SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)	1. SOLICITATION NO. W5J9JE-10-R-0083	2. TYPE OF SOLICITATION [ ] SEALED BID (IFB) [X] NEGOTIATED (RFP)	3. DATE ISSUED 19-May-2010	PAGE OF PAGES 1 OF 50

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

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO. W917PM01046357	6. PROJECT NO.

7. ISSUED BY CODE W5J9JE	8. ADDRESS OFFER TO (If Other Than Item 7) CODE
AFGHANISTAN DISTRICT NORTH (AEN) US ARMY CORPS OF ENGINEERS OPERATION ENDURING FREEDOM APO AE 09356 TEL: FAX:	**See Item 7** TEL: FAX:

9. FOR INFORMATION CALL:	A. NAME MARTHA L JACKSON	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS)

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 no., date):

Project: ANP UP District HQ Goshta, Nangarhar, Afghanistan

Proposals shall be hand delivered to the U.S. Army Corps of Engineers, House #1, Street #1, West Wazir Akbar Khan (behind Amani High School), Kabul, Afghanistan - prior to the time and date specified for receipt of proposals. The point of contact for this effort is Martha Jackson at Martha.L.Jackson@usace.army.mil.

The estimated magnitude of this project is between $1,000,000 and $5,000,000. This is a Lowest Price Technically Acceptable Acquisition. The Government intends to award one Firm Fixed Price contract.

11. The Contractor shall begin performance within 10 calendar days and complete it within 365 calendar days after receiving [ ] award, [X] notice to proceed. This performance period is [ ] mandatory, [ ] negotiable. (See 52.211-10 .)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) [ ] YES [X] NO	12B. CALENDAR DAYS

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 3 copies to perform the work required are due at the place specified in Item 8 by 03:00 PM (hour) local time 09 Jun 2010 (date). If this is a sealed bid solicitation, offers must 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, [X] 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 90 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

SOLICITATION, OFFER, AND AWARD (Continued)

(Construction, Alteration, or Repair)

OFFER ***(Must be fully completed by offeror)***

14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*		15. TELEPHONE NO. *(Include area code)*
		16. REMITTANCE ADDRESS *(Include only if different than Item 14)* **See 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 requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

AMOUNTS	SEE SCHEDULE OF PRICES

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 NO.										
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. 253(c)
26. ADMINISTERED BY CODE		27. PAYMENT WILL BE MADE BY: CODE

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, requisitions 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 or 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)* TEL: EMAIL:
30B. SIGNATURE	30C. DATE	31B. UNITED STATES OF AMERICA BY
		31C. AWARD DATE

Section 00010 - Solicitation Contract Form

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001		1	Lump Sum		
	ANP UP Dist HQ Goshta, Nangarhar FFP Site Adapt Construction 1 story UP District Headquarters FOB: Destination MILSTRIP: W917PM01046357 PURCHASE REQUEST NUMBER: W917PM01046357				

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002		1	Lump Sum		
DBA	Insurance FFP FOB: Destination MILSTRIP: W917PM01046357 PURCHASE REQUEST NUMBER: W917PM01046357				

NET AMT

SCHEDULE NOTES

PROPOSAL SCHEDULE NOTES

1. Offeror shall submit prices on all items.

2. Only one contract for the entire schedule will be awarded under this solicitation. This project will be awarded as a lump sum contract. This Proposal Schedule is an accounting tool for allocating funds to applicable budget.

3. Costs associated with this project shall include design and construction costs, site development, and utility installation.

4. The government has the right to reduce the number of units in a bid item or choose to delete a base bit item entirely if necessary after the proposals are received.

5. Period of performance is the sum of 365 calendar days and the number of total weather days appropriate for the province in which the project is located, as defined by Section 1060 – 1.20.1. This period of performance starts from receipt of notice to proceed, and is the total period of performance for the Base Items and all Optional Items, inclusive. Liquidated damages are assessed at $628.00 per day for each calendar day of delay past this period of performance until contract completion for either the Base Items or the Optional Items whichever is applicable.

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY REFERENCE

52.236-28 Preparation of Proposals--Construction OCT 1997

CLAUSES INCORPORATED BY FULL TEXT

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

Offers submitted in response to this solicitation shall be in the English language. Offers received in other than English shall be rejected.

(End of provision)

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)

Offers submitted in response to this solicitation shall be in terms of U.S. dollars. Offers received in other than U.S. dollars shall be rejected.

(End of provision)

52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995)--EFARS

(a) For the purpose of initial evaluations of bids, the following will be utilized in the resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:

(1) Obviously misplaced decimal points will be corrected;

(2) Discrepancy between unit price and extended price, the unit price will govern;

(3) Apparent errors in extension of unit prices will be corrected;

(4) Apparent errors in addition of lump-sum and extended prices will be corrected.

(b) For the purpose of bid evaluation, the government will proceed on the assumption that the bidder intends his bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

(c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

(End of statement)

52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (JAN 2004)

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

“Discussions” are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

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

“Proposal modification” is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

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

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

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

(c) Submission, modification, revision, and withdrawal of proposals. (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

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

(i) The solicitation number;

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

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

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

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

(3) Submission, modification, or revision, of proposals.

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

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

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

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

(3) It is the only proposal received.

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

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

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

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

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

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

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

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

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

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

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

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

(2) Mark each sheet of data it wishes to restrict with the following legend: Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

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

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

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

(4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

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

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

(7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.

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

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

(10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.

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

(i) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.

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

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

(iv) A summary of the rationale for award.

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

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

(End of provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

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

(End of provision)

52.233-2 SERVICE OF PROTEST (SEP 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

By Courier or Hand Carry:
U.S. Army Corps of Engineers (USACE)
Afghanistan Engineer District - North (AEN)
Qalaa House, Attention: Contracting Officer
House #1, Street #1,
West Wazir Akbar Khan (behind Amani High School),
Kabul, Afghanistan

(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)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

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

(b) Site visits may be arranged during normal duty hours by contacting:

There will be no Government representative available for a site visit and the Government will not provide security for a site visit. Offerors may visit the site on their own schedule at their own risk.

(End of provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

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

http://farsite.hill.af.mil

(End of provision

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (FEB 2009)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition 236220.

(2) The small business size standard is $33.5M.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(__) Paragraph (d) applies.

(__) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in ORCA 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 $100,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the clause at 52.204-7, Central Contractor Registration.

(iv) 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.

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

(vi) 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.

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

(viii) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(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.

(ix) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

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

(xi) 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.

(xii) 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 items.

(xiii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

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

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

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

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $67,826, the provision with its Alternate II applies.

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

(xviii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification.

(xix) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to--

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

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

(Contracting Officer check as appropriate.)

----(i) 52.219-19, Small Business Concern Representation for the Small Business Competitiveness Demonstration Program.

------(ii) 52.219-21, Small Business Size Representation for Targeted Industry Categories Under the Small Business Competitiveness Demonstration Program.

------(iii) 52.219-22, Small Disadvantaged Business Status.

------(A) Basic.

------(B) Alternate I.

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

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

------(vi) 52.222-52 Exemption from Application of the Service Contract Act to Contracts for Certain Services--Certification.

-- ----(vii) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

XX ------(viii) 52.223-13, Certification of Toxic Chemical Release Reporting.

------(ix) 52.227-6, Royalty Information.

------ (A) Basic.

------ (B) Alternate I.

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

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca.bpn.gov. After reviewing the ORCA 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 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, identifyingchange 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 ORCA.

(End of Provision)

252.204-7007 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (52.204-8) ALTERNATE A

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition 236220.

(2) The small business size standard is $33.5M.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes tofurnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the clause at 52.204-7, Central Contractor Registration, is included inthis solicitation, paragraph (c) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeroris currently registered in CCR, and has completed the ORCA electronically, the offerormay choose to use paragraph (b) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(__) Paragraph (c) applies.

(__) Paragraph (c) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) Web site at https://orca.bpn.gov/.

After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically 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/DFARS clause No.	Title	Date	Change

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

(End of Provision)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (JAN 2009)

(a) "Definitions."

As used in this provision --

(a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.

(2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries subject to this provision include: Cuba, Iran, Sudan, and Syria.

(3) "Significant interest" means --

(i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;

(ii) Holding a management position in the firm, such as a director or officer;

(iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;

(iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or

(v) Holding 50 percent or more of the indebtness of a firm.

(b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

(1) Identification of each government holding a significant interest; and

(2) A description of the significant interest held by each government.

(End of provision)

252.209-7002 DISCLOSURE OF OWNERSHIP OR CONTROL BY A FOREIGN GOVERNMENT (JUN 2005)

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

(1) "Effectively owned or controlled" means that a foreign government or any entity controlled by a foreign government has the power, either directly or indirectly, whether exercised or exercisable, to control the election, appointment, or tenure of the Offeror's officers or a majority of the Offeror's board of directors by any means, e.g., ownership, contract, or operation of law (or equivalent power for unincorporated organizations).

(2) "Entity controlled by a foreign government"—

(i) Means—

(A) Any domestic or foreign organization or corporation that is effectively owned or controlled by a foreign government; or

(B) Any individual acting on behalf of a foreign government.

(ii) Does not include an organization or corporation that is owned, but is not controlled, either directly or indirectly, by a foreign government if the ownership of that organization or corporation by that foreign government was effective before October 23, 1992.

(3) "Foreign government" includes the state and the government of any country (other than the United States and its outlying areas) as well as any political subdivision, agency, or instrumentality thereof.

(4) "Proscribed information" means—

(i) Top Secret information;

(ii) Communications Security (COMSEC) information, except classified keys used to operate secure telephone units (STU IIIs);

(iii) Restricted Data as defined in the U.S. Atomic Energy Act of 1954, as amended;

(iv) Special Access Program (SAP) information; or

(v) Sensitive Compartmented Information (SCI).

(b) *Prohibition on award.* No contract under a national security program may be awarded to an entity controlled by a foreign government if that entity requires access to proscribed information to perform the contract, unless the Secretary of Defense or a designee has waived application of 10 U.S.C. 2536(a).

(c) *Disclosure.* The Offeror shall disclose any interest a foreign government has in the Offeror when that interest constitutes control by a foreign government as defined in this provision. If the Offeror is a subsidiary, it shall also disclose any reportable interest a foreign government has in any entity that owns or controls the subsidiary, including reportable interest concerning the Offeror's immediate parent, intermediate parents, and the ultimate parent. Use separate paper as needed, and provide the information in the following format:

Offeror's Point of Contact for Questions about Disclosure
(Name and Phone Number with Country Code, City Code
and Area Code, as applicable)

Name and Address of Offeror

Name and Address of Entity Controlled by a Foreign Government	Description of Interest, Ownership Percentage, and Identification of Foreign Government

(End of provision)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

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

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

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

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

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

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

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

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

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

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

(End of provision)

252.225-7042 AUTHORIZATION TO PERFORM (APR 2003)

The offeror represents that it has been duly authorized to operate and to do business in the country or countries in which the contract is to be performed.

(End of provision)

DBA REPRESENTATION

DEFENSE BASE ACT INSURANCE RATES – LIMITATION – FIXED-PRICE (OCT 2009)

(a) The U.S. Army Corps of Engineers (USACE) has entered into a contract with **CNA Insurance** to provide all Defense Base Act (DBA) insurance to USACE and JCC-I/A contractors and subcontractors at a contracted fixed rate. The fixed rates for this insurance are as follows:

Service	$4.00	per $100 of employee remuneration
Construction	$6.00	per $100 of employee remuneration
Security	$10.00	per $100 of employee remuneration
Aviation	$17.00	per $100 of employee remuneration

(b) Bidders/Offerors should **compute the total compensation or total payroll**, (salary, plus overseas recruitment incentive and post differential, but ***excludes*** per diem, housing allowance, travel expenses, temporary quarters allowance, education allowance and other miscellaneous post allowances to include fee or profit) to be paid to employees who will be covered by DBA insurance. Compute the cost of DBA Insurance by utilizing the spaces provided below for the base period and whatever extension there may be thereafter, if applicable.

(1) Compensation of Covered Employees: _____
(Total Payroll Not Total Contract Value) Ex: If total Payroll is $100,000.00

(2) Applicable DBA Rate: _____
(Use appropriate Rate) Ex: If a Service, the rate is $4.00/$100 or 4%

(3) Total DBA Cost: _____
(Amount of DBA Premium) Ex: $100 K multiplied by 4% is $4,000.00

(c) Bidders/Offerors shall include a statement as to whether or not local nationals or third country nationals will be employed on the resultant contract.

(d) CNA Insurance is utilizing Rutherfoord International as their managing Broker. The primary POC is the USACE DBA Program Administrator is Carole Sacra, (703) 813-6523 Carole.Sacra@rutherfoord.com The alternate POC is Sara Payne, Senior Vice President, (703) 813-6503 sara.payne@rutherfoord.com.

(e) Labor Category/Job Classification Definitions:
SERVICE: $4.00/$100 "White collar" workers such as IT Consultants, Engineers, Administrative type Office workers and light housekeeping. Security Consultants could be included as long as they are just assessing risk and not providing armed protection.

CONSTRUCTION: $6.00/$100 "Blue collar" workers providing Construction services such as Carpentry, Electrical, Plumbing, Concrete, Asphalt, Day Laborers, Operation and Maintenance of Heavy Equipment

SECURITY: $10.00/$100 Personal Security Detail (PSD) and Static or Convoy Guarding property of Personnel

AVIATION: $17.00/$100 Pilot and Crew of any aircraft excluding ground personnel who provide maintenance or services but stay on the ground

(End of Provision)

AI 26.6 Projected Afghan and Third Country National (TCN) Employment (5 Nov 07)

Projected Afghan Employment

Collecting & Reporting Employment Statistics

The purpose of this clause is to collect data on the projected number of Afghans employed for the term of the contract. Offerors are required to identify in the space provided below the total projected number that will be directly employed in the performance of this contract.

Employment is the total number of Afghan persons expected to be on the payroll (contractors, subcontractors, & sub-subcontractors) emp1oyed full or part time who received pay for my part of the term of the contract. Temporary and intermittent employees are included, as are any workers who are on paid sick leave, on paid holiday, R&R leave or who work during only part of the pay period." Enter into spaces provided in item #l. Next enter in the spaces provided in item #2 what is the average number employed throughout the term of the contract. Item #3 An "Afghan-Based Company" is a company (including a subsidiary company) whose principal place of business is located within Afghanistan.

