a. Conduct a topographic survey.
- b. Conduct a soil investigation.

G1010 SITE CLEARINGS

G101001 CLEARING

Remove obstacles and plants/trees in the footprint of the new construction. The contractor is responsible for acquiring the permit when it is required.

G101006 DEBRIS DISPOSAL

All grubbing and clearing residue, demolished material, rubbish, and debris generated by this project shall be hauled off-site and off station by the Contractor and disposed of properly in accordance with local requirements. Coordinate with the end user and COR prior to conduct this activity.

G1020 SITE DEMOLITION AND RELOCATION

Demolish and remove existing structures, utilities, pavements, and other obstructions within the construction area as required to prepare the site for new construction. Perform all work in accordance with applicable codes, regulations, and standards. Coordinate utility disconnections and ensure proper disposal of debris.

G1030 SITE EARTHWORK

G1030001 GRADING

- a. Grade and level site to provide positive drainage offsite.
- b. Conduct soils testing to determine if remedial soil importation and/or compaction of existing earth condition is required and to determine viability of the structural and foundation design.

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Compacted crushed/gravel road shall comply with standard no. DH-S 201/2544 by the Department of Highways, Thailand, and other relevant codes and standards in Section 2.1.

LOW-WATER CROSSING

Install water depth gauges on both sides of each low-water crossing, with a minimum of two gauges per crossing and additional gauges spaced every 10 meters for crossings exceeding 20 meters in length. Gauges must be securely installed and clearly marked with visible units and color-coded thresholds for safe vehicle operation.

X FIELD REQUIREMENTS

The contractor shall be responsible for the following.

- a. Obtain all construction permits and clearance.
- b. Perform mobilization and demobilization. At a minimum, this work shall include the following:
 1. Temporary fence and gate.
 2. Project identification signboard.
 3. Temporary site office.
 4. Temporary storage facility.
 5. Temporary toilets.
 6. Worker's accommodation.
- c. Repair damages caused by construction activities and restore the project site to existing condition.
- d. Provide Technical training to the end user and provide video footage of the training to the COR and the end user for record.

-- End of Section --

PART 4 PERFORMANCE TECHNICAL SPECIFICATIONS

1.0 GENERAL REQUIREMENTS

The requirements indicated here are minimum performance requirements. More specific project functional and performance requirements, scope items and expected quality levels over and above the standards in Part 4 are identified in Part 3 of the Request for Proposal or Basic Ordering Agreement.

Part 4 is a general section. Not all items in Part 4 will be required for this project. See Part 3 for project-specific requirements.

In general, unless otherwise indicated, provide all labor, equipment and materials necessary to complete the work required for the contract. All work must be in conformance with all applicable referenced criteria, construction standards, laws and regulations, including applicable building fire and life safety codes.

1.1 MATERIAL & METHODS OF CONSTRUCTION

Only new materials and equipment are to be installed in the work. All materials, equipment and appliances must be of the current manufacturers' products. Do not use obsolete or discontinued materials, equipment and appliances, except that construction materials containing recycled content as described in Paragraph 1 of this Part that completely comply with all materials specifications found elsewhere in this Part may be used.

1.2 APPLICABLE CODES & STANDARDS

The design and construction shall be in accordance with the international building code (IBC) and established construction practices, and the latest revision/edition of the following referenced codes and standards. The term "Latest Revision/Edition" is defined as the version in effect as of the project award date. References are available at <https://www.wbdg.org/dod/>. Comply with the required and advisory portions of the current edition of the standard at the time of the contract award. All work shall comply with the codes and standards listed in RFP Part 3.

1.3 LOCATION-SPECIFIC CODES & STANDARDS

See Part 3. STATEMENT OF WORKS / PROJECT PROGRAM

1.4 DISCREPANCIES

When discrepancies in the referenced standards and the contract requirements occur, the more stringent requirements govern. The word "should" in all codes and standards is to be interpreted as a requirement. The Authority Having Jurisdiction in the interpretation of the codes and standards, and approving the exceptions allowed in the referenced standards, is the Contracting Officer, and the parties designated by the Contracting Officer.

2.0 PERFORMANCE TECHNICAL SPECIFICATIONS

A SUBSTRUCTURE

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Foundations shall be steel reinforced concrete with continuous strip footings or isolated spread footings. Concrete slabs shall not be less than 25cm in thickness and footings must not be less than 45 cm below the lowest adjacent grade. Design and construct foundations of reinforced concrete shall comply with IBC, standard of Wind Loading Calculation and Response of Buildings (มยพ. 1311), Department of Public Works and Town & Country Planning of Thailand, and other applicable local codes and standards.

1. Contractor-Foundation Design: The type of foundation shall be determined by the contractor. The

Designer of Record shall evaluate the RFP data, and obtain and evaluate all additional data as required to support the design and construction.

2. Geotechnical Report:

The contractor shall perform the soil test/analysis for load calculation and structure design. Submit its analysis/investigation report to COR for approval. The contractor's final design drawings shall include:

- Notes identifying the soil allowable bearing capacity used in design.
- Subsurface soil information, be it Government provides or Contractor obtains, that represents subsurface conditions existing on the project site (such as boring logs, test pits, laboratory test results and groundwater observations). The locations of all borings must be indicated on the drawings.

3. Performance Verification and Acceptance Testing: Verification of satisfactory construction and system performance is required to be via Performance Verification Testing, as detailed in this part of the RFP.

4. Soil & Earthwork: Construct backfill and embankment at the locations and to lines and grades indicated. Use only approved materials in constructing fill on the prepared subgrade. Place satisfactory material in horizontal lifts not exceeding 150mm in loose depth.

Do not place material on surfaces that are muddy. Compact with equipment well suited to the soil being compacted. Moisture condition the material to moisture content between optimum and 3% wet above the optimum moisture content. Moisten or aerate material as necessary to provide the moisture content that will readily facilitate obtaining the specified compaction with the equipment used. Compact each lift as specified before placing the overlying lift. All fill slopes shall be over built and trimmed back to expose firm, compacted material at the finish grade.

The soil materials for foundation work shall be well graded and suitable for building sub grade and foundation used. The filled soil shall be compacted to at least a minimum relative density of 95% of maximum density. The contractor is needed to perform a professional compaction test on foundation before the concrete slab commencing.

All main structural supports must be founded on stable, original ground and the excavation levels of all foundations shall be located at least 1.2 meters below the lowest point of the finished floor levels of the building unless the building is supported on piles.

The following materials list below shall NOT be used as filled materials:

- Organic Soils, e.g. peat, alluvial clays and silts.
- Toxic materials, e.g. industrial waste.
- Materials containing substances which can be dissolved or leached.

5. Piling: The pre-stressed reinforced concrete pressed in pile is preferable. The minimum pile size used is □ 175mm x 175mm x 7m length and shall be tested for load bearing capability and integrity by an approval independent laboratory who is the specialist in field. The professional license engineer's endorsement in report is required and submitted before subsequent works proceed. The pile ends shall be capped with steel plate while the pile head shall extend into the pile cap and shall be trimmed with light equipment to expose rebar and extended into the pile cap. No subterranean termite treatment is required.

6. Damp Proof Membrane (DPM): The floors in contact with the ground must be protected against infiltration of moisture from the sub-grade. The Contractor shall prepare the sub-grade surfaces to install a suitable DPM that shall meet the following requirements.

The DPM material shall be a permanent moisture barrier that shall not disintegrate over time and shall act as an underlay preventing loss of moisture and infiltration of moisture from the existing sub-grade. All sharp or irregular surfaces on the substrate materials must be removed to prevent puncture of this membrane. The membrane shall be minimum 0.2mm (0.008inch) thick complying with ASTM C-171, with physical requirements complying with ASTM D-2103, ASTM C-156 and ASTM D-882. The membrane shall be extended past the edges or perimeter of the slab and shall be turned up against walls. Other approved forms of waterproofing membrane or chemicals suitable for the intended purpose of preventing moisture intrusion through the existing floor slab may be used subject to the Government's approval.

A1030 SLAB ON GRADE

Refer A1010 STANDARD FOUNDATIONS for similar details, along with the following material requirements.

CONCRETE

All concrete materials used in this project shall comply with the industrial standards and ACI 301. The design compressive strength of job-mixed concrete shall have a 28-day minimum of 240 kg/cm². Concrete shall be kept damp for not less than seven days. Ensure curing of slabs commences as soon as possible after final finishing, by the use of continuous water spray, or ponding. Alternately, apply an approved curing membrane. The contractor shall be responsible for the compressive strength test (concrete foundation, beam and column). The test shall be performed and certified by the third-party organization. The test result shall be submitted to the government for approval before construction commencing.

CEMENT

The cement shall be "Portland cement type 1" conforms to ASTM C150/C150M. Use one brand and type of cement for formed concrete having exposed-to-view finished surfaces. Submit catalogue and strength test report for COR approval prior construction commencing.

WATER

Minimize the amount of water in the mix. The amount of water must not exceed 45 percent by weight of cementitious materials, and in general, improve workability by adjusting the grading rather than by adding water. Water must be fresh, clean, and potable, free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances deleterious to concrete.

AGGREGATES

ASTM C33/C33M, except as modified herein. Furnish aggregates for exposed concrete surfaces from one source. Provide aggregates that do not contain any substance which may be deleteriously reactive with the alkalis in the cement. Aggregate must not possess properties or constituents that are known to have specific unfavorable effects in concrete.

ADMIXTURES

ASTM C494/C494M: Type A, water reducing; Type B, retarding; Type C, accelerating; Type D, water-reducing and retarding; and Type E, water-reducing and accelerating admixture. Do not use calcium chloride admixtures.

EXPANSION/CONTRACTION JOINT FILLER

ASTM D1751, ASTM D1752, cork or 100 percent post-consumer paper meeting ASTM D1752 (subparagraphs 5.1 to 5.4). Material must be 10 mm unless otherwise indicated. Preformed Joint Filler Strips. Provide non-extruding and resilient bituminous type filler strips conforming to ASTM D1751.

JOINT SEALANT COMPOUND

Provide cold-applied, two-component, elastomeric polymer type compound conforming to FS SS-S-200.

STRUCTURAL STEEL

Use deformed steel. ASTM A615/A615M and AASHTO M 322M/M 322 with the bars marked A, S, W, and Grade 420. The actual yield strength based on mill tests shall not exceed 540 MPa, and the ratio of the actual tensile strength to the actual yield strength shall not be less than 1.25. The reinforcing steel shall be placed in concrete structure according to structural design and calculations. The random sampling pieces may be selected at site by COR for testing by the contractor's own facility. Certificates of manufacturer (including manufacturing dates and chemical composition) shall be submitted for every batch of delivery to site.

Deformed bar – Steel grade SD30 or better
Round bar – Steel grade SR24.

TYPING WIRE

Mild drawn steel wire not less than 1.2mm diameter.

REINFORCING BAR SUPPOORTS

Provide bar ties and supports of coated or non-corrodible material.

SUPPORTS FOR REINFORCEMENT

Supports include bolsters, chairs, spacers, and other devices necessary for proper spacing, supporting, and fastening reinforcing bar in place.

FALSEWORK & FORMWORK

User falsework and formwork of sufficient strength to retain and support the fresh concrete to the required profiles and tolerances. Select formwork finish to produce the specified finished quality. Ensure steel, timber, or plywood used for formwork is non-staining to the set concrete.

Securely fix and brace formwork sufficiently to support loads and with joints and linings tight enough to prevent water loss. Tie wires or rods are not allowed to be used unless approved in writing by COR. Always keep the formwork to be wet before concrete is placed.

STRIKING FORMWORK

Strike formwork without damaging or overloading structure. Do not remove formwork before the following minimum period:

12 hours	Sides of beams, walls and columns
4 days	Slabs in beam and slab construction (leave props under slab spans over 2m.)
10 days	Props from under slab spans over 2m.
18 days	Beams, soffits and slab spans over 5m.

G BUILDING SITEWORK

G10 SITE PREPARATIONS

GENERAL REQUIREMENTS

The Contractor is required to perform a topographic survey of the project area that will be impacted by his/her work. This topographic survey shall be included in the contractor's design plans. Topographic and utility surveys to include surveys of the existing size and a capability assessment of existing utilities (power, water, sanitary, etc.) around the immediate vicinity of the building site for connection and support of utilities requirements for the new building and services. Prior to starting work, physically verify the location of all existing utilities and obtain all additional survey data required to provide a quality final design. The Contractor shall verify the location of all utilities prior to construction. Minimize the impact of construction activity on operations and neighboring facilities.