1. Total Afghan (Afghan Residents) Employed:

Afghan: Men _____

Afghan: Females _____

Total: _____

2. Average Afghans (Afghan Residents) Employed:

Afghan: Men _____

Afghan: Females _____

Total: _____

1. Is your company an “Afghan Based" company? Yes ___ No___. If no, what country is your company registered/incorporated: _____

2. Afghan Company Certification. The offeror ____is or ____is not an Iraqi owned firm. If the firm is Afghan owned, the Ministry of Trade registration/license number is: _____.

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUL 2004
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	SEP 2007
52.203-13	Contractor Code of Business Ethics and Conduct	DEC 2008
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.204-7	Central Contractor Registration	APR 2008
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	SEP 2006
52.211-13	Time Extensions	SEP 2000
52.215-2	Audit and Records--Negotiation	MAR 2009
52.215-8	Order of Precedence--Uniform Contract Format	OCT 1997
52.215-11	Price Reduction for Defective Cost or Pricing Data--Modifications	OCT 1997
52.215-13	Subcontractor Cost or Pricing Data--Modifications	OCT 1997
52.215-17	Waiver of Facilities Capital Cost of Money	OCT 1997
52.215-21	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data--Modifications	OCT 1997
52.222-29	Notification Of Visa Denial	JUN 2003
52.222-50	Combating Trafficking in Persons	FEB 2009
52.224-1	Privacy Act Notification	APR 1984
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.225-14	Inconsistency Between English Version And Translation Of Contract	FEB 2000
52.227-4	Patent Indemnity-Construction Contracts	DEC 2007
52.227-14	Rights in Data--General	DEC 2007
52.228-3	Worker's Compensation Insurance (Defense Base Act)	APR 1984
52.229-6	Taxes--Foreign Fixed-Price Contracts	JUN 2003
52.230-2	Cost Accounting Standards	OCT 2008
52.232-5	Payments under Fixed-Price Construction Contracts	SEP 2002
52.232-17	Interest	OCT 2008
52.232-27	Prompt Payment for Construction Contracts	OCT 2008
52.233-1	Disputes	JUL 2002
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

52.236-4	Physical Data	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
52.236-17	Layout of Work	APR 1984
52.236-21 Alt I	Specifications and Drawings for Construction (Feb 1997) - Alternate I	APR 1984
52.236-23	Responsibility of the Architect-Engineer Contractor	APR 1984
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	JUN 2007
52.243-6	Change Order Accounting	APR 1984
52.244-4	Subcontractors and Outside Associates and Consultants (Architect-Engineer Services)	AUG 1998
52.244-5	Competition In Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items	AUG 2009
52.246-12	Inspection of Construction	AUG 1996
52.246-21	Warranty of Construction	MAR 1994
52.248-3	Value Engineering-Construction	SEP 2006
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (May 2004) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	JAN 2009
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	JAN 2009
252.204-7000	Disclosure Of Information	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	Central Contractor Registration (52.204-7) Alternate A	SEP 2007
252.204-7006	Billing Instructions	OCT 2005
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	DEC 2006
252.211-7003 Alt I	Item Identification and Valuation (Aug 2008) Alternate I	AUG 2008
252.215-7000	Pricing Adjustments	DEC 1991
252.222-7002	Compliance With Local Labor Laws (Overseas)	JUN 1997

252.223-7003	Changes In Place Of Performance--Ammunition And Explosives	DEC 1991
252.225-7041	Correspondence in English	JUN 1997
252.227-7013	Rights in Technical Data--Noncommercial Items	NOV 1995
252.227-7022	Government Rights (Unlimited)	MAR 1979
252.227-7023	Drawings and Other Data to become Property of Government	MAR 1979
252.227-7033	Rights in Shop Drawings	APR 1966
252.229-7000	Invoices Exclusive of Taxes or Duties	JUN 1997
252.231-7000	Supplemental Cost Principles	DEC 1991
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	MAR 2008
252.232-7008	Assignment of Claims (Overseas)	JUN 1997
252.232-7010	Levies on Contract Payments	DEC 2006
252.233-7001	Choice of Law (Overseas)	JUN 1997
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.247-7007	Liability and Insurance	DEC 1991
252.247-7023	Transportation of Supplies by Sea	MAY 2002
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000

CLAUSES INCORPORATED BY FULL TEXT

52.211-10 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 ready for use not later than 365 calendar days after ntp. * The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of $628.00 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall--

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (OCT 2003)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term “EFT” refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in the CCR database and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a financial institution properly recognized under an assignment of claims pursuant to subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(i) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

(End of Clause)

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least twenty-five (25) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

(1) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.

(2) If equipment costs have been allocated to a contract using predetermined rates , those charges will be adjusted to actual costs.

(3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.

(4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).

(5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.

(End of Clause)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

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

http://farsite.hill.af.mil

(End of clause)

252.225-7040 CONTRACTOR PERSONNEL AUTHORIZED TO ACCOMPANY U.S. ARMED FORCES DEPLOYED OUTSIDE THE UNITED STATES (JUL 2009)

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

Law of war means that part of international law that regulates the conduct of armed hostilities. The law of war encompasses all international law for the conduct of hostilities binding on the United States or its individual citizens, including treaties and international agreements to which the United States is a party, and applicable customary international law.

Subordinate joint force commander means a sub-unified commander or joint task force commander.

(b) General.

(1) This clause applies when Contractor personnel are authorized to accompany U.S. Armed Forces deployed outside the United States in--

(i) Contingency operations;

(ii) Humanitarian or peacekeeping operations; or

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

(2) Contract performance in support of U.S. Armed Forces deployed outside the United States 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 accompanying the U.S. Armed Forces.

(i) Except as provided in paragraph (b)(3)(ii) 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 such force reasonably appears necessary to execute their security mission to protect assets/persons, consistent with the terms and conditions contained in their contract or with their job description and terms of employment.

(iii) Unless immune from host nation jurisdiction by virtue of an international agreement or international law, inappropriate use of force by contractor personnel authorized to accompany the U.S. Armed Forces can subject such personnel to United States or host nation prosecution and civil liability (see paragraphs (d) and (j)(3) of this clause).

(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. (1)(i) The Combatant Commander will develop a security plan for protection of Contractor personnel in locations where there is not sufficient or legitimate civil authority, when the Combatant Commander decides it is in the interests of the Government to provide security because--

(A) The Contractor cannot obtain effective security services;

(B) Effective security services are unavailable at a reasonable cost; or

(C) Threat conditions necessitate security through military means.

(ii) The Contracting Officer shall include in the contract the level of protection to be provided to Contractor personnel.

(iii) In appropriate cases, the Combatant Commander may provide security through military means, commensurate with the level of security provided DoD civilians.

(2)(i) Generally, all Contractor personnel authorized to accompany the U.S. Armed Forces in the designated operational area are authorized to receive resuscitative care, stabilization, hospitalization at level III military treatment facilities, and assistance with patient movement in emergencies where loss of life, limb, or eyesight could occur. Hospitalization will be limited to stabilization and short-term medical treatment with an emphasis on return to duty or placement in the patient movement system.

(ii) When the Government provides medical treatment or transportation of Contractor personnel to a selected civilian facility, the Contractor shall ensure that the Government is reimbursed for any costs associated with such treatment or transportation.

(iii) Medical or dental care beyond this standard is not authorized unless specified elsewhere in this contract.

(3) Unless specified elsewhere in this contract, the Contractor is responsible for all other support required for its personnel engaged in the designated operational area under this contract.

(4) Contractor personnel must have a letter of authorization issued by the Contracting Officer in order to process through a deployment center or to travel to, from, or within the designated operational area. The letter of authorization also will identify any additional authorizations, privileges, or Government support that Contractor personnel are entitled to under this contract.

(d) Compliance with laws and regulations. (1) The Contractor shall comply with, and shall ensure that its personnel authorized to accompany U.S. Armed Forces deployed outside the United States as specified in paragraph (b)(1) of this clause are familiar with and comply with, all applicable--

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

(ii) Provisions of the law of war, as well as any other applicable treaties and international agreements;

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

(iv) Orders, directives, and instructions issued by the Combatant Commander, including those relating to force protection, security, health, safety, or relations and interaction with local nationals.

(2) The Contractor shall institute and implement an effective program to prevent violations of the law of war by its employees and subcontractors, including law of war training in accordance with paragraph (e)(1)(vii) of this clause.

(e) Pre-deployment requirements.

(1) The Contractor shall ensure that the following requirements are met prior to deploying personnel authorized to accompany U.S. Armed Forces. Specific requirements for each category may be specified in the statement of work or elsewhere in the contract.

(i) All required security and background checks are complete and acceptable.

(ii) All deploying personnel meet the minimum medical screening requirements and have received all required immunizations as specified in the contract. The Government will provide, at no cost to the Contractor, any theater-specific immunizations and/or medications not available to the general public.

(iii) Deploying personnel have all necessary passports, visas, and other documents required to enter and exit a designated operational area and have a Geneva Conventions identification card, or other appropriate DoD identity credential, from the deployment center. Any Common Access Card issued to deploying personnel shall contain the access permissions allowed by the letter of authorization issued in accordance with paragraph (c)(4) of this clause.

(iv) Special area, country, and theater clearance is obtained for personnel. Clearance requirements are in DoD Directive 4500.54, Official Temporary Duty Abroad, and DoD 4500.54-G, DoD Foreign Clearance Guide. Contractor personnel are considered non-DoD personnel traveling under DoD sponsorship.

(v) All personnel have received personal security training. At a minimum, the training shall--

(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, in accordance with DoD Instruction 1300.23, Isolated Personnel Training for DoD Civilian and Contractors.

(vii) Personnel have received law of war training as follows:

(A) Basic training is required for all Contractor personnel authorized to accompany U.S. Armed Forces deployed outside the United States. The basic training will be provided through--

(1) A military-run training center; or

(2) A Web-based source, if specified in the contract or approved by the Contracting Officer.

(B) Advanced training, commensurate with their duties and responsibilities, may be required for some Contractor personnel as specified in the contract.

(2) The Contractor shall notify all personnel who are not a host country national, or who are not ordinarily resident in the host country, that--

(i) 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 in accordance with the Military Extraterritorial Jurisdiction Act of 2000 (18 U.S.C. 3621, 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;

(iii) Other laws may provide for prosecution of U.S. nationals who commit offenses on the premises of U.S. diplomatic, consular, military or other U.S. Government missions outside the United States (18 U.S.C. 7(9)); and

(iv) In time of declared war or a contingency operation, Contractor personnel authorized to accompany U.S. Armed Forces in the field are subject to the jurisdiction of the Uniform Code of Military Justice under 10 U.S.C. 802(a)(10).

(f) Processing and departure points. Deployed Contractor personnel shall--

(1) Process through the deployment center designated in the contract, or as otherwise directed by the Contracting Officer, prior to deploying. The deployment center will conduct deployment processing to ensure visibility and accountability of Contractor personnel and to ensure that all deployment requirements are met, including the requirements specified in paragraph (e)(1) of this clause;

(2) Use the point of departure and transportation mode directed by the Contracting Officer; and

(3) Process through a Joint Reception Center (JRC) upon arrival at the deployed location. The JRC will validate personnel accountability, ensure that specific designated operational area entrance requirements are met, and brief Contractor personnel on theater-specific policies and procedures.

(g) Personnel data.

(1) The Contractor shall enter before deployment and maintain data for all Contractor personnel that are authorized to accompany U.S. Armed Forces deployed outside the United States as specified in paragraph (b)(1) of this clause. The Contractor shall use the Synchronized Predeployment and Operational Tracker (SPOT) web-based system, at http://www.dod.mil/bta/products/spot.html, to enter and maintain the data.

(2) The Contractor shall ensure that all employees in the database have a current DD Form 93, Record of Emergency Data Card, on file with both the Contractor and the designated Government official. The Contracting Officer will inform the Contractor of the Government official designated to receive this data card.

(h) Contractor personnel.

(1) The Contracting Officer may direct the Contractor, at its own expense, to remove and replace any Contractor personnel who jeopardize or interfere with mission accomplishment or 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 the Termination for Default clause.

(2) The Contractor shall have a plan on file showing how the Contractor would replace employees who are unavailable for deployment or who need to be replaced during deployment. The Contractor shall keep this plan current and shall provide a copy to the Contracting Officer upon request. The plan shall--

(i) Identify all personnel who are subject to military mobilization;

(ii) Detail how the position would be filled if the individual were mobilized; and

(iii) Identify all personnel who occupy a position that the Contracting Officer has designated as mission essential.

(3) Contractor personnel shall report to the Combatant Commander or a designee, or through other channels such as the military police, a judge advocate, or an inspector general, any suspected or alleged conduct for which there is credible information that such conduct--

(i) Constitutes violation of the law of war; or

(ii) Occurred during any other military operations and would constitute a violation of the law of war if it occurred during an armed conflict.

(i) Military clothing and protective equipment.

(1) Contractor personnel are prohibited from wearing military clothing unless specifically authorized in writing by the Combatant Commander. If authorized to wear military clothing, Contractor personnel must--

(i) Wear distinctive patches, arm bands, nametags, or headgear, in order to be distinguishable from military personnel, consistent with force protection measures; and

(ii) Carry the written authorization with them at all times.

(2) Contractor personnel may wear military-unique organizational clothing and individual equipment (OCIE) required for safety and security, such as ballistic, nuclear, biological, or chemical protective equipment.

(3) The deployment center, or the Combatant Commander, shall issue OCIE and shall provide training, if necessary, to ensure the safety and security of Contractor personnel.

(4) The Contractor shall ensure that all issued OCIE is returned to the point of issue, unless otherwise directed by the Contracting Officer.

(j) Weapons.

(1) If the Contractor requests that its personnel performing in the designated operational area be authorized to carry weapons, the request shall be made through the Contracting Officer to the Combatant Commander, in accordance with DoD Instruction 3020.41, paragraph 6.3.4.1 or, if the contract is for security services, paragraph 6.3.5.3. The

Combatant Commander will determine whether to authorize in-theater Contractor personnel to carry weapons and what weapons and ammunition will be allowed.