TOPOGRAPHIC SURVEY

Include topographic survey in the design plans. Topographic and utilities surveys to include surveys of the existing size and a capability assessment of existing utilities (power, water, sanitary, etc.) around the immediate vicinity of the project site for connection and support of utilities requirements for the new building and services. Prior to commencing work, physically verify the location of all existing utilities and obtain all additional survey data required to provide a quality final design. The Contractor shall verify the location of all utilities prior to construction.

SOIL INVESTIGATION

Conduct subsurface investigation, testing, and analysis that the DOR deems necessary for the design and construction of the building and site improvement. The soil investigation is also to determine if soil improvement remedial soil importation and/or compaction of existing earth condition are required, and to determine viability of the structural and foundation design. Provide a complete soil investigation report prepared and certified by a licensed engineer. The report shall be submitted to the COR prior to commencing any work.

1. Description of the existing site conditions;
2. Description of the equipment and methods used to conduct field and laboratory work;
3. Log of Borings;
4. Descriptions of soil conditions at the borings & any unusual conditions which may affect construction;
5. Results of the laboratory tests;
6. Analysis and recommendations for the foundation design.

G1010 SITE CLEARINGS

G101001 CLEARING

Vegetation which does not impede/prevent construction of facility shall be left in place for all structures. Contractor shall keep as many trees, bushes, and other vegetation as possible in place and not just clear-cut the entire area; intent is to minimize erosion. Vegetation shall be cleared around all structures to five meters. Contractor shall submit site clearance plan for approval before start of tree cutting. Seek all required permits prior to perform site clearings. Minimize potential disturbance to normal operations of nearby facilities.

Remove ground vegetation including stumps, and trees as required to allow construction of the new buildings/structures. The contractor is responsible to acquire the permit, if required.

Remove sod and other topsoil that contains unsuitable organic material.

G101007 DEBRIS DISPOSAL

All grubbing and clearing residue, demolished material, rubbish and debris generated by this project shall be hauled off-site and off station by the Contractor and disposed of properly in accordance with the local requirements/regulations. Coordinate with the end user and COR prior to conduct this activity.

G1020 SITE DEMOLITION & RELOCATION

Demolish and remove all unwanted existing structures and materials from ground surface and clearly indicating that they have been abandoned. Remove utilities underneath or within 3m of any new facilities. Fill abandoned gravity systems with flowable fill. Remove existing utilities structures to 90cm below existing or new adjacent grade. Break up bases to permit drainage and fill with clean sand.

G1030 SITE EARTHWORK

The earthwork including grading, compaction and other related work shall be complied with applicable standard and code required. If sheeting/shoring or dewatering is required, the Contractor shall provide a registered Professional Engineer to provide excavation, sheeting, shoring, and dewatering plans and inspection of excavations and soil/groundwater conditions throughout construction. The Engineer shall be responsible for performing pre-construction and periodic site visits throughout construction to assess site

conditions. The Engineer, with the concurrence of the contractor and the Contracting Officer, must update the excavation, sheeting, shoring, and dewatering plans as construction progresses to reflect actual site conditions and must submit the updated plan and a written report (with professional seal) at least monthly informing the Contractor and the Contracting Officer of the status of the plan and an accounting of Contractor adherence to the plan; specifically addressing any present or potential problems. The Engineer shall be available to meet with the Contracting Officer at any time throughout the contract duration.

G1030001 GRADING

Grades and levels site to provide positive drainage offsite. The finish floor elevations of new facilities above the existing ground level shall be as specified in Part 3.

Conduct soils testing to determine if remedial soil importation and/or compaction of existing earth condition is required and to determine viability of the structural and foundation design.

G103005 COMPACTION

The soil compaction at the construction area shall be as per IBC 2018, Department of Public Works and Town & Country Planning of Thailand, and Department of Highway.

G103007 SLOPE STABILIZATION

The slope stabilization at the construction area shall be as per IBC 2018, Department of Public Works and Town & Country Planning of Thailand, and Department of Highway.

G20 SITE IMPROVEMENTS

Refer details in Part 3.

X10 FIELD REQUIREMENTS

CONSTRUCTION PERMIT & CLEARANCE

The contractor shall apply and obtain all appropriate permits and clearances from local governing authority and pay fees including but are not limited to environmental preservation and social fees due to secure permits and approvals and other services from the local governing authority and comply with all other related laws and regulations applicable to the Host Nation before commencing any part of the work.

SITE MOBILIZATION / DEMOBILIZATION

Mobilization shall include all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of project identification signboard, temporary fence and gate, offices, buildings, and other necessary general facilities for the Contractor's operations at the site.

The contractor is required to provide temporary site facilities including but not limited to site office with meeting room, enclosed material and equipment storage, toilets, and temporary worker camp. Those facilities should be structurally sound, safe and comfortable to support human activities.

The contractor shall provide temporary utility services (i.e. water, electric, etc.) required for construction and to support temporary facilities and bear all associated costs for connection, installation and usage bills to include administration fees and coordination effort with local authorities.

1. Temporary fence and gate: Unless required by specific rules and regulations of the installation (i.e. compound, camp, etc.), the temporary fence and gate shall be constructed of metal roof sheet supported by wooden or steel studs and posts. Minimum height of the temporary fence and gate is 2m. A security guard post should be constructed as a part of the temporary fence for the purpose of security screening.
2. Project identification signboard: Minimum dimension of the project identification signboard 1.2m x 2.4m. The signboard shall include the following information.
 - Name of project

- Project location (city and country)
- Name of funding agency with logo
- Name of end user name with logo
- Name of project manager (NAVFAC) with logo
- Name of general contractor with logo

Final design of the project identification signboard shall be approved by the COR prior to production.

3. The contractor is responsible for providing temporary toilet and all worker accommodation as per required by the law and regulation.
4. Demobilization shall include all activities and associated costs for transportation of personnel, equipment, and supplies not required or not included in the contract from the site; including the disassembly, removal, and site cleanup of project identification signboard, temporary fence and gate, offices, buildings, and other facilities assembled on the site specifically for this contract.
5. The contractor is responsible to have control over their workforces and subcontractors' behavior to maintain proper professional ethics and attitudes within project site. This is to include awareness to not disturb or commit violence and vandalism to the local community area adjacent to the project site.

TECHNICAL TRAINING

Conduct a technical training at the project site by qualified persons. Provide training materials for five attendees. Prepare equipment (i.e. projector and projector screen) as required to facilitate the training. At a minimum, training topics shall include the following topics:

1. Project specific
 - a. Introduction to the project:
 - i. End user (Thai/U.S.)
 - ii. Current point of contact
 - b. Warranty period
2. Civil/Structure
 - a. Introduction to civil/structure:
 - i. Type of concrete pad
 - ii. Type of roadways
 - b. Basic maintenance and repair

PRODUCT WARRANTY

Provide all product warranty for at least 1 year.

-- End of Section --

PART 6
ATTACHMENTS

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FIGURE 1: SITE LOCATION
Bahn Di Lang Range, Lopburi, Thailand.

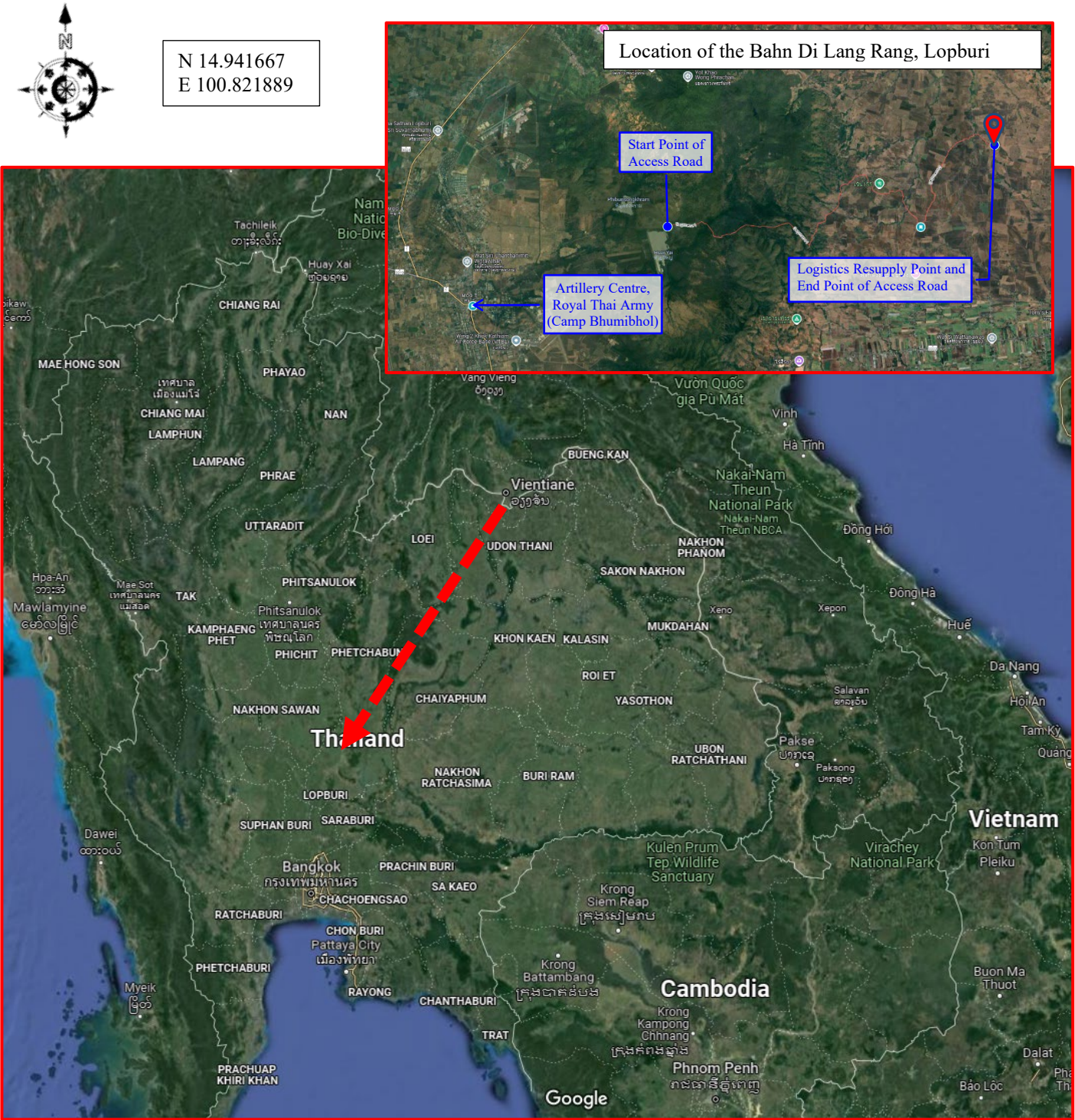


FIGURE 2: CONCEPT SITE LAYOUT OF LOGISTICS RESUPPLY POINT



FIGURE 3: SAMPLE OF CONCRETE PAD AT LOGISTICS RESUPPLY POINT



FIGURE 4: CONCEPT SITE LAYOUT OF ACCESS ROAD



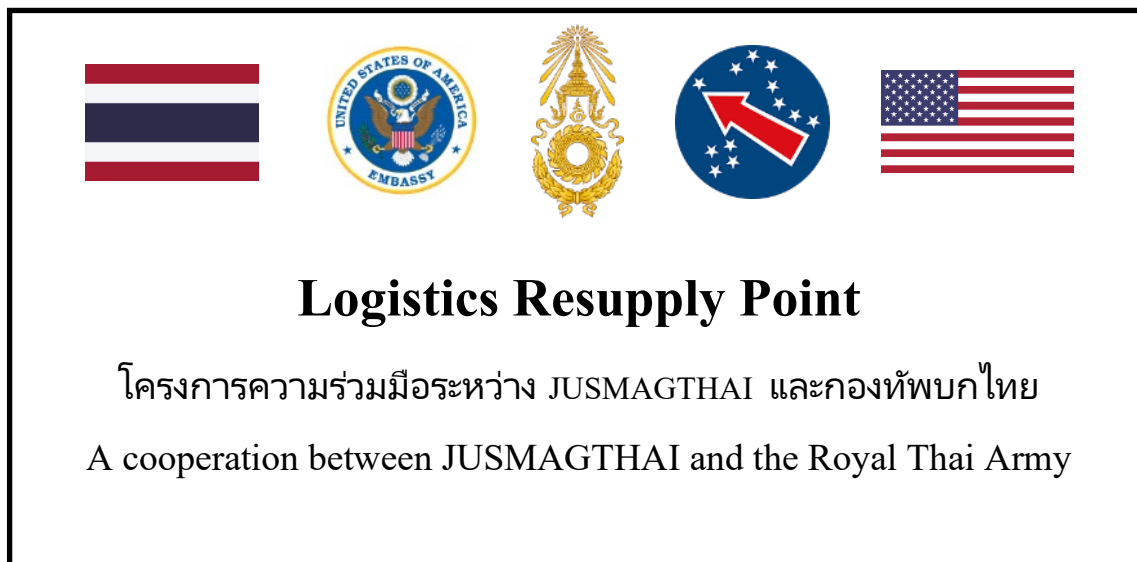
FIGURE 5: SAMPLE OF COMPACTED CRUSHED/GRAVEL ROAD



FIGURE 6: SAMPLE OF LOW-WATER CROSSING: CONCRETE-SLAB FORDS



FIGURE 7: SAMPLE OF THE PROJECT PLAQUE



NOTE: The project plaque shall be 1200 x 600 x 25mm made of grey or black granite.
It shall be located nearby the entrance of the building.