(2) If the Contracting Officer, subject to the approval of the Combatant Commander, authorizes the carrying of weapons--

(i) The Contracting Officer may authorize the Contractor to issue Contractor-owned weapons and ammunition to specified employees; or

(ii) The Contracting Officer's Representative may issue Government-furnished weapons and ammunition to the Contractor for issuance to specified Contractor employees.

(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; 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 18 U.S.C. 922; and

(iii) Adhere to all guidance and orders issued by the Combatant Commander regarding possession, use, safety, and accountability of weapons and ammunition.

(4) 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.

(5) Upon redeployment or revocation by the Combatant Commander of the Contractor's authorization to issue firearms, the Contractor shall ensure that all Government-issued weapons and unexpended ammunition are returned as directed by the Contracting Officer.

(k) Vehicle or equipment licenses. Contractor personnel shall possess the required licenses to operate all vehicles or equipment necessary to perform the contract in the designated operational area.

(l) Purchase of scarce goods and services. If the Combatant Commander has established an organization for the designated operational area whose function is to determine that certain items are scarce goods or services, the Contractor shall coordinate with that organization local purchases of goods and services designated as scarce, in accordance with instructions provided by the Contracting Officer.

(m) Evacuation.

(1) If the Combatant Commander orders a mandatory evacuation of some or all personnel, the Government will provide assistance, to the extent available, to United States and third country national Contractor personnel.

(2) In the event of a non-mandatory evacuation order, unless authorized in writing by the Contracting Officer, the Contractor shall maintain personnel on location sufficient to meet obligations under this contract.

(n) Next of kin notification and personnel recovery.

(1) The Contractor shall be responsible for notification of the employee-designated next of kin in the event an employee dies, requires evacuation due to an injury, or is isolated, missing, detained, captured, or abducted.

(2) In the case of isolated, missing, detained, captured, or abducted Contractor personnel, the Government will assist in personnel recovery actions in accordance with DoD Directive 3002.01E, Personnel Recovery in the Department of Defense.

(o) Mortuary affairs. Mortuary affairs for Contractor personnel who die while accompanying the U.S. Armed Forces will be handled in accordance with DoD Directive 1300.22, Mortuary Affairs Policy.

(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 the place of performance or Government-furnished facilities, equipment, material, services, or site. Any change order issued in accordance with this paragraph (p) 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 when subcontractor personnel are authorized to accompany U.S. Armed Forces deployed outside the United States in--

(1) Contingency operations;

(2) Humanitarian or peacekeeping operations; or

(3) Other military operations or military exercises, when designated by the Combatant Commander.

(End of clause)

252.225-7043 ANTITERRORISM/FORCE PROTECTION POLICY FOR DEFENSE CONTRACTORS OUTSIDE THE UNITED STATES (MAR 2006)

(a) Definition. United States, as used in this clause, means, the 50 States, the District of Columbia, and outlying areas.

(b) Except as provided in paragraph (c) of this clause, the Contractor and its subcontractors, if performing or traveling outside the United States under this contract, shall--

(1) Affiliate with the Overseas Security Advisory Council, if the Contractor or subcontractor is a U.S. entity;

(2) Ensure that Contractor and subcontractor personnel who are U.S. nationals and are in-country on a non-transitory basis, register with the U.S. Embassy, and that Contractor and subcontractor personnel who are third country nationals comply with any security related requirements of the Embassy of their nationality;

(3) Provide, to Contractor and subcontractor personnel, antiterrorism/force protection awareness information commensurate with that which the Department of Defense (DoD) provides to its military and civilian personnel and their families, to the extent such information can be made available prior to travel outside the United States; and

(4) Obtain and comply with the most current antiterrorism/force protection guidance for Contractor and subcontractor personnel.

(c) The requirements of this clause do not apply to any subcontractor that is--

(1) A foreign government;

(2) A representative of a foreign government; or

(3) A foreign corporation wholly owned by a foreign government.

(d) Information and guidance pertaining to DoD antiterrorism/force protection can be obtained from: HQDA-AT; telephone, DSN 222-9832 or commercial (703) 692-9832.

(End of clause)

252.225-7997 ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES RELATING TO ALLEGED CRIMES BY OR AGAINST CONTRACTOR PERSONNEL IN IRAQ AND AFGHANISTAN (DEVIATION)

(a) The Contractor shall report to the appropriate investigative authorities any alleged offenses under—

(1) The Uniform Code of Military Justice (chapter 47 of title 10, United States code) (applicable to contractors serving with or accompanying an armed force in the field during a declared war or a contingency operation); or

(2) The Military Extraterritorial Jurisdiction Act (chapter 212 of title 18, United States Code).

(b) The Contractor shall provide to all contractor personnel who will perform work on a contract in Iraq or Afghanistan, before beginning such work, information on the following:

(1) How and where to report an alleged crime described in paragraph (a) of this clause.

(2) Where to seek victim and witness protection and assistance available to contractor personnel in connection with an alleged offense described in paragraph (a) of this clause.

(End of clause)

252.229-7001 TAX RELIEF (JUN 1997)

(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: (Offeror Insert) RATE (PERCENTAGE): (Offeror Insert)

(b) 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)

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

See Appendix A & Appendix C

(End of clause)

JCC I/A CLAUSES

PAYMENT IN LOCAL CURRENCY (AFGHANISTAN) (OCT 2009)

This contract is awarded in U.S. Dollars. The contractor will receive payment in local currency. The currency exchange rate will be determined at the official exchange rate posted by the local DoD Finance office on the date of the payment in accordance with the Department of Defense Financial Management Regulation. Local currency payments are made via Electronic Funds Transfer. Local currency is defined as the currency of the receiving financial institution. Payments in cash are restricted to contracts where the vendor provides proof that an account at a bank accepting local EFT is unavailable.

JCC-I/A CLAUSE 952.222-0001

PROHIBITION AGAINST HUMAN TRAFFICKING, INHUMANE LIVING CONDITIONS, AND WITHHOLDING OF EMPLOYEE PASSPORTS (Aug 2009)

(a) All contractors ("contractors" refers to both prime contractors and all subcontractors at all tiers) are reminded of the prohibition contained in Title 18, United States Code, Section 1592, against knowingly destroying, concealing, removing, confiscating, or possessing any actual or purported passport or other immigration document, or any other actual or purported government identification document, of another person, to prevent or restrict or to attempt to prevent or restrict, without lawful authority, the person's liberty to move or travel, in order to maintain the labor or services of that person, when the person is or has been a victim of a severe form of trafficking in persons.

(b) Contractors are also required to comply with the following provisions:

(1) Contractors shall only hold employee passports and other identification documents discussed above for the shortest period of time reasonable for administrative processing purposes.

(2) Contractors shall provide all employees with a signed copy of their employment contract, in English as well as the employee's native language that defines the terms of their employment/compensation.

(3) Contractors shall not utilize unlicensed recruiting firms, or firms that charge illegal recruiting fees.

(4) Contractors shall be required to provide adequate living conditions (sanitation, health, safety, living space) for their employees. Fifty square feet is the minimum acceptable square footage of personal living space per employee. Upon contractor's written request, contracting officers may grant a waiver in writing in cases where the existing square footage is within 20% of the minimum, and the overall conditions are determined by the contracting officer to be acceptable. A copy of the waiver approval shall be maintained at the respective life support area.

(5) Contractors shall incorporate checks of life support areas to ensure compliance with the requirements of this Trafficking in Persons Prohibition into their Quality Control program, which will be reviewed within the Government's Quality Assurance process.

(6) Contractors shall comply with international laws regarding transit/exit/entry procedures, and the requirements for work visas. Contractors shall follow all Host Country entry and exit requirements, including requirements for visas and work permits.

(c) Contractors have an affirmative duty to advise the Contracting Officer if they learn of their employees violating the human trafficking and inhumane living conditions provisions contained herein. Contractors are advised that

contracting officers and/or their representatives will conduct random checks to ensure contractors and subcontractors at all tiers are adhering to the law on human trafficking, humane living conditions and withholding of passports.

(d) The contractor agrees to incorporate the substance of this clause, including this paragraph, in all subcontracts under his contract.

952.223-0001 – REPORTING KIDNAPPINGS, SERIOUS INJURIES AND DEATHS
JCC-I/A CLAUSE 952.223-0001
REPORTING KIDNAPPINGS, SERIOUS INJURIES AND DEATHS
(MAR 2009)

Contractors shall notify the Contracting Officer, as soon as practicable, whenever employee kidnappings, serious injuries or deaths occur.
Report the following information:
Contract Number
Contract Description & Location
Company Name
Reporting party:
Name
Phone number
e-mail address
Victim:
Name
Gender (Male/Female)
Age
Nationality
Country of permanent residence
Incident:
Description
Location
Date and time
Other Pertinent Information

JCC-I/A CLAUSE 952.225-0001
ARMING REQUIREMENTS AND PROCEDURES FOR
PERSONAL SECURITY SERVICES CONTRACTORS AND FOR REQUESTS FOR PERSONAL PROTECTION
(FEB 2010)

(a) ***General.*** Contractor and its subcontractors at all tiers that require arming under this contract agree to obey all laws, regulations, orders, and directives applicable to the use of private security personnel in Iraq and Afghanistan, including U.S. CENTCOM, United States Forces – Iraq (USF-I) and United States Forces – Afghanistan (USFOR-A) Commander orders, instructions and directives. Contractors will ensure that all employees, including employees at any tier of subcontracting relationships, who will seek individual authorization to be armed under the provisions of this contract (requests for blanket authorization for groups or organizations will not be approved), comply with the contents of this clause and with the requirements set forth in the following:

(1) DODI 3020.50, *Private Security Contractors (PSCs) Operating in Contingency Operations;*
(2) DODI 3020.41, *Program Management for Acquisition and Operational Contract Support in Contingency Operations*;
(3) DFARS 252.225-7040, *Contractor Personnel Supporting a Force Deployed Outside the United States*;
(4) Class Deviation 2007-O0010, Contractor Personnel in the United States Central Command Area of Responsibility
(5) USFOR-A, FRAGO 09-206, Outlines Management of Armed Contractors and Private Security Companies Operating in the Combined Joint Operating Area - Afghanistan (CJOA-A)
(6) USF-I OPORD 10-01, Annex C, Appendix 13
(7) U.S. CENTCOM Message, *USCENTCOM Policy and Delegation of Authority for Personal Protection and Contract Security Service Arming of DoD Civilian Personnel and Contractors for Iraq and Afghanistan*, dated 23 Dec 2005
(8) U.S. CENTCOM Message, *Modification to USCENTCOM Civilian and Contractor Arming Policy and Delegation of Authority for Iraq and Afghanistan*, dated 07 Nov 2006
(9) U.S. CENTCOM Message, *Modification 3 to USCENTCOM Civilian and Contractor Arming Policy and Delegation of Authority in Iraq and Afghanistan*, dated 09 Jun 2009

(b) ***Required Government Documentation.*** An O-6 or GS-15 (or above) from the unit requesting the contractor security shall provide a description of the following to the arming approval authority via the contracting officer representative (COR) in sponsoring each individual request for arming (under paragraph (c) below:

(1) The specific location where the PSC employee will operate;
(2) The persons and/or property that require protection;
(3) The anticipated threat;
(4) The requested weapon type(s), including serial number when possible;
(5) The reason current security/police forces are unable to provide adequate protection; and
(6) Verification, under paragraph (e) below, that background checks have been conducted and that no records were found of convictions or other acts that should be known to the arming authority.

(c) ***Required Contractor Documentation***. Contractors and their subcontractors at all tiers that require arming approval shall provide to the arming approval authority via the COR consistent documentation (signed and dated by the employee and employer as applicable) for each of their employees who will seek authorization to be armed under the contract as follows:

(1) Weapons Qualification/Familiarization. All employees must meet the weapons qualification requirements on the requested weapon(s) established by any DoD or other U.S. government agency, Law of Armed Conflict (LOAC); Rules for the Use of Force (RUF), as defined in the U.S. CENTCOM Policy, dated 23 December 2005; and distinction between the above-prescribed RUF and the Rules of Engagement (ROE), which are applicable only to military forces.

(2) Completed DD Form 2760 (or equivalent documentation) for each armed employee, indicating that the employee is not otherwise prohibited under U.S. law from possessing the required weapon or ammunition.

(3) Written acknowledgement by the individual of the fulfillment of training responsibilities and the conditions for the authorization to carry firearms. This document includes the acknowledgement of the distinctions between the ROE applicable to military forces and RUF that control the use of weapons by DoD civilians, DoD contractors and PSCs.

(4) Written acknowledgement signed by both the armed employee and by a representative of the employing company that use of weapons could subject both the individual and company to U.S. and host nation prosecution and civil liability.

(5) A copy of the contract between the contractor's company and the U.S. Government that verifies the individual's employment and addresses the need to be armed.

(6) One (1) copy of a business license from the Iraqi or Afghani Ministry of Trade or Interior;

(7) One (1) copy of a license to operate as a PSC (or a temporary operating license) from the Ministry of Interior;

(d) The contractor will submit to the COR a communications plan that, at a minimum, sets forth the following:

(1) The contractor's method of notifying military forces and requesting assistance where hostilities arise, combat action is needed or serious incidents have been observed;

(2) How relevant threat information will be shared between contractor security personnel and U.S. military forces; and

(3) How the contractor will coordinate transportation with appropriate military authorities.

(e) Prior to requesting arming approval, the contractor will submit to the COR an acceptable plan for accomplishing background checks on all contractor and subcontractor employees who will be armed under the contract. The contractor shall, at a minimum, perform the following (which will be specifically addressed in its plan and which will be documented and furnished to the COR upon completion):

(1) Use one or more of the following sources when conducting the background checks: Interpol, FBI, Country of Origin Criminal Records, Country of Origin U.S. Embassy Information Request, CIA records, and/or any other records available;

(2) Verify with USF-I or USFOR-A, as applicable, that no employee has been barred by any commander within Iraq or Afghanistan; and

(3) All local nationals and third country nationals will voluntarily submit to full biometric enrollment in accordance with theater biometric policies within 60 days of their arming request. While biometric collection and screening is voluntary, CORs will immediately notify the arming approval authority of any individuals who do not meet this requirement and any arming authorization will be revoked until all requirements are met.