FIGURE 8: SITE PHOTOS



Start Point of Access Road (KM 0)



Existing Concrete Culverts (KM 0+300)



Existing Road Condition (KM 0+300)



Existing Road Condition (KM 1+300)



Low-Water Crossing – Location 1 (KM 1+600)



Existing Road Condition (KM 1+600)



Existing Road Condition (KM 2)



Low-Water Crossing – Location 2 (KM 4+400)



Existing Road Condition (KM 5+900)



Existing Road Condition (KM 7)



Existing Road Condition (KM 13+900)



Low-Water Crossing – Location 3 (KM 14)



Existing Road Condition (KM 15)



Existing Road Condition (KM 19+600)



Low-Water Crossing – Location 4 (KM 19+700)



Existing Condition of Logistics Resupply Point

FIGURE 9: LOPBURI HISTORICAL WEATHER DATA

Operational Climatic Data Summary (OCDS)

LOCATION_ID: WMO_48426 STATION NAME: LOP BURI THAILAND
LOCATION(DEGREES): N 14.8 E 100.617 ELEVATION: 36 ft / 11 m UTC TO LST: 7
MEAN POR: 2013/01/01 - 2022/12/31 EXTREME POR: 1949/05/01 - 2023/09/30 PREPARED BY: 557 WW / 14 WS
DETAILED POR: 1956 1960-1961 1965 1973 1975-1981 1983-2004 2006-2022
YEAR(S): Period of Record (see mean POR >>>)

Authoritative climate summary - data quality and quantity sufficient to produce accurate climatological values

Temperature

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Extreme Max (C)	37.7	38.0	40.0	41.1	41.1	38.7	37.9	37.8	36.0	36.4	36.6	35.9	41.1
Average Max (C)	32.1	33.8	35.7	36.3	35.9	34.6	33.4	33.1	32.5	32.3	32.7	31.4	33.6
Daily Average (C)	26.6	28.2	30.2	30.8	30.8	29.9	29.1	28.4	28.0	28.3	28.3	26.5	28.8
Average Min (C)	21.7	23.6	25.8	26.5	26.9	26.4	25.9	25.6	25.5	25.1	24.5	22.1	25.0
Extreme Min (C)	11.0	14.8	16.5	20.0	22.8	23.5	23.0	23.0	21.0	18.6	15.6	11.7	11.0
Max Diurnal Range (C)	20	18	17	16	15	13	12	12	14	15	15	19	20
Average # Days >= 32.2 C	21	24	30	29	30	28	25	26	20	21	22	14	288
Average # Days <= 0.0 C	0	0	0	0	0	0	0	0	0	0	0	0	0
Average # Days <= -17.8 C	0	0	0	0	0	0	0	0	0	0	0	0	0

Precipitation

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Monthly Max (mm)	137.3	109.0	271.2	263.0	352.8	310.0	348.1	367.0	516.5	497.6	168.8	68.0	1951.1
Monthly Average (mm)	6.6	14.3	37.1	78.1	149.6	141.1	150.7	176.8	268.7	149.0	33.3	5.6	1206.7
Monthly Min (mm)	0	0	0	0	5.9	14.4	15.0	36.6	44.0	0	0	0	304.0
Daily Max (mm)	35.6	30.5	106.7	71.1	109.2	81.3	99.1	134.6	114.3	81.3	35.6	15.2	134.6
Monthly Max Snowfall (cm)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average Snowfall (cm)	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Max Snowfall (cm)	0	0	0	0	0	0	0	0	0	0	0	0	0
Days with Liquid = Trace	*	*	*	*	*	*	*	*	*	*	*	*	*
Days with Liquid >= 0.2	1	2	3	6	10	12	12	14	15	9	3	*	87
Days with Liquid >= 12.8	*	*	*	*	*	*	*	*	*	*	*	*	*
Days with Frozen = Trace	*	*	*	*	*	*	*	*	*	*	*	*	*
Days with Frozen >= 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
Days with Frozen >= 3.7	0	0	0	0	0	0	0	0	0	0	0	0	0

Moisture

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Average Max RH (%)	81.7	82.4	87.8	86.1	87.3	89.5	90.7	92.5	94.0	90.9	83.7	77.1	87.0
Average Min RH (%)	40.9	40.1	41.7	42.6	48.0	52.2	56.5	57.9	63.0	58.6	49.6	42.3	49.5
Extreme Max Dew Point (C)	25.8	27.0	28.0	28.3	27.8	28.3	27.3	27.5	27.7	27.7	26.8	26.1	28.3
Average Dew Point (C)	21.6	23.6	27.9	28.7	30.4	30.4	30.2	30.7	31.2	29.3	25.9	20.8	27.7
Extreme Min Dew Point (C)	2.2	1.9	1.9	11.4	16.4	18.4	18.9	19.6	18.1	11.2	6.0	-1.1	-1.1
Average Vapor Pressure (mb)	21.6	23.6	27.9	28.7	30.4	30.4	30.2	30.7	31.2	29.3	25.9	20.8	27.7

Wind

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Prevailing Direction	\$NE	\$S	\$S	\$S	\$S	\$S	\$S	\$S	\$S	\$NE	\$NE	\$NE	\$S
Average Prevailing Speed (m/s)	2.6	1.9	2.0	2.0	1.8	1.8	1.9	1.7	1.8	2.0	2.3	2.5	1.9
Extreme Max Speed (m/s)	17.5	15.4	14.4	15.4	13.4	15.4	18.0	12.3	15.4	13.4	15.4	17.5	18.0
Extreme Max Gust (m/s)	16.9	11.3	11.3	13.3	*	8.2	10.2	12.3	7.7	7.7	15.4	16.4	16.9
Average Speed (m/s)	1.0	1.2	1.4	1.4	1.3	1.2	1.1	1.0	0.7	0.7	1.0	1.4	1.1

Pressure

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Extreme Max Pressure Altitude (m)	90	110	116	145	130	169	183	173	161	119	110	107	183
Average Max Pressure Altitude (m)	37	44	62	72	85	88	89	88	78	61	50	35	66
Average Pressure Altitude (m)	18	24	40	50	62	69	71	70	58	41	30	15	46
Std Dev Pressure Altitude (m)	2.9	2.9	2.6	2.6	2.3	2.1	2.1	2.2	2.4	2.7	2.1	2.6	3.4

Weather Occurrence

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Average # Fog Days (FG/BR)	27	25	31	30	29	28	30	31	30	31	29	26	345
Average # Thunderstorm Days	#	1	3	7	11	9	6	9	12	8	3	#	71
Average # Precip Days	3	2	4	9	14	17	18	20	22	15	7	2	133
Average # Rain Days	3	2	4	8	14	16	18	20	22	15	7	2	131

Continue

Cloud													
Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Average Cloud Cover (%)	45	50	52	57	65	74	80	83	79	65	51	42	62
Median Cloud Cover (%)	38	38	50	63	75	75	88	88	75	75	50	25	75
Standard Deviation (%)	27.3	26.7	24.0	25.9	24.1	21.7	19.9	18.6	22.1	27.1	27.4	25.4	27.9
Sample Size	2477	2235	2456	2398	2472	2392	2403	2488	2403	2467	2396	2461	29048

% Frequency of Wind > 12.8 m/s

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
05-07 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
08-10 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
11-13 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
14-16 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
17-19 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
20-22 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
23-01 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
02-04 LST	0	0	0	0	0	0	0	0	0	0	0	0	0
All Hours	0	0	0	0	0	0	0	0	0	0	0	0	0

% Frequency of Fog (FG/BR)

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
05-07 LST	72.9	76.4	94.8	92.7	90.0	88.6	86.8	88.5	90.0	92.9	86.2	64.2	85.3
08-10 LST	25.8	43.6	50.6	34.7	32.1	29.4	45.7	52.2	54.5	47.9	21.3	9.7	37.3
11-13 LST	3.2	0.7	0.3	2.7	3.9	6.3	12.7	11.3	21.3	21.8	4.3	1.6	7.5
14-16 LST	3.2	1.1	0.7	2.0	4.2	7.0	10.3	11.5	20.4	17.8	3.7	2.3	7.0
17-19 LST	26.9	18.9	15.4	19.4	24.8	41.1	41.6	53.2	60.9	64.9	48.0	22.0	36.5
20-22 LST	69.6	62.6	79.5	62.5	65.3	64.1	64.0	67.5	65.3	82.2	72.6	52.4	67.4
23-01 LST	76.8	75.5	92.9	91.0	81.9	83.3	81.3	79.9	78.7	89.3	83.9	65.0	81.6
02-04 LST	76.8	77.5	94.1	93.7	86.8	87.9	88.3	86.5	86.3	90.0	85.7	61.8	84.6
All Hours	44.4	44.5	53.6	49.8	48.6	50.9	53.8	56.4	59.7	63.3	50.7	34.9	50.9

% Frequency of Thunderstorms

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
05-07 LST	0.3	0.4	1.9	3.0	4.9	2.0	0.3	1.6	3.3	4.2	1.3	0.3	2.0
08-10 LST	0.0	0.4	0.6	0.3	1.3	0.3	0.0	0.3	1.3	0.3	0.0	0.0	0.4
11-13 LST	0.0	0.4	1.6	1.3	2.9	3.0	0.3	0.6	3.3	2.3	0.3	0.0	1.3
14-16 LST	0.6	2.1	3.6	11.3	8.8	7.0	5.0	4.5	12.0	12.0	5.3	0.0	6.0
17-19 LST	0.6	4.3	6.6	18.7	20.6	14.7	13.1	17.0	22.5	16.9	9.0	0.0	12.0
20-22 LST	0.0	1.1	3.3	4.7	10.1	13.8	12.0	15.1	16.0	8.1	2.0	0.0	7.2
23-01 LST	0.3	1.1	4.5	6.0	12.9	15.3	12.0	15.9	21.0	9.1	2.7	0.0	8.4
02-04 LST	0.3	0.4	2.3	2.7	4.2	1.3	0.3	1.9	2.7	3.2	0.7	0.3	1.7
All Hours	0.3	1.3	3.1	6.0	8.2	7.2	5.4	7.1	10.3	7.0	2.7	0.1	4.9

% Frequency of Rain

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
05-07 LST	2.9	1.4	3.2	5.7	10.7	11.7	19.8	19.2	27.6	15.6	6.4	2.9	10.6
08-10 LST	1.9	2.1	1.3	2.7	4.2	6.0	7.9	9.0	13.6	6.1	2.0	1.0	4.8
11-13 LST	2.9	2.5	2.3	4.3	6.1	9.0	11.7	11.3	20.3	12.0	3.7	1.3	7.3
14-16 LST	1.9	1.4	4.2	9.0	9.4	9.7	15.0	12.2	23.7	20.4	9.7	0.6	9.8
17-19 LST	3.2	4.6	7.2	19.1	25.5	25.1	33.6	35.9	40.1	30.5	15.3	2.6	20.3
20-22 LST	1.0	2.2	4.2	8.0	15.9	26.8	29.7	34.7	39.7	18.8	4.7	2.6	15.7
23-01 LST	2.3	2.2	5.5	9.7	21.0	32.0	33.8	39.6	46.7	23.0	8.7	3.6	19.0
02-04 LST	1.9	1.1	3.3	4.3	7.4	9.4	16.7	17.0	23.0	12.0	4.0	2.3	8.6
All Hours	2.3	2.2	3.9	7.8	12.5	16.2	21.0	22.3	29.3	17.3	6.8	2.1	12.0

LEGEND:

* = Data not Available
 *** = Variable Wind Direction Predominant
 # = Occurrences rounded to zero
 \$ = Percent of Calm > Prevailing Direction
 Abs = Absolute

ALSTG = Altimeter Setting
 DA = Density Altitude
 FG/BR = Fog/Mist
 LST = Local Standard Time
 RH = Relative Humidity

SLP = Sea Level Pressure
 Spec = Specific
 Std Dev = Standard Deviation
 T = Trace
 Vis = Visibility

-- End of Part 6 --

ENCLOSURE 1 – PRE-PROPOSAL INQUIRY (PPI) FORM

	OFFEROR NAME:		DATE:
	ADDRESS:		
	PHONE NUMBER:		
	EMAIL:		
Question No.	Reference (Sect/Para/Page)	QUESTION	GOVERNMENT RESPONSE

ENCLOSURE 2 - OFFEROR EXPERIENCE PROJECT DATA SHEET

Provide the following information on projects to demonstrate past experience on recent, relevant construction projects. Use continuation sheets, if needed. Data sheets for each project shall not exceed two (2) pages.