(f) ***Penalties for Non-Compliance.*** Failure of contractor or subcontractor employee(s) to comply with the laws, regulations, orders, and rules (including those specified herein) governing the use of force, training, arming authorization, and incident reporting requirements may result in the revocation of weapons authorization for such employee(s). Where appropriate, such failure may also result in the total revocation of weapons authorization for the contractor (or subcontractor) and sanctions under the contract, including termination.

(g) ***Criminal and Civil Liability.*** Arming of contractor or subcontractor employees under this contract may subject the contractor, its subcontractors, and persons employed by the same, to the civil and criminal jurisdiction of the

U.S. and Host Nation. "Host Nation" refers to the nation or nations where services under this contract are performed.

(h) ***Lapses in Training or Authorization.*** Failure to successfully retrain an employee who has been properly authorized to be armed under this contract within twelve (12) months of the last training date will constitute a lapse in the employee's authorization to possess and carry the weapon. All unauthorized employees will immediately surrender their weapon and authorization letter to the contractor and will remain unarmed until such time as they are retrained and newly approved by the arming authority. Additionally, the arming authority's authorization letter is valid for a maximum of twelve (12) months from the date of the prior letter (unless authorization is earlier invalidated by a lapse in training).

(i) ***Authorized Weapon & Ammunition Types***. Unless DCDRUSCENTCOM (or a designee) expressly provides otherwise, all arming requests and authorizations for contractor or subcontractor employees under this contract shall be limited to U.S. Government-approved weapons and ammunition. Notwithstanding Host Nation laws or regulations that would allow use of heavier weapons by contract security/PSC, all DoD security service / PSC contractors must have weapons approved by DCDRUSCENTCOM (or a designee) before use. This restriction applies to all weapons in the possession of contractor employees, even if such weapons are required for personal protection. The following weapons and ammunition are currently authorized by the U.S. Government for use in Iraq and Afghanistan:

(1) The M9, M4, M16, or equivalent (e.g. .45 CAL, AK-47).
(2) The M9 or equivalent sidearm will be the standard personal protection weapon unless other weapons are specifically requested and approved.
(3) U.S. government Ball ammunition is the standard approved ammunition.

(j) ***Requirements for Individual Weapons Possession***. All employees of the contractor and its subcontractors at all tiers who are authorized to be armed under this contract must:

(1) Possess only those U.S. Government-approved weapons and ammunition for which they are qualified under the training requirements of section (c) and subsequently authorized to carry;
(2) Carry weapons only when on duty or at a specific post (according to their authorization);
(3) Not conceal any weapons, unless specifically authorized;
(4) Carry proof of authorization to be armed. Employees not possessing such proof will be deemed unauthorized and must surrender their weapon to their employer; and
(5) IAW USCENTCOM G.O. #1, consumption of alcohol in Iraq or Afghanistan is prohibited. In the event of a suspension or an exception to G.O. #1, employees shall not consume any alcoholic beverage while armed or within eight (8) hours of the next work period when they will be armed. There are no circumstances under which a person will be authorized to consume any alcoholic beverage when armed for personal protection.

(k) ***Weapons/Equipment Restrictions and Responsibilities.*** Unless otherwise provided, the U.S. Government will not provide any weapons or ammunition to contractors, their subcontractors, or any employees of the same. The Contractor will provide all weapons and ammunition to those employees that will be armed under the contract. The contractor and its subcontractors at all tiers will also provide interceptor body armor, ballistic helmets, and the Nuclear, Biological, and Chemical (NBC) protective masks to those employees that require such equipment in the performance of their duties.

(l) ***Rules for the Use of Force (RUF).*** In addition to the RUF and ROE training referenced in paragraph (c), the contractor and its subcontractors at all tiers will monitor and report all activities of its armed employees that may

violate the RUF and/or otherwise trigger reporting requirements as serious incidents. Prompt reporting demonstrates a desire by the contractor and its subcontractors to minimize the impact of any violations and, therefore, will be given favorable consideration. Violations of the RUF include, though are not limited to:

(1) Taking a direct part in hostilities or combat actions, other than to exercise self-defense;
(2) Failing to cooperate with Coalition and Host Nation forces;
(3) Using deadly force, other than in self-defense where there is a reasonable belief of imminent risk of death or serious bodily harm;
(4) Failing to use a graduated force approach;
(5) Failing to treat the local civilians with humanity or respect; and
(6) Detaining local civilians, other than in self-defense or as reflected in the contract terms.

(m) ***Retention and Review of Records***. The Contractor and all subcontractors at all tiers shall maintain records on weapons training, LOAC, RUF and the screening of employees for at least six (6) months following the expiration (or termination) of the contract. The Contractor and its subcontractors at all tiers shall make these records available to the Contracting Officer or designated representative, at no additional cost to the government, within 72 hours of a request.

(n) ***Contractor Vehicles.*** Vehicles used by contractor and subcontractor personnel in the course of their security duties shall not be painted or marked to resemble U.S./Coalition or host nation military and police force vehicles.

(o) ***Quarterly Reporting.*** The prime contractor will report quarterly (i.e. NLT 1 January, 1 April, 1 July and 1 October for each quarter of the calendar year) to the Contracting Officer responsible for this contract, and any other organization designated by the Contracting Officer, the following information under this contract:

(1) The total number of armed civilians and contractors;
(2) The names and contact information of its subcontractors at all tiers; and
(3) A general assessment of the threat conditions, adequacy of force numbers, and any problems that might require a change to force levels. Note: this information is in addition to the information the contractor promises to immediately provide under the communications plan referenced at paragraph (d).

(End)

JCC-I/A CLAUSE 952.225-0002
ARMED PERSONNEL INCIDENT REPORTS
(JAN 2010)

(a) All contractors and subcontractors in the United States Forces-Iraq (USF-I) or United States Forces-Afghanistan (USFOR-A) theater of operations shall comply with and shall ensure that their personnel supporting USF-I or USFOR-A forces are familiar with and comply with all applicable orders, directives, and instructions issued by the respective USF-I or USFOR-A Commanders relating to force protection and safety.

(b) **IRAQ**: Contractors shall provide all incidents and use of weapons firing incidents to the USF-I Contractor Operations Cell (CONOC) as soon as practical, based upon the situation, and submit a written report to CONOC within 4 hours. The initial report shall include the name of the company, location of the incident, time when the incident occurred, a brief description of the events leading up to the incident, and a company point of contact. A follow-up, comprehensive written report shall be provided to the CONOC within 96 hours of the incident. Reports

shall be submitted to CONOC at: mncic3conoc@iraq.centcom.mil;, DSN 318-435-2369; Iraqna 0044 203 286 9851 or 0044 203 239 5894; or Skype: MNCICONOC.

(c) **AFGHANISTAN**: Contractors shall immediately report all incidents and use of weapons through their Contracting Officers Representative (CORs) who will notify the Contracting Officer. Contracting Officers are responsible to notify the PARC-A Chief of Operations and the JOC @ USFOR-A (JOC SHIFT DIRECTOR, DSN: 318-237-1761) Information should include: the name of the company, where the incident occurred, time when the incident occurred, a brief description of the events leading up to the incident, and a point of contact for the company. The PARC-A Chief of Operations in coordination with the JOC will issue guidance for further reporting requirements.

(d) Contractors shall provide first aid and request MEDEVAC of injured persons, and remain available for U.S. or Coalition response forces, based upon the situation. In the event contractor personnel are detained by U.S. or Coalition Forces, prolonged detention due to lack of proper identification can be alleviated by contractor personnel possessing on their person information that includes the contractor's name, the contract number, a contractor management POC, and the phone number of the CONOC/JOC Watch.

(End)

JCC-I/A CLAUSE 952.225-0003
FITNESS FOR DUTY AND MEDICAL/DENTAL CARE LIMITATIONS
(JAN 2010)

(a) The contractor shall perform the requirements of this contract notwithstanding the fitness for duty of deployed employees, the provisions for care offered under this section, and redeployment of individuals determined to be unfit. The contractor bears the responsibility for ensuring all employees are aware of the conditions and medical treatment available at the performance location. The contractor shall include this information and requirement in all subcontracts with performance in the theater of operations.

(b) The contractor shall not deploy an individual with any of the following conditions unless approved by the appropriate CENTCOM Service Component (ie. ARCENT, AFCENT, etc.) Surgeon: Conditions which prevent the wear of personal protective equipment, including protective mask, ballistic helmet, body armor, and chemical/biological protective garments; conditions which prohibit required theater immunizations or medications; conditions or current medical treatment or medications that contraindicate or preclude the use of chemical and biological protective's and antidotes; diabetes mellitus, Type I or II, on pharmacological therapy; symptomatic coronary artery disease, or with myocardial infarction within one year prior to deployment, or within six months of coronary artery bypass graft, coronary artery angioplasty, or stenting; morbid obesity (BMI >/= 40); dysrhythmias or arrhythmias, either symptomatic or requiring medical or electrophysiological control; uncontrolled hypertension, current heart failure, or automatic implantable defibrillator; therapeutic anticoagulation; malignancy, newly diagnosed or under current treatment, or recently diagnosed/treated and requiring frequent subspecialist surveillance, examination, and/or laboratory testing; dental or oral conditions requiring or likely to require urgent dental care within six months' time, active orthodontic care, conditions requiring prosthodontic care, conditions with immediate restorative dentistry needs, conditions with a current requirement for oral-maxillofacial surgery; new onset (< 1 year) seizure disorder, or seizure within one year prior to deployment; history of heat stroke; Meniere's Disease or other vertiginous/motion sickness disorder, unless well controlled on medications available in theater; recurrent syncope, ataxias, new diagnosis (< 1year) of mood disorder, thought disorder, anxiety, somatoform, or dissociative disorder, or personality disorder with mood or thought manifestations; unrepaired hernia; tracheostomy or aphonia;

renalithiasis, current; active tuberculosis; pregnancy; unclosed surgical defect, such as external fixeter placement; requirement for medical devices using AC power; HIV antibody positivity; psychotic and bipolar disorders. (Reference: Mod 8 to USCENTCOM Individual Protection and Individual/Unit Deployment Policy, PPG-Tab A: Amplification of the Minimal Standards of Fitness for Deployment to the CENTCOM AOR).

(c) In accordance with military directives (DoDI 3020.41, DoDI 6000.11, CFC FRAGO 09-1038, DoD PGI 225.74), resuscitative care, stabilization, hospitalization at Level III (emergency) military treatment facilities and assistance with patient movement in emergencies where loss of life, limb or eyesight could occur will be provided. Hospitalization will be limited to emergency stabilization and short-term medical treatment with an emphasis on return to duty or placement in the patient movement system. Subject to availability at the time of need, a medical treatment facility may provide reimbursable treatment for emergency medical or dental care such as broken bones, lacerations, broken teeth or lost fillings.

(d) Routine and primary medical care is not authorized. Pharmaceutical services are not authorized for routine or known, routine prescription drug needs of the individual. Routine dental care, examinations and cleanings are not authorized.

(e) Notwithstanding any other provision of the contract, the contractor shall be liable for any and all medically-related services or transportation rendered. In accordance with OUSD(C) Memorandum dated 4 June 2008, the following reimbursement rates will be charged for services at all DoD deployed medical facilities. These rates are in effect until changed by DoD direction.

(1) Inpatient daily rate: $2,041.00. Date of discharge is not billed unless the patient is admitted to the hospital and discharged the same day.

(2) Outpatient visit rate: $195.00. This includes diagnostic imaging, laboratory, pathology, and pharmacy provided at the medical facility.

(End)

JCC-I/A CLAUSE 952.225-0004
COMPLIANCE WITH LAWS AND REGULATIONS
(JAN 2010)

(a) The Contractor shall comply with, and shall ensure that its employees and its subcontractors and their employees, at all tiers, are aware of and obey all U.S. and Host Nation laws, Federal or DoD regulations, and Central Command orders and directives applicable to personnel in Iraq and Afghanistan, including but not limited to USCENTCOM, Multi-National Force and Multi-National Corps operations and fragmentary orders, instructions, policies and directives.

(b) Contractor employees shall particularly note all laws, regulations, policies, and orders restricting authority to carry firearms, rules for the use of force, and prohibiting sexual or aggravated assault. Contractor employees are subject to General Orders Number 1, as modified from time to time, including without limitation, their prohibition on privately owned firearms, alcohol, drugs, war souvenirs, pornography and photographing detainees, human casualties or military security measures.

(c) Contractor employees may be ordered removed from secure military installations or the theater of operations by order of the senior military commander of the battle space for acts that disrupt good order and discipline or violate applicable laws, regulations, orders, instructions, policies, or directives. Contractors shall immediately comply with any such order to remove its contractor employee.

(d) Contractor employees performing in the USCENTCOM Area of Responsibility (AOR) may be subject to the jurisdiction of overlapping criminal codes, including, but not limited to, the Military Extraterritorial Jurisdiction Act (18 U.S.C. Sec. 3261, et al) (MEJA), the Uniform Code of Military Justice (10 U.S.C. Sec. 801, et al)(UCMJ), and the laws of the Host Nation. Non-US citizens may also be subject to the laws of their home country while performing in the USCENTCOM AOR. Contractor employee status in these overlapping criminal jurisdictions may be modified from time to time by the United States, the Host Nation, or by applicable status of forces agreements.

(e) Under MEJA, a person who engages in felony misconduct outside the United States while employed by or accompanying the Armed Forces is subject to arrest, removal and prosecution in United States federal courts. Under the UCMJ, a person serving with or accompanying the Armed Forces in the field during a declared war or contingency operation may be disciplined for a criminal offense, including by referral of charges to a General Court Martial. Contractor employees may be ordered into confinement or placed under conditions that restrict movement within the AOR or administratively attached to a military command pending resolution of a criminal investigation.

(f) Contractors shall immediately notify military law enforcement and the Contracting Officer if they suspect an employee has committed an offense. Contractors shall take any and all reasonable and necessary measures to secure the presence of an employee suspected of a serious felony offense. Contractors shall not knowingly facilitate the departure of an employee suspected of a serious felony offense or violating the Rules for the Use of Force to depart Iraq or Afghanistan without approval from the senior U.S. commander in the country.

(End)

952.225-0005 – MONTHLY CONTRACTOR CENSUS REPORTING

JCC-I/A CLAUSE 952.225-0005
MONTHLY CONTRACTOR CENSUS REPORTING (MAR 2009)

Contractor shall provide monthly employee census information to the Contracting Officer, by province, for this contract. Information shall be submitted either electronically or by hard-copy. Information shall be current as of the 25th day of each month and received by the Contracting Officer no later than the first day of the following month. The following information shall be provided for each province in which work was performed:

(1) The total number (prime and subcontractors at all tiers) employees.
(2) The total number (prime and subcontractors at all tiers) of U.S. citizens.
(3) The total number (prime and subcontractors at all tiers) of local nationals (LN).
(4) The total number (prime and subcontractors at all tiers) of third-country nationals (TCN).
(5) Name of province in which the work was performed.
(6) The names of all company employees who enter and update employee data in the Synchronized Predeployment & Operational Tracker (SPOT) IAW DFARS 252.225-7040 or DFARS DOD class deviation 2007-O0010.

JCC-I/A CLAUSE 952.225-0013
CONTRACTOR HEALTH AND SAFETY
(FEB 2010)

(a) Contractors shall comply with all National Electrical Code (NEC 2008), Specifications as outlined, and MIL Standards and Regulations. All infrastructure to include, but not limited to, living quarters, showers, and restrooms shall be installed and maintained in compliance with these standards and must be properly supported and staffed to ensure perpetual Code compliance, prevent hazards and to quickly correct any hazards to maximize safety of those who use or work at the infrastructure (NEC Table 352.20). Specifically, the use of magnetic ballasts in lighting for new construction or replacement of existing magnetic ballasts during refurbishment, alterations or upgrades with new magnetic ballasts is prohibited. The government has the authority to enter and inspect contractor employee living quarters at any time to ensure the prime contractor is complying with safety compliance standards outlined in the 2008 National Electric Code (NEC).

(b) The contractor shall correct all deficiencies within a reasonable amount of time of contractor becoming aware of the deficiency either by notice from the government or a third party, or discovery by the contractor. Further guidance on mandatory compliance with NFPA 70: NEC 2008 can be found on the following link http://www.nfpa.org.

(End)

JCC-I/A CLAUSE 952.236-0001
ELECTRICAL AND STRUCTURAL BUILDING STANDARDS FOR CONSTRUCTION PROJECTS
(FEB 2010)

(a) The standards set forth herein are the minimum requirements for the contract. These standards must be followed unless a more stringent standard is specifically included. In such case the most stringent standard shall be required for contract acceptance.

(b) The contractor, in coordination with the Contracting Officer, Base Camp Mayor, Base/Unit Engineers, and requiring activity shall evaluate, upgrade, build, and/or refurbish buildings to a safe and livable condition. This work may include refurbishment, construction, alterations, and upgrades. All work shall be in accordance with accepted standards of quality.

(c) As dictated by the Unified Facilities Criteria (UFC) the contract shall meet:

(1) “the minimum requirements of United States’ National Fire Protection Association (NFPA) 70,
(2) 2008 National Electrical Code (NEC),
(3) American National Standards Institute (ANSI) C2, and
(4) United States’ National Electrical Safety Code (NESC).

(d) These standards must be met when it is reasonable to do so with available materials. When conditions dictate deviation, then provisions within the International Electrical Code (IEC) or British Standard (BS 7671) shall be followed. Any deviations from the above necessary to reflect market conditions, shall receive prior written approval from a qualified engineer and the Contracting Officer.

(e) The use of magnetic ballasts in lighting for new construction or replacement of existing magnetic ballasts during refurbishment, alterations, or upgrades with new magnetic ballasts is prohibited.

(f) The following internet links provide access to some of these standards:

UFC: http://65.204.17.188/report/doc_ufc.html
NFPA 70: http://www.nfpa.org
NESC: http://www.standards.ieee.org/nesc

(End)

CONTRACTOR PERSONNEL IN THE UNITED STATES CENTRAL COMMAND AREA OF RESPONSIBILITY (DEVIATION 2007-O0010)

(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.

(b) *General.* (1) This clause applies when contractor personnel are required to perform in the United States Central Command (USCENTCOM) Area of Responsibility (AOR), and are not covered by the clause at DFARS 252.225-7040, Contractor Personnel Authorized to Accompany U.S. Armed Forces Deployed Outside the United States.

(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 USCENTCOM AOR 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 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 USCENTCOM AOR, 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 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 local national or ordinarily resident in the host country that—
(i) 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 violation of the law of war when committed by a civilian national of the United States;

(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 Government missions outside the United States (18 U.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 USCENTCOM AOR 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) The Contractor shall enter, before deployment, or if already in the USCENTCOM AOR, enter upon becoming an employee under this contract, and maintain current data, including departure date, for all

contractor personnel, including U.S. citizens, U.S. legal aliens, third country nationals, and local national contractor personnel, who are performing this contract in the USCENTCOM AOR. This requirement excludes—

- Personnel hired under contracts for which the period of performance is less than 30 days; and
- Embarked contractor personnel, while afloat, that are tracked by the Diary Message Reporting System.

(2) The automated web-based system to use for this effort is the Synchronized Predeployment and Operational Tracker (SPOT). Follow these steps to register in and use SPOT:

(i) SPOT registration can be accomplished by either a Common Access Card or through an Army Knowledge Online (AKO) account.

(ii) In order to obtain an AKO account, the Contractor shall—

(A) Request the Contracting Officer or other Government point of contract to sponsor its AKO guest account;

(B) Go to http://www.us.army.mil;

(C) Enter the AKO sponsor username; and

(D) After AKO registration, contact the sponsor to confirm registration.

(iii) *Registration in SPOT.*

(A) Register for a SPOT account at https://iel.kc.us.army.mil/spotregistration/.

(B) The customer support team must validate user need. This process may take 2 business days. Company supervisors will be contacted to determine the appropriate level of user access.

(iv) *Access to SPOT.* Upon approval, all users will access SPOT at https://iel.kc.us.army.mil/spotracker.

(v) *SPOT Questions*. Refer SPOT application assistance questions to the Customer Support Team at 717-506-1358 or SPOT@technisource.com.

(3) The Contractor shall ensure that all employees in the database have a current DD Form 93, Record of Emergency Data Card, on file with both the Contractor and the designated Government official. The Contracting Officer will inform the Contractor of the Government official designated to receive the data card.

(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, 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 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; and

(C) In compliance with applicable Department of Defense and agency policies, agreements, rules, regulations, and other applicable law;

(ii) Are not barred from possession of a firearm by 18 U.S.C. 922; and

(iii) Adhere to all guidance and orders issued by the Combatant Commander 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, arm bands, 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*. In the case of isolated, missing, detained, captured or abducted contractor personnel, the Government will assist in personnel recovery actions 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 in accordance with DoD Directive 1300.22, Mortuary Affairs Policy.

(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 in the USCENTCOM AOR.

(End)

252.225-7997 ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES RELATING TO ALLEGED CRIMES BY OR AGAINST CONTRACTOR PERSONNEL IN IRAQ AND AFGHANISTAN (DEVIATION) (DEC 2009)

(a) The Contractor shall report to the appropriate investigative authorities any alleged offenses under--

(1) The Uniform Code of Military Justice (chapter 47 of title 10, United States Code) (applicable to contractors serving with or accompanying an armed force in the field during a declared war or a contingency operation); or

(2) The Military Extraterritorial Jurisdiction Act (chapter 212 of title 18, United States Code).

(b) The Contractor shall provide to all contractor personnel who will perform work on a contract in Iraq or Afghanistan, before beginning such work, information on the following:

(1) How and where to report an alleged crime described in paragraph (a) of this clause.

(2) Where to seek victim and witness protection and assistance available to contractor personnel in connection with an alleged offense described in paragraph (a) of this clause.

(End of clause.)

ATTACHMENTS

Section	Title
00110	Technical Evaluation Requirements
00120	Proposal Evaluation and Contract Award
00150	The Site Adapt Process
00555	Design Concept Documents
01010	Scope of Work
01015	Technical Requirements
01040	Security
01060	Special Requirements
01060a	Ministry of Interior Sign
01060b	Clearance Request Requirements Checklist
01065	Afghan Capacity Development
01312	Quality Control System
01321	Network Analysis Schedule
01321a	Appendix to Section 01321
01335	Submittal Procedures for Site-Adapt Projects
01335a	Attachments AED
01355	Environmental Protection (ANSF Version)
01415	Metric Measurements
01451	Contractor Quality Control
01525	Safety and Occupational Health Requirements
01770	Closeout Procedures
01780A	Closeout Submittals
01781	Operation and Maintenance Data
APPENDIX A	1 Story UP District HQs Drawings
APPENDIX B	ANP Technical Specification
APPENDIX C	20M Water Tower Design
APPENDIX D	Site Assessment Report

SECTION 00110
INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS

LOWEST PRICED TECHNICALLY ACCEPTABLE (LPTA)

1. DEFINITION

This solicitation is for a firm fixed price type contract to acquire: ANP UP Dist HQ Goshta, Nangarhar, Afghanistan

This work includes, but is not limited to, management, planning, design, material, labor, and equipment, to site adapt and construct all utilities, vehicular access, buildings, force protection measures, site security, de-mining activities, and other features as referenced herein.

When the word 'Offeror' is encountered throughout this Section 00110, it is intended to mean a company or Joint Venture seeking to do business with the Government that submits a proposal in response to this solicitation.

A proposal is documentation prepared by the Offeror and submitted to the Government for evaluation purposes in response to this solicitation.

When the word 'Government' is encountered throughout this Section 00110, it is intended to mean U.S. Army Corps of Engineers Afghanistan District-North (AED-N).

Proposals for this solicitation will be accepted until the date and time indicated on Standard Form 1442. Perspective Offerors should submit inquiries related to this solicitation only by e-mail to:

E-MAIL ADDRESS: **martha.l.jackson@usace.army.mil**

Include the solicitation number, and project title with any questions/clarifications. Written questions must be received by this office not later than 4 calendar days prior to the date set for receipt of offers. TELEPHONE INQUIRIES WILL NOT BE ACCEPTED.

Oral explanations or instructions are not binding. Any information given to an Offeror which impacts the solicitation and/or offer will be given in the form of a written amendment to the solicitation.

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

2. DIRECTIONS FOR SUBMITTING PROPOSALS

Offers must be in sealed envelopes/packages, marked and addressed as follows:
MARK PACKAGES:

Solicitation No. W5J9JE-10-R-0083

Offer Closing Date: 9 June 2010

Offer Closing Time: 3:00 p.m. (LOCAL KABUL TIME)

ADDRESS PACKAGES TO:

U.S. Army Corps of Engineers (USACE)
Afghanistan Engineer District-North (AED-N)
Qalaa House, Attention: Martha Jackson
Kabul, Afghanistan

Special Instructions Pertaining to Hand Carried Offers: Hand-carried offers must be delivered to the USACE AED office, Qalaa House, Kabul, Afghanistan. Offerors who desire to hand-deliver their offers must give properly marked package(s) to the guard at the entrance gate to Qalaa House Compound no later than the time specified above (hand receipts provided upon request).

PROPOSALS SUBMITTED AFTER THE DATE AND TIMES ESTABLISHED FOR SUBMISSION OF PROPOSALS WILL NOT BE EVALUATED.

3. PREPROPOSAL CONFERENCE / SITE VISIT

A Pre-proposal Conference was held at Qalaa House in Kabul. The conference slides and information are located on the AEN website at http://www.aed.usace.army.mil/contracting2010.asp

An organized site visit will not be held. Vendors may visit the site on their own schedule and at their own risk.

IMPORTANT NOTES. (1) Remarks and explanations addressed during the conference shall not qualify or alter the terms and conditions of the solicitation. (2) The terms and conditions of the solicitation remain unchanged unless the solicitation is formally amended in writing by the Contracting Officer.

4. ELECTRONIC OFFERS

FAXED PROPOSALS, MODIFICATIONS THERETO, OR CANCELLATIONS WILL NOT BE ACCEPTED. However, proposals may be withdrawn in writing by letter or e-mail. Any written notice to withdraw an offer sent to this office must be received in the office

designated in the Request for Proposal (RFP) for receipt of offers not later than the exact date and time set for receipt of proposals.

5. PROPOSALS SHALL BE SUBMITTED IN THE FOLLOWING FORMAT:

Proposal Package	Original	Copies
VOLUME 1 – Technical Proposal	**1**	**3**

FACTOR 1 – Experience

FACTOR 2 – Key Personnel

FACT OR 3 - Security

FACTOR 4 – Past Performance

FACTOR 5 – Afghan Capacity Development

Volume 1 shall also include the following:

- Letters of Commitments for Subcontractors (if applicable)
- Joint Venture Agreement (if applicable)

	Original	Copies
VOLUME 2 – Price Proposal and Administrative Submission	**1**	**0**

FACTOR 6 – Price Proposal

Volume 2 shall also include the following:

- Signed offer, Standard Form 1442
- Pricing Schedule
- Representation and Certifications, Section 00600
- All Amendments, signed and dated
- Offeror's e-mail address and cell phone number
- Name, Address, DUNS, CAGE and TAX Identification Number of the Contractor submitting the proposal

Failure to submit these documents may result in rejection of the proposal. The Government will not make assumptions concerning intent, capabilities, or experience. Clear identification of proposal details shall be the sole responsibility of the Offeror. The Government will reject incomplete proposals after initial evaluation without further consideration. Therefore the proposal shall meet the following basic requirements identified in paragraph 6:

6. PROPOSAL SUBMISSION REQUIREMENTS AND INSTRUCTIONS

a. REQUIREMENT FOR SEPARATE TECHNICAL AND PRICE PROPOSALS. DO NOT MIX CONTENTS OF VOLUME 1 (Technical) AND VOLUME 2 (Price) IN THE SAME BINDER.

(1) The Proposal shall be typed and submitted in English, and easy to read.

(2) Each Offeror must submit a Technical Proposal and a Price Proposal. The Technical Proposal and the Price Proposal must be submitted as separate volumes. Both the Technical and price proposal shall contain page numbers.

The outside of each separate volume (Vol 1 – Technical; Vol 2 – Price) must be clearly marked to indicate its contents; and the identity of the Offeror. Additionally, identify the "original" Technical proposal and the "original" cost/price proposal on the outside cover.

(3) Both the Technical Proposal and the Price Proposal must be received by the closing date and time set for receipt of proposals.

(4) Pricing Schedule, Vol 2, shall be completed in full

(5) Do not include any dollar amounts from the Price Proposal in the Technical Proposal.

(6) All information intended to be evaluated as part of the Technical Proposal must be submitted as part of the Technical Proposal. Do not cross-reference similar material in the Price Proposal, or vice versa. Also, do not include links to websites in your proposal.

(7) Do not include exceptions to the terms and conditions of the solicitation in either the technical or price proposal. Should the Offeror include terms and conditions that conflict with the terms and conditions of the Solicitation, the offer may be determined "unacceptable" and thus ineligible for award. Any questions related to specific terms and conditions contained within the Solicitation should be resolved prior to submission of the offer. Notwithstanding the above, the Offeror must clearly describe in the Proposal Cover Sheet submitted with the Price Proposal any exceptions to the contractual and/or technical terms and conditions of the solicitation contained in the Offer.

(8) Failure to submit required documents or failing to complete them properly may result in rejection of the offer without further evaluation. Therefore, Offerors are urged to follow instructions and speak with the Contracting Officer if they do not understand any part of the Solicitation.

b. DISCUSSIONS. The Government intends to evaluate proposals and award a contract without discussions with Offerors. Therefore, the Offeror's initial proposal should contain the Offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition

can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient completion among the most highly rated proposals.

c. GENERAL INSTRUCTIONS.

(1) Submit only the hard-copy paper documents specifically authorized and/or required elsewhere in this section. Do not submit excess information, to include audio-visual materials, electronic media, etc.

(2) Use only 8 ½ by 11 inch paper or A4 paper for hard copy submissions, unless another paper size is specifically authorized elsewhere in this section for a particular submission. Do not use fold-outs (e.g., 11" x 14" or 11" x 17" sheets). Do not use a font size smaller than 10, an unusual font style such as script, or condensed print for any submission. All page margins must be at least 1 inch wide, but may include headers and footers. All pages must be numbered.

(3) The preferred method for assembling your proposals is to use three-ring binders; however, the use of pressboard or other report covers with compression or other type fasteners is acceptable. Do not use spring clamps or exceed the recommended capacity of the fastener or binder. Do not use plastic multi-hole/spiral binding systems, heat binding systems, or other systems which do not facilitate the ready insertion of additional pages. Do not include loose papers.

(4) "Confidential" projects cannot be submitted to demonstrate capability unless all of the information required for evaluation as specified herein can be provided to the Government as part of the Offeror's technical proposal. Offerors that include in their proposals information they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, must be clearly marked in accordance with the instructions at FAR 52.215-1, "Instructions to Offerors—Competitive Acquisition", paragraph (e), "Restriction on disclosure and use of data".

(5) In the case of an Offeror that is part of a large, multi-segmented business concern, provide information directly pertaining to the specific segment of the business concern (i.e., the division, group, unit, etc.) that will perform work under the prospective contract.

(6) For submissions with page limitations, the pages will be counted as follows: One side of the paper is one page; information on both the back and front of one sheet of paper will be counted as two pages. Pages furnished for organizational purposes only, such as a "Table of Contents" or divider tabs, are not included in the page limitation.

7. JOINT VENTURES

Each company that is part of a Joint Venture must submit a legally binding joint venture agreement with their Technical Proposal. The Government will not evaluate the capability of any contractors that are not included in the Joint Venture agreement. Joint Ventures must

include a copy of the legal joint venture signed by an authorized officer from each of the firms that make up the Joint Venture with the chief executive of each company identified. All agreements must be translated into English. A complete and legally binding document with all the information required under this section titled "Joint Ventures" shall be included.

If submitting a proposal as a Joint Venture, the experience, key personnel, past performance, and management approach of each of the Joint Venture Partners may be submitted for the Joint Venture Entity. The experience for each Joint Venture Partner will be considered the experience of the Joint Venture entity. Joint ventures shall submit the following additional documentation regarding their business entities:

a. A detailed statement outlining the following in terms of percentages, where appropriate.

(1) The relationship of the joint venture parties in terms of business ownership, capital contribution, and profit distribution or loss sharing.

(2) The management approach of the joint venture in terms of who will conduct, direct, supervise and control the project and have custody and control of the assets of the joint venture and perform the duties necessary to complete the work.

(3) The structure of the joint venture and decision-ranking responsibilities of the joint venture parties in terms of who will control the manner and method of performance of the work.

(4) Identification of the key personnel having authority to legally bind the joint venture to subcontracts and state who will provide or contract for the labor and materials for the joint venture.

(5) Identification of the party maintaining the joint venture bank accounts for the payment of all expenses and the deposits of all receipts, keep the books and records, and pay applicable taxes for the joint venture.

(6) Identification of the party furnishing the facilities, such as office supplies and telephone service.

(7) Identification of party having overall control of the joint venture.

Other sections of the proposal shall identify, where appropriate, whether key personnel are employees of the individual joint venture partners. The proposal should further identify for which partner the employee works. If the key personnel is an employee of the joint venture, the proposal should indicate that this is the status of the employee.

If one of the joint venture parties possesses relevant experience and/or past performance, the experience and/or past performance of that firm will be considered as the experience and/or past performance of the joint venture.

*****All members of the Joint Venture shall sign the SF 1442 and the Joint Venture Agreement shall be included as part of the Technical Proposal.**

SUBCONTRACTORS

If an Offeror wishes to be credited with a subcontractor or supplier (i.e. a firm that is not the prime contractor or part of the joint venture), *a letter of commitment signed by the subcontractor **and** the prime contractor must be submitted***.** The commitment letter must be submitted even if the firm is in some way related to a joint venture partner (for example, the subcontractor is subsidiary of a joint venture partner, or a subsidiary of a firm to which the joint venture partner is also a subsidiary). If an Offeror submits projects demonstrating experience by a subcontractor, a subsidiary, or a supplier, as opposed to the prime or one of the joint venture partners, the Offeror MUST submit a signed letter of commitment from the contractor who performed and completed the work**.** *If a letter of commitment is not submitted, the experience will not be considered*.

*****Letters of Commitment shall be included in the Technical Proposal.**

8. SPECIFIC INSTRUCTIONS FOR VOLUME 1 – TECHNICAL PROPOSAL

(1) Number of Sets of the Technical Proposal. Submit an ORIGINAL and THREE (3) additional sets of the Technical Proposal, with each set in a separate binder.

(2) Format and Contents of the Technical Proposal and List of Tabs. The original and all copies of the technical proposal will be appropriately labeled as such. Each technical proposal shall be organized using the tabs specified in the following chart. Note: The main tabs directly correlate to the evaluation factors identified in Section 00120.

TAB	CONTENTS OF THE TECHNICAL PROPOSAL	PAGE LIMITS
TAB 1 Factor 1	EXPERIENCE	5
TAB 2 Factor 2	KEY PERSONNEL	2 pages per resume
TAB 3 Factor 3	SECURITY	10
TAB 4 Factor 4	PAST PERFORMANCE	5

TAB 5 Factor 5	AFGHAN CAPACITY DEVELOPMENT	2

(3) Page Limitations. The following page limitations are established for each factor described above:

- Factor #1, Experience – Limited to 5 pages (maximum of 5 forms)

  Letters of Commitment with subcontractors (if applicable) will **NOT** count against your page limitation.

  The Joint Venture agreement (if applicable) will **NOT** count against your page limitation.

- Factor #2, Key Personnel – Limited to 2 pages for each resume

- Factor #3, Security – Limited to a maximum of 10 pages.

  Letter of Commitment (if applicable) from a licensed private security contractor, will **NOT** count against your page limitation.

- Factor #4, Past Performance – Limited to 5 pages (maximum of 5 forms)

  Letters of recommendation, commendations, evaluations and/or awards will **NOT** count against your page limitation.

- Factor #5, Afghan Capacity Development – Limited to 2 pages (1 page for the Resume and 1 page for the Afghan Capacity Development form)

Pages submitted which exceed limitations listed above will not be evaluated. Tables of content, proposal cover letters, and tabs between proposal information do not count toward any page limitations in the proposal.

9. SPECIFIC INSTRUCTIONS FOR VOLUME II – PRICE PROPOSAL

(1) Number of Sets of the Price Proposal. Submit an ORIGINAL set of the Price Proposal in a binder.

(2) Size Restrictions and Page Limits. Use only 8 ½" x 11" or A4 pages. There are no page limits set for the price proposal. However, limit your response to information required by this solicitation. Excess information will not be considered in the Government's evaluation.

(3) Format and Contents of the Price Proposal and List of Tabs. The Price Proposal shall be appropriately labeled and shall be organized and tabbed as indicated in the following chart.

TAB	CONTENTS OF THE PRICE PROPOSAL
TAB 1	The Proposal Cover Sheet, to include the Offeror's e-mail address, cell phone number, Name, Address, DUNS, CAGE and Tax Identification Number of the Offeror
TAB 2	The SF 1442 and Acknowledgem ent of all A mendments (signed and dated)
TAB 3	Section 00010, Pricing Schedule
TAB 4	Representations, Certifications, and Other Statements of Offerors

(4) Detailed Submission Instructions for the Price Proposal

TAB 1: The proposal cover sheet is required by FAR 52.215-1(2) (c) (i)-(v) and must be submitted by all Offerors. This provision, titled "Instructions to Offerors—Competitive Acquisition," and the format for the proposal cover sheet are furnished elsewhere in this section.

TAB 2: The SF 1442, Solicitation, Offer, and Award is to be completed by all Offerors and duly executed with an original signature by an official authorized to bind the company in accordance with FAR 4.102. Any and all amendments must be acknowledged by all Offerors in accordance with the instructions on the Standard Form 30, Amendment of Solicitation.

TAB 3: Section 00010 is to be completed in its entirety by all Offerors. See Sections 00010 with attached notes, for further instructions.

TAB 4: All Offerors must have electronically completed the annual representations and certifications on the "Online Representations and Certifications Application" (ORCA) website or respond with the completed representations / certifications found in the solicitation. Offerors are responsible for ensuring that these on-line Representations and Certifications are updated as necessary to reflect changes, but at least annually to ensure that they are kept current, accurate and complete. If the ORCA is not completed the Offeror must complete and return the "Representations, Certifications, and Other Statements of Offerors" included in the solicitation. If the Offeror is a Joint Venture, all participants must separately complete both the ORCA Representations and Certifications.

10. PROPOSAL FORMAT - VOLUME 1

TAB 1: FACTOR 1 - EXPERIENCE

The Proposal must contain no more than five (5) projects using the attached Experience Information Form at the end of Section 00110, representing the Offeror's experience performing work required on this solicitation. "**Same or Similar**" as referenced below, is defined as experience on projects that is the same or similar in size, scope, complexity and dollar magnitude as the project described in the solicitation.

***__**EXPERIENCE reflects whether the Offeror has performed similar work before.**__

Demonstrate the experience of the Offeror and/or the proposed team, including sub-contractors and Joint Ventures.

- The Offeror shall complete no more than five (5), Experience Information forms, attached at the end of Section 00110, in response to this factor. All blocks must be completed and all data must be accurate, current, and complete.

- At least two (2) of the projects submitted must be the **same or similar** to the project described in the solicitation

- All projects submitted must be at least 50% complete.

- At least one (1) of the projects submitted must be valued at over $500,000.00 **AND** must have been completed within the last 3 years. This project must be the **same or similar** to the project described in the solicitation.

  In addition, the Offeror shall submit:

- At least one (1) project that has been successfully completed in the Province in which the solicitation project is to be located within the last three (3) years. This project must be 100% complete. This project **does not** have to be the **same or similar** to that described in the solicitation.

TAB 2: FACTOR 2 - KEY PERSONNEL:

The Offeror must provide a Resume for the following Key Personnel:

Project Manager for Design
Project Manager for Construction
Senior Electrical Engineer
Senior Mechanical Engineer
Senior Civil Engineer
On-Site Construction Superintendent
Safety Officer

Quality Control Manager
Project Scheduler (Resume must indicate Scheduling Software experience (e.g., Primavera, Microsoft Project)

All Resumes must include the following information and may NOT exceed two (2) pages per Resume:

- Name and title
- Project assignment
- Name of firm with which associated
- Years experience with this firm (in your field of expertise/discipline) **and** years of experience with other firms (in your field of expertise/ discipline)
- Education degree(s), year, and institution
- Active professional registration, year first registered, if applicable
- Other experience and qualifications relevant to same/similar work required under this contract
- List of projects in which the individual has worked to include Name of project(s) and project location(s)

The following key personnel must have degrees in the required disciplines:

- Project Manager for Design – Architectural or Engineering Degree
- Project Manager for Construction – Architectural or Engineering Degree
- Senior Electrical Engineer – Electrical Engineering Degree
- Senior Mechanical Engineer – Mechanical Engineering Degree
- Senior Civil Engineer – Civil Engineering Degree

ALL Key Personnel shall have a minimum of three (3) years of professional experience in their field. For example, the senior Civil Engineer must have a degree in Civil Engineering and a minimum of three (3) years of professional civil engineering experience.

TAB 3: FACTOR 3 - SECURITY PLAN

The Offeror must submit a "draft" Security Plan specific to the geographic area of the project location. The draft Security Plan must describe how the Offeror will meet the specific requirements in Technical Specification Section 01040, "Security". At a minimum, the draft Security Plan must address the following:

- Licensed Armed Guards - Section 01040 paragraph 6.0
- Access Control to Limit Entry – Section 01040 paragraph 4.0
- Security for Road Projects, Transportation and Convoys - Section 01040 paragraph 4.2
- Movement of Project Equipment and Supplies - Section 01040 paragraph 4.2.1
- Threat Assessment - Section 01040 paragraph 5.2

- Coordinate with Local Police - Section 01040 paragraph 5.5

In addition, the Offeror must submit either a:

1) letter of commitment from a licensed Private Security Contractor (PSC)

OR

2) a statement indicating that they will self-perform the security functions.

TAB 4: FACTOR 4, PAST PERFORMANCE

The Proposal must contain no more than five (5) projects using the attached Past Performance form at the end of Section 00100, representing the Offeror's relevant Past Performance. Relevant Past Performance is defined as past performance on projects that is the same or similar in size, scope, complexity and dollar magnitude as the project described in the solicitation.

***__**PAST PERFORMANCE describes how well the Offeror performed the work.**__

Demonstrate the past performance of the Offeror and/or the proposed team, including sub-contractors and Joint Ventures.

- The Offeror shall complete and submit no more than five (5) Past Performance forms (one (1) form for each project) attached at the end of the Section 00110 in response to this factor. Past Performance forms submitted must be on projects that are at least 50% complete within the last three (3) years.

- The Offeror shall submit at least (1) one Past Performance form for a project that has been successfully completed (i.e., 100% complete) in the Province in which the solicitation project is located within the last three (3) years. This project does not have to be the same or similar to that described in the solicitation.

- Provide the Data Universal Numbering System (DUNS) in Block 2. A DUNS number must be provided if the contractor has obtained a number.

- The Offeror is highly encouraged to also submit letters of recommendation, commendations, and/or awards on projects, which demonstrate construction experience, if available.

TAB 5: FACTOR 5 – AFGHAN CAPACITY DEVELOPMENT:

The Offeror must provide a one (1) page Resume for the Afghan Capacity Development Manager (ACDM).

The Resume must include the following information and may NOT exceed one (1) page:

- Name
- Capacity building experience (to include but not limited to improving Afghan laborer skills including on-the-job training; working or coordinating with vocational/technical trade schools; experience with recruitment and hiring of skilled Afghan labor).

The Offeror must complete and submit the Afghan Capacity Development Form at the end of Section 00110 stating the minimum percentage of workforce to be Afghan in Column 2.

The signature block on the Afghan Capacity Development Form must be completed by an executive officer in the company who has legal authority to make the commitments.

The Offeror must fill-in Column 2 on the Afghan Capacity Development Form to show the percentage of: 1) skilled Afghan technical workers and 2) highly skilled Afghan technical workers to be employed on this project.

- Skilled Technical Workers include, but are not limited to: equipment operators, masons, reinforcing steel workers, concrete finishers, laboratory technicians, painters, and carpenters.

- Highly Skilled Technical Workers include: electricians and plumbers who have completed advanced electrical or plumbing courses with certification.

The percentage (%) of workers you indicate in Column (2) must be equal to or greater than the percentage shown in Column (3).

IMPORTANT NOTE
After Contract Award, the Afghan Capacity Development Manager must submit a "Capacity Development Plan" to the Contracting Officer describing how the Offeror will promote the education and develop skills development of Afghan citizens. The Capacity Development Plan must describe how the Offeror will meet the specific requirements in Technical Specification Section 01065 Afghan Capacity Development. Specifically, the plan must demonstrate the following:

- How the Offeror (and subcontractors) will recruit, hire, train and maintain a staff of skilled Afghan technical workers for construction trades including, but not limited to: equipment operators, masons, reinforcing steel workers, concrete finishers, laboratory technicians, painters, and carpenters.

- How the Offeror (and subcontractors) will recruit, hire, train and maintain a staff of Afghan highly skilled Afghan technical workers including electricians and plumbers.

- How the Offeror (and subcontractors) plans to coordinate and work with the technical and trade schools in the province, if applicable, where the project is being built to use

graduates from the schools and provide opportunities for the students and graduates of the schools to get on-the-job training and experience.

- During project execution, the appropriate diplomas for these skilled workers must be provided to the U.S. Government upon request.

11. PROPOSAL FORMAT - VOLUME II

TAB 1: FACTOR 6 - PRICE

The Offeror's prices shall contain all costs to complete the work contained in the Bidding Schedule that is part of this solicitation. The Offeror's prices shall contain all costs including of profit, all overhead (to include office and field overhead), labor burden, insurance, adjustments to listed prices, general and administrative expenses, subcontractor mark-up, mobilization and demobilization, and all other costs including, but not limited to, compliance with environmental laws, permits, preparation of reports, correspondence and documentation required by law or these specifications, tax laws, protection and/or moving of government property and engineering services. (Engineering services include those services that are incidental to construction, and completing submittals for construction work.) The prices shall also include costs necessary to interface with Government representatives, and coordination with occupants and other contractors as necessary. For more information see the Summary of Work.

Information to be provided in Volume II:

- Proposal Cover sheet (see instructions below)
- Offeror's e-mail address and cell phone number
- Name, Address, DUNS, CAGE and TAX Identification Number of the Contractor submitting the proposal.
- SF1442, Solicitation offer and award
- All Amendments, signed and dated
- Completed Bidding Schedule, containing the Contractor determined Prices.
- Representation and Certifications, Section 00600

Proposal Cover Sheet

1. Solicitation Number: 2. The name, address, and telephone and cell phone numbers of the Offeror (and electronic address if available): 3. 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. Statement to include any exceptions in technical or cost/price proposal or exceptions inherent in Offeror's standard terms and conditions.

4. Names, titles, and telephone and cell phone numbers (and electronic addresses if available) of persons authorized to negotiate on the Offeror's behalf with the Government in connection with this solicitation:

5. 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.

6. Offeror's e-mail address, cell phone number, Name, Address, DUNS, CAGE and TAX Identification Number.

PRICE PROPOSAL EVALUATION

An initial price analysis will be conducted on the Offeror's prices using techniques pursuant to FAR 15.404-1(b) and in accordance with the solicitation. An evaluation for acceptability will be performed on each proposal in accordance with FAR 15.101-2(b). The Government will evaluate proposals as follows. First, the Government price evaluators will conduct a price analysis of overall prices and then perform a realism analysis for the purpose of measuring each Offeror's understanding of the requirements and to assess the risk inherent in an Offeror's proposal. Total prices submitted by the Offeror that are determined to be more than 25% above or below the Independent Government Estimate or more than 25% above or below the average of all the price proposals received in response to the solicitation will be considered to be unreasonably high or unrealistically low in order to perform the work and will not be considered for award.

In the event the Government receives more than ten proposals in response to this solicitation, the Government will evaluate proposals as follows. First, the Government will determine which ten (10) complete proposals have the lowest overall proposed prices. The technical (non-pricing) volume(s) of each of these proposals will be given to the Technical Evaluators for review, without identification of the prices or any rank order of prices. If no proposals are found to be technically acceptable within this first group of proposals, then the process described will be conducted again, as many times as necessary, until such time as the Government identifies a technically acceptable proposal(s).

12. LOWEST-PRICED TECHNICALLY (LPTA) ACCEPTABLE PROCESS.

An evaluation for acceptability will be performed on each proposal in accordance with FAR 15.101-2(b). The proposal that provides the lowest price and is otherwise technically acceptable in all factors will be selected for award. To be considered technically acceptable, no technical factor in the proposal may be rated as "NO GO". The failure of a proposal to meet the minimum acceptability standard for any of the factors will result in a technically unacceptable rating and may preclude award. See also Section 00120.

EXPERIENCE INFORMATION **(To be completed by Offeror)**	
1. Contractor: Address:	**2.** Contract /Task Order(TO) /Purchase Order (PO) Number:
	3. Contract/TO/PO Dollar Value:
	4. Contract/TO/PO Status: ☐ **Active** ☐ **Complete** Percent (%) complete and scheduled completion date (if active): Completion Date (if 100% complete):
5. Project Title: Location (City and Province):	☐ **Prime** ☐ **Subcontractor**
6. Project Description: Features of work that the Offeror has completed to include the total dollar value for the completed work:	

PAST PERFORMANCE

(To be completed by Offeror)

1. Contract /Task Order(TO) /Purchase Order (PO) Number:

2. Contractor Data Universal Numbering System (DUNS) #:

3. Contract/TO/PO Dollar Value:

4. Project Title:

Location (City and Province):
Percent complete:
Date completed:

Was Project Completed on time (within schedule) and within cost?

5. If you answered No above, provide a brief synopsis on corrective actions that were taken:

6. List of Current/On-going Projects, Dollar Value, Contract number, percentage (%) complete:

7. Points of Contact (POC)/References (minimum of 2 required and shall be the Owner or Customer of the project. Example – USACE, USAID):

Name:	Name:
Phone #:	Phone #:
e-mail:	e-mail:

Afghan Capacity Development Form (To be completed by Offeror)		
Column 1	Column 2 Colu	mn 3
Position	Minimum percentage of workforce to be Afghan (this column to be completed by Offeror)	Target Quota (column 2 must be greater than or equal to the figures below)
Skilled Technical Workers		**50%**
Highly Skilled Technical Workers		**25%**

By my signature below, I certify that I have read Section 001065 "Afghan Capacity Development" and that the company will comply with the hiring requirements for skilled Afghan technical workers (i.e., minimum of 50%) and highly skilled Afghan technical workers (i.e., minimum of 25%). I acknowledge that failure to fully comply with the Afghan First hiring requirements may result in the contract being Terminated for Default.

Signature _____

Printed Name _____

Title _____

این مدارک تهیه شده است تنها برایی معلومات. نسخه انگلیسی نسخه رسمی است. اگر کدام اختلاف بین دو نسخه فارسی و انگلیسی وجود دارد, نسخه انگلیسی برتری دارد.

بخش 00110
دستورات, شرایط و یاداشت ها برایی داوطلبان
پایینترین قیمت, قابل قبول از لحاظ تکنیکی (LPTA)

1.تعریف

این درخواست برایی حصول (بدست آوردن) یک قرارداد با قیمت ثابت است: ذکر نمایید توضیحات کلی پروژه شامل موقعیت (شهر و ولایت)

این کار شامل میشود اما محدود نمیشود به مدیریت, پلان کردن, مواد دیزاین, کارگر و وسایط برایی مطابقت پروژه با ساحه و ساختن تمام امکانات از قبیل راه ورودی برایی وسایط, ساختمان ها, سنجش نیروهایی محافظتی, امنیت ساحه, فعالیت هایی ماین پاکی, و امکانات دیگر چنانچه مرجع داده شده است در اینجا.

موقعیکه کلمه ای پیشنهاد دهنده 'Offeror' ذکر میشود در این بخش 00110, هدف از آن شرکتی میباشد که تلاش می نماید برایی بدست آوری انجام یک قرارداد با قول اردویی انجینری ایالات متحده که تقدیم مینماید یک پیشنهاد (پروپوسل) را در جواب این درخواست .

یک پیشنهاد (پروپوسل) مدارکی است که تهیه میشود توسط پیشنهاد دهنده و تقدیم میشود به قول اردویی انجینری ایالات متحده در جواب این درخواست ,بمنظور ارزیابی این پیشنهاد توسط قول اردویی انجینری ایالات متحده .

موقعیکه کلمه دولت'Government' ذکر میشود در این بخش 00110 به مفهوم قول اردویی انجینری امریکا بخش شمال(U.S. Army Corps of Engineers Afghanistan District-North (AED-N)) میباشد.

پیشنهادها (پروپوسل ها) برایی این درخواست (Solicitation) قبول میشود تا تاریخ و وقت ذکر شده در فورم استاندارد 1442. پیشنهاد دهندگان برایی این درخواست باید بپرسند سؤالات شان را مربوط به این درخواست تنها از طریق نوشتاری یا ایمل کنند به:
آدرس ایمل: (پر کنید نام درست متخصص قرارداد CT specialist را)

اگر کدام سؤال/توضیحی دارید (در مورد کدام درخواست) شامل بسازید شماره درخواست, و عنوان پروژه را همراه با سؤالات خود . سؤالات نوشتاری باید دریافت شود بوسیله این دفتر 4 روز قبل از تاریخ تعیین شده برایی دریافت پیشنهادات.پرسشهایی تلفنی پاسخ داده نمیشود.

توضیحات یا دستورات شفاهی داده نمی شود (در مورد درخواست). هر نوع اطلاعاتی که داده میشود برایی قراردادی که تأثیر گذار است بر رویی این درخواست و یا پیشنهاد داده میشود به شکل ضمیمهٔ ها (تصحیحات) نوشتاری برایی درخواست.

چنانچه این یک مذاکره اکتسابی رقابتی میباشد, بازگشایی و مرور درخواست هایی داوطلبی در حضور عامه (Public bid opening) وجود ندارد. هیچ نوع اطلاعات از قبیل تعداد پیشنهاد دهندگان (داوطلبان) یا نتایج رقابت تا زمان اهداء پروژه به کسی داده تمیشود.

2.هدایات برایی تقدیم پروپوسل ها (پیشنهادات)

پیشنهادات باید داخل بسته ها / نامه هایی مهر شده باشند, نشانی شده و آدرس داده شده باشد از قرار ذیل:

بسته هایی نشانی شده:

شماره درخواست. W5J9JE-10-R-00XX (پر کنید شماره درست درخواست را)

تاریخ ختم دریافت پیشنهاد: ماه xxx 2010 (پر کنید تاریخ درست را)

زمان ختم دریافت پیشنهاد: 3 بعد از ظهر (زمان محلی کابل)

آدرس دهید بسته ها را به:
قول اردویی انجینری امریکا (USACE)
بخش انجینری افغانستان-شمال (AED-N)
قلعه هاوس, به آدرس:ذکر نمایید نام افسر قرارداد مسؤل را
کابل, افغانستان
(لصفاً برایی اطلاعات ذکر شده بالا به نسخه انگلیسی مراجعه نمایید)

دستورات مخصوص مرتبط با پیشنهادات منتقل شده دستی: پیشنهادات منتقل شده دستی باید تحویل داده شوند به دفاتر قول اردویی انجینری امریکا ساحه انجینری افغانستان (USACE AED offices) , قلعه هاوس, کابل, افغانستان.
پیشنهاد دهندگانی که تقاضایی تحویل دهی دستی پیشنهاداتشان را دارند باید تحویل دهند بسته هایی نشانی شده بطور کامل را به نگهبان دروازه ورودی قرارگاه قلعه هاوس نه دیرتر از زمان مشخص شده در بالا (رسیدهایی نوشتاری را باید بمحض تحویل (پیشنهاد) دریافت نمایید از نگهبان دروازه ورودی قلعه هاوس).

3. کنفرانس قبل از پیشنهاد (PREPROPOSAL Conference) / بازدید از ساحه
(لصفاً برایی اطلاعات ذکر زیر به نسخه انگلیسی مراجعه نمایید)
یک کنفرانس قبل از پیشنهاد برگزار شد در قلعه هاوس کابل . سلاید هایی کنفرانس و ااطلاعات قرارداده شده است در ویب سایت اِ.ای.این (AEN) در (این آدرس) http://www.aed.usace.army.mil/AEN-Index.asp.

یک بازدید برنامه ریزی شده از ساحه برگزار نمیشود. رقابت کنندگان ممکن است ساحه را بازدید نمایند با مسؤلیت (ریسک) وبر حسب برنامه زمانی خودشان.

یاداشت هایی مهم. (1) تذکرات و توضیحات آدرس داده شده در طول کنفرانس نباید تنظیم یا جایگزین نمایند بندها و شرایط درخواست را. (2) بندها و شرایط درخواست بدون تغییر میمانند تا زمانیکه درخواست رسماً تصحیح شود بصورت نوشتاری توسط افسر قرارداد.

4. پیشنهادات الکترونیکی
پیشنهادات فاکس شده یا ایمل شده و همچنان ایجاد تعدیلات (تغییرات) یا صرفنظر کردن از پیشنهاد و یا شرایط آن (حذفیات) قبول نمیشود پس از تاریخ تعیین شده برایی دریافت پیشنهاد و یا از طریق فاکس یا ایمل. هرچند که پیشنهادات ممکن است که بازپس گرفته شوند بوسیله فرستادن یک نامه و یا ایمل برایی ایجاد تغییرات مورد نظرتان و یا صرفنظر از داوطلبی.
پیشنهاد فرستاده شده به این دفتر باید دریافت شود توسط دفتر تعیین شده در آر.اِف.پی (RFP) (درخواست برایی پیشنهاد) برایی دریافت پیشنهادات نه دیرتر از زمان و تاریخ دقیق تعیین شده برایی دریافت پیشنهادات.
5. پیشنهادات (پروپوسل ها) باید تقدیم شود با فرمت (ویرایش) زیر:

بسته پیشنهاد (پروپوسل)	پیشنهاد پرینت شده (کوپی اصلی)	کوپی ها (Copies)
فاکتور 1 – تجربه	1	3
فاکتور 2 – پرسونل کلیدی		
فاکتور 3 – امنیت		
فاکتور 4- اجرائات گذشته		
فاکتور 5 – انکشاف ظرفیت برایی افغان ها		

جلد اول ممکن است که شامل مواد زیر باشد:

* تعهد نامه ها برایی قراردادیهایی فرعی (اگر قابل تطبیق بود)
* موافقتنامه شراکت (جوینت وینچر) (اگر قابل تطبیق بود)

	پیشنهاد پرینت شده (کوپی اصلی)	کوپی ها (Copies)
جلد 2- پیشنهاد قیمت و مدارک تحویلی (اداری / اجرایی)	1	0
فاکتور 6- پیشنهاد قیمت		

جلد دوم ممکن است همچنان شامل موارد زیر باشد:

پیشنهاد امضاء شده, فورم استاندارد 1442
(جداول) لیست قیمت ها برایی هر جزء/بخش کار
معلومات و معرفی در مورد شرکت و مالکین آن و سرتیفیکت ها (تصدیق ها), بخش 00600
تمام تصحیحات (موارد اظافی و یا موارد حذفی) (Amendment), امضاء شده و تاریخ زده شده باشد
ایمل آدرس و شماره تلیفون پیشنهاد دهندگان (داوطلبان)
نام, آدرس, دنس (DUNS), کج و شماره شناسایی مالیات (TAX Identification Number)قراردادی

عدم مؤفقیت در تقدیم این مدارک ممکن است رد پیشنهاد (پروپوسل) را به دنبال داشته باشد. قول اردویی انجینری ایالات متحده هیچ فرضی رامبنی برقصد, توانایی یا تجربه (قراردادی) انجام نمیدهد. ارائه مشخصات دقیق و . جزئیات پیشنهاد (پروپوسل) باید تنها مسؤلیت پیشنهاد دهندگان (Offeror) باشد.
قول اردویی انجینری ایالات متحده رد میکند پیشنهادات (پروپوسل) هایی نامکمل را بعد از بررسی هایی اولیه بدون توجه به فاکتور هایی بعدی.
بنابراین پیشنهاد باید نیازمندیهایی اولیه زیر تعریف شده در پاراگراف 6 را مراعات نماید:

6. نیازمندیها وراهنمایی ها برایی تقدیم پیشنهاد (پروپوسل)

a. ضرورت است به تقدیم پیشنهادات قیمت و تکنیکی بطور جداگانه. مخلوط ننمایید محتویات جلد اول (پیشنهاد تکنیکی) و جلد دوم (پیشنهاد قیمت) در داخل یک صحاف.

(1) پیشنهاد باید تایپ و تقدیم شده باشد به انگلیسی, برایی خواندن (قابل فهم) و آسان باشد.

(2) هر پیشنهاد دهنده باید تقدیم نماید یک پیشنهاد قیمت و یک پیشنهاد تکنیکی را. پیشنهاد قیمت و پیشنهاد تکنیکی باید تقدیم شود در جلد هایی جداگانه. هر دو پیشنهاد قیمت و پیشنهاد تکنیکی باید دربر داشته باشد شماره صفحات را.

(بیرون) رویی هر جلد جداگانه باید نشانی (مارک) شده باشد تا تشریح نماید محتویات آنر؛ و مشخصات شناسایی پیشنهاد دهندگان را ارائه نماید. به اضافه, مشخص نمایید بطور واضح که کوپی (پرینت) اصلی پیشنهاد قیمت و پیشنهاد تکنیکی (کدام است) بر رویی جلد بیرونی.

(3)هر دو پیشنهاد قیمت و پیشنهاد تکنیکی باید دریافت شوند در آخرین تاریخ و زمان مهلت تعیین شده برایی دریافت پیشنهاد.

(4) قیمت ها برحسب برنامه زمانی , جلد دوم, باید کلاً تکمیل شده باشند.

(5)شامل نسازید کدام مقدار دالری را از پیشنهاد قیمت در پیشنهاد تکنیکی.

(6)تمام معلوماتی که ارزیابی میشود بعنوان یک بخش از پیشنهاد تکنیکی باید تقدیم شوند بعنوان یک بخش از پیشنهاد تکنیکی. مرجع و یا دوبار عنوان نکنید موضوعات مشابه را در پیشنهاد قیمت و (همچنان در پیشنهاد تکنیکی) ویا برعکس آن. همچنان شامل نسازید لینک ها به ویب سایت ها را در پیشنهادتان.

(7)شامل نسازید استثنائات را به بند ها و شرایط درخواست نه در پیشنهاد تکنیکی و نه در پیشنهاد قیمت.ممکن است پیشنهاد در برداشته باشد کدام بند و یا شرایط استاندارد شرکت (پیشنهاد دهنده را) که مغایر (یا متضاد) با شرایط و بند هایی درخواست باشد ، در اینصورت پیشنهاد ممکن است مشخص شود غیر قابل قبول و یا فاقد شرایط لازم برایی اهداء. هر سؤال مربوط به بند ها و شرایط مشخصی که شامل درخواست است باید حل شود قبل از تقدیم پیشنهاد. علی رغم مواد ذکر شده در بالا, پیشنهاد دهندگان باید بطور واضح شرح دهند کدام مغایرت (تضاد) موجود در پیشنهاد را (همراه) با بند هایی قراردادی, تکنیکی و یا شرایط درخواست را بر رویی ورق جلد پیشنهاد (پروپوسل) قیمت که همراه با پیشنهاد قیمت تقدیم میشود.

(8)شکست در تقدیم و یا عدم تکمیل مدارک مورد نیاز بصورت درست رد پیشنهاد را بدون ارزیابی فاکتورهایی بعدی بدنبال دارد. بنابراین، پیشنهاد دهندگان توصیه میشوند که راهنمایی ها را پیروی کنند و صحبت کنند همراه با افسر قرارداد اگر کدام قسمتی از درخواست را متوجه نشدند.

b. مباحثات. قول اردویی انجینری ایالات متحده تصمیم دارد تا ارزیابی نماید پیشنهادات را و اهداء نماید یک قرارداد را بدون بحث کردن با پیشنهاد دهندگان . بنابر این, پیشنهاد اولیهٔ باید دربرداشته باشد بهترین شرایط پیشنهاد دهندگان را از نقطهٔ نظر (زاویه دید) مخارج, قیمت و موارد تکنیکی. قول اردویی انجینری حق انجام بحث با قراردادی را حفظ میکند اگر بعداً افسر قرارداد انجام مباحثات را ضروری تشخیص داد. اگر افسر قرارداد مشخص ساخت اینکه تعداد پیشنهادات دریافت شده زیادتر از تعداد مؤثر برایی برگزاری یک رقابت کارآمد میباشد, افسر قرارداد ممکن است که محدود سازد تعداد پیشنهادات را در حد (رنج) رقابت و در حد پیشترین تعدادی که مجاز میسازد یک انتخاب مؤثر را از بین پیشنهادات با بالاترین امتیازات.

c. <u>هدایات کلی.</u>

(1) تقدیم کنید تنها مدارک را به شکل اوراق پرینت شده (هارد کوپی) با اندازه و نوعی که مشخص میشود در جایی دیگری از این بخش. تقدیم ننمایید اطلاعات زیادتری را تا شامل نمایید مواد صوتی- تصویری, رسانه هایی الکترونیکی و غیره را.

(2) تنها استفاده نمایید ½ 8 در 11 انچ و یا کاغذ A4 را برایی اندازه کاغذ مدارک تحویلی پرینت شده. استفاده ننمایید اوراق تا شده (از قبیل ورقه هایی 14 x ”11 یا 17 x ”11) تا زمانیکه در این بخش بطور مشخص استفاده آن مجاز شده

باشد برایی مدارک تحویلی مشخص. استفاده ننمایید از قلم (فونت) کوچکتر از 10 , و یا یک قلم با استایل غیر معمول مثل اسکرییپت(Script), و یا پرینت فشرده برایی کدام نوع مدارک تحویلی. حاشیه تمام صفحات باید حداقل دارایی 1 اینچ عرض باشد, اما ممکن است که شامل عنوان و پایان باشد. تمام صفحات باید شماره زده شده باشند.

(3) روش ترجیحی برایی نشاندادن پیشنهادتان استفاده از صحاف سه حلقه ای(Three-ring binders), هر چند که استفاده از تخته فشاری (Pressboard) یا پوش هایی گزارش همراه با فشار و انواع دیگر بست ها قابل قبول میباشد. استفاده ننمایید گیره هایی فنری(Spring clamps) یا فراتر نشوید از ظرفیت توصیه شده چفت ها و یا گیره ها. استفاده ننمایید از پوشه هایی پلاستیکی دارایی چندین سوراخ(Plastic multi-hole) / سیستم صحافی مارپیچی, سیستم صحافی حرارتی (Heat binding system), یا سیستم هایی که میسر نمی سازد جوف گذاری (الحاق نمودن) آماده ورق هایی اضافی را. شامل نسازید اوراق نازک را.

(4) "محرمانه" پروژه ها نمی توانند تقدیم شوند برایی نشاندادن توانایی تا زمانیکه تمام معلوماتی که مورد نیاز است برایی ارزیابی چنانکه مشخص شده است اینجا بتوانند تهیه شوند برایی قول اردویی انجینری امریکا بعنوان یک بخش از پیشنهاد تکنیکی. پیشنهاد دهندگانی که اطلاعاتی را شامل پیشنهاد شان نموده اند که نمیخواهند آشکار(فاش) شود برایی مردم عامه به هر منظوری, یا استفاده شود بوسیله قول اردویی انجینری ایالات متحده بغیر از استفاده بمنظور ارزیابی, باید مشخص نشانی (مارک) کرده باشند مطابق هدایات در FAR 52.215-1"هدایات برایی پیشنهاد دهندگان-اکتساب رقابتی", پاراگراف (ای) "Instructions to Offerors—Competitive Acquisition", paragraph (e), محدودیت ها برایی آشکار سازی و استفاده داده ها" "Restriction on disclosure and use of data"" .

(5) در صورتی که یک پیشنهاد دهنده قسمتی از یک تجارت بزرگ و دارایی چندین بخش مربوط به هم میباشد, اطلاعات تهیه شده مستقیماً مربوط به بخش مشخص تجارت مورد نظر ما (ساختمان) باید باشد (با ذکر معلوماتی همچون بخش, گروپ, واحد و غیره) که اجراء مینمایند کار را تحت قرارداد مربوط به آینده.

(6) برایی (پیشنهادات) تابع محدودیات صفحات, صفحه ها شماره میشوند از قرار ذیل: یک طرف کاغذ یک صفحه است، معلومات بر رویی دو طرف پشت و جلو یک ورق کاغذ محسوب میشوند دو صفحه. در جا هایی مجاز, ورق هایی تاشو ("11" x 14" or 11" x 17") شماره میشوند یک صفحه. اوراق تهیه شده فقط بمنظورسازماندهی (منظم ساختن) مثل جداول محتویات (Table of contents) یا صفحات برایی جداسازی/فهرست عناوین (Divider tabs) شامل محدودیات صفحات نمیشود.

7. شراکت (JOINT VENTURES)

یک شرکت که قسمتی از یک شراکت (جوینت وینچر) میباشد باید یک توافقنامه شراکت غیرقابل فسخ قانونی را تحویل دهد. قول اردویی انجینری ایالات متحده ارزیابی نمی نماید توانایی کدام قراردادی را که شامل توافقنامه شراکت نیست. شرکا