PLACE PHOTO HERE
(Must be actual photo of project. Use final photo if the project is complete. AI generated images, photoshopped photos, renderings, or drawings will not be accepted.)

Offeror Name: _____

Contract Number: _____

Project Title/Location: _____

Short Project Description: _____

Project involved Design or Design-Build (check those that apply):

☐ Yes, self-performed design as the Prime contractor

☐ Yes, offeror managed a design contractor, and coordinated review and approval of design

☐ No, project did not require design or design-build

Contract Amount: _____

Original Contract Completion Date: _____

Final Contract Completion Date: _____

Date Completed: _____

Percentage of Work Performed: _____

Prime or Subcontract Work: _____

Customer/Client: _____

Customer/Client Contact Information: (include for each POC: NAME, PHONE NUMBER, EMAIL ADDRESS, AND MAILING ADDRESS)

ENCLOSURE 3 – PAST PERFORMANCE QUESTIONNAIRE

1. The NAVFAC Form PPQ shall be utilized for all evaluations that require a Past Performance Questionnaire (PPQ).
2. Offerors should submit the PPQ with their offer. 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, Nitiwate Dissanont via email at nitiwate@state.gov prior to proposal closing date.
3. Offerors should provide PPQs with their proposal as required by RFP. 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.

ENCLOSURE 3	
NAVFAC/USACE PAST PERFORMANCE QUESTIONNAIRE (Form PPQ-0)	
CONTRACT INFORMATION (Contractor to complete Blocks 1-4)	
<div>1. Contractor Information</div> <div style="display: flex; justify-content: space-between;"><div>Firm Name: Address: Phone Number: Email Address: Point of Contact:</div><div>CAGE Code: DUNs Number: Contact Phone Number:</div></div>	
<div>2. Work Performed as: <input type="checkbox"/> Prime Contractor <input type="checkbox"/> Sub-Contractor <input type="checkbox"/> Joint Venture <input type="checkbox"/> Other (Explain)</div> <div>Percent of project work performed:</div> <div>If subcontractor, who was the prime (Name/Phone #):</div>	
<div>3. Contract Information</div> <div>Contract Number:</div> <div>Delivery/Task Order Number (if applicable):</div> <div>Contract Type: <input type="checkbox"/> Firm Fixed Price <input type="checkbox"/> Cost Reimbursement <input type="checkbox"/> Other (Please specify):</div> <div>Contract Title:</div> <div>Contract Location:</div> <div>Award Date (mm/dd/yy):</div> <div>Contract Completion Date (mm/dd/yy):</div> <div>Actual Completion Date (mm/dd/yy):</div> <div>Explain Differences:</div> <div>Original Contract Price (Award Amount):</div> <div>Final Contract Price (to include all modifications, if applicable):</div> <div>Explain Differences:</div>	
<div>4. Project Description:</div> <div>Complexity of Work High Med Routine</div> <div>How is this project relevant to project of submission? (Please provide details such as similar equipment, requirements, conditions, etc.)</div>	
CLIENT INFORMATION (Client to complete Blocks 5-8)	
<div>5. Client Information</div> <div>Name:</div> <div>Title:</div> <div>Phone Number:</div> <div>Email Address:</div>	
<div>6. Describe the client's role in the project:</div>	
<div>7. Date Questionnaire was completed (mm/dd/yy):</div>	
<div>8. Client's Signature:</div>	

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

<i>ADJECTIVAL RATINGS AND DEFINITIONS TO BE USED TO BEST REFLECT YOUR EVALUATION OF THE CONTRACTOR'S PERFORMANCE</i>		
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 were 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 negative.

Contractor Information (Firm Name): _____
Client Information (Name): _____

TO BE COMPLETED BY CLIENT

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 technical performance	E VG S M U N
c) Timeliness/effectiveness of contract problem resolution without extensive customer guidance	E VG S M U N
d) Adequacy/effectiveness of quality control program and adherence to contract quality assurance requirements (without adverse effect on performance)	E VG S M U N
2. SCHEDULE/TIMELINESS OF PERFORMANCE:	
a) Compliance with contract delivery/completion schedules including any significant intermediate milestones. <i>(If liquidated damages were assessed or the schedule was not met, please address below)</i>	E VG S M U N
b) Rate the contractor's use of available resources to accomplish tasks identified in the contract	E VG S M U N
3. CUSTOMER SATISFACTION:	
a) To what extent were the end users satisfied with the project?	E VG S M U N
b) Contractor was reasonable and cooperative in dealing with your 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/or labor force?	E VG S M U N
b) Ability to hire, apply, and retain a qualified workforce to this effort	E VG S M U N
c) Government Property Control	E VG S M U N
d) Knowledge/expertise demonstrated by contractor personnel	E VG S M U N
e) Utilization of Small Business concerns	E VG S M U N
f) Ability to simultaneously manage multiple projects with multiple disciplines	E VG S M U N
g) Ability to assimilate and incorporate changes in requirements and/or priority, including planning, execution and response to Government changes	E VG S M U N
h) Effectiveness of overall management (including ability to effectively 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 the contractually agreed price(s)?	E VG S M U N

Contractor Information (Firm Name): _____
Client Information (Name): _____

b) Contractor proposed innovative alternative methods/processes that reduced cost, improved maintainability or other factors that benefited the client	E	VG	S	M	U	N
c) If this is/was a Government cost type contract, please rate the 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? <i>If no, please explain in Remarks section.</i>	Yes			No		
e) If this is/was a Government contract, has/was this contract been partially or completely terminated for default or convenience or are there any pending terminations? <i>Indicate if show cause or cure notices were issued, or any default action in comment section below.</i>	Yes			No		
f) Have there been any indications that the contractor has had any financial problems? <i>If yes, please explain below.</i>	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, and respond 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 the project and personnel security requirements.	E	VG	S	M	U	N
7. GENERAL						
a) Ability to successfully respond to emergency and/or surge situations (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 (<i>explain if specific issues</i>)	E	VG	S	M	U	N
c) Would you hire or work with this firm again? (<i>If no, please explain below</i>)	Yes			No		
d) In summary, provide an overall rating for the work performed 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 (*please attach additional pages if necessary*):

BILL OF QUANTITIES									
Project Title									
D/B CONSTRUCT LOGISTICS RESUPPLY PAD AND IMPROVE ACCESS ROAD AT BAHN DI LANG RANGE, LOPBURI, THAILAND									
ITEM	DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		TOTAL	
		NUMBER	UNIT	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)
CLIN 0001: BASE BID ITEM 0001 - CONSTRUCT A LOGISTICS RESUPPLY POINT (LRP) CONCRETE PAD									
A	SUBSTRUCTURE								
A10	FOUNDATIONS								
A1030	SLAB ON GRADE								
	- Excavation & backfill		m3						
	- Compacted sand		m3						
	- Reinforcing		kg						
	- Concrete		m3						
	- Accessories		LOT						
F	SPECIAL CONSTRUCTION AND DEMOLITION								
F10	SPECIAL CONSTRUCTION								
F1010	SPECIAL STRUCTURES								
	- Project plaque with accessories		EA						
G	BUILDING WORKS								
G10	SITE PREPARATION								
	- Site topology survey		EA						
	- Soil investigation & report		EA						
G1010	SITE CLEARINGS								
	- Remove ground vegetation, tree removal, tree relocation, grubbing, clearing and debris disposal		LOT						
G1020	SITE DEMOLITION AND RELOCATIONS								
	- Demolition and removal of existing structures, utilities, pavements, and other obstructions within the construction area		LOT						
G1030	SITE EARTHWORK								
	- Grading/compaction		m2						

Table 2: FIELD REQUIREMENTS (CLIN 0001)

	DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
		NUMBER	UNIT	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)
X	FIELD REQUIREMENTS								
	- Calculation and Design Drawings		EA						
	- Construction permit & site clearance		EA						
	- Site mobilization & demobilization		EA						
	- Testing		EA						
	- Technical training to users		EA						
TOTAL ITEM A-to-G-to-X									
VAT									
TOTAL CLIN 0001									

BILL OF QUANTITIES									
Project Title D/B CONSTRUCT LOGISTICS RESUPPLY PAD AND IMPROVE ACCESS ROAD AT BAHN DI LANG RANGE, LOPBURI, THAILAND									
ITEM	DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		TOTAL	
		NUMBER	UNIT	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)
CLIN 0002: BASE BID ITEM 0002 - IMPROVE 15 KM ACCESS ROAD									
F	SPECIAL CONSTRUCTION AND DEMOLITION								
F10	SPECIAL CONSTRUCTION								
F1010	SPECIAL STRUCTURES								
	- Project plaque with accessories		EA						
G	BUILDING SITEWORKS								
G10	SITE PREPARATION								
	- Site topology survey		EA						
	- Soil investigation & report		EA						
G1010	SITE CLEARING								
	- Site clearing, tree and vegetation removal, grubbing, debris disposal, and all related work		LOT						
G1020	SITE DEMOLITION AND RELOCATIONS								
	- Demolition and removal of existing structures, utilities, pavements, and other obstructions within the construction area		LOT						
G1030	SITE EARTHWORK								
	- Backfill materials		m3						
	- Grading/compaction		m2						
G20	SITE IMPROVEMENTS								
G2010	ROADWAYS								
	- Compacted crushed/gravel road		m3						
	Low-water crossing: Location 1								
	- Reinforcing		kg						
	- Concrete		m3						
	- Water depth gauges		EA						
	Low-water crossing: Location 2								
	- Reinforcing		kg						
	- Concrete		m3						
	- Water depth gauges		EA						
	Low-water crossing: Location 3								
	- Reinforcing		kg						
	- Concrete		m3						
	- Water depth gauges		EA						

Table 2: FIELD REQUIREMENTS (CLIN 0002)

	DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
		NUMBER	UNIT	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)
X	FIELD REQUIREMENTS								
	- Calculation and Design Drawings		EA						
	- Construction permit & site clearance		EA						
	- Site mobilization & demobilization		EA						
	- Testing		LOT						
	- Technical training to users		EA						
TOTAL ITEM A-to-G-to-X									
VAT									
TOTAL CLIN 0002									

BILL OF QUANTITIES									
Project Title D/B CONSTRUCT LOGISTICS RESUPPLY PAD AND IMPROVE ACCESS ROAD AT BAHN DI LANG RANGE, LOPBURI, THAILAND									
ITEM	DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		TOTAL	
		NUMBER	UNIT	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)
CLIN 0003: OPTION ITEM 0001 - IMPROVE 6 KM ACCESS ROAD									
G	BUILDING SITEWORKS								
G10	SITE PREPARATION								
	- Site topology survey		EA						
	- Soil investigation & report		EA						
G1010	SITE CLEARING								
	- Site clearing, tree and vegetation removal, grubbing, debris disposal, and all related work		LOT						
G1020	SITE DEMOLITION AND RELOCATIONS								
	- Demolition and removal of existing structures, utilities, pavements, and other obstructions within the construction area		LOT						
G1030	SITE EARTHWORK								
	- Backfill materials		m3						
	- Grading/compaction		m2						
G20	SITE IMPROVEMENTS								
G2010	ROADWAYS								
	- Compacted crushed/gravel road		m3						
	Low-water crossing: Location 4								
	- Reinforcing		kg						
	- Concrete		m3						
	- Water depth gauges		EA						

Table 2: FIELD REQUIREMENTS (CLIN 0002)

	DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
		NUMBER	UNIT	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)	UNIT COST	TOTAL (\$)
X	FIELD REQUIREMENTS								
	- Calculation and Design Drawings		EA						
	- Construction permit & site clearance		EA						
	- Site mobilization & demobilization		EA						
	- Testing		LOT						
	- Technical training to users		EA						
TOTAL ITEM A-to-G-to-X									
VAT									
TOTAL CLIN 0003									
GRAND TOTAL (CLIN 0001 TO 0003)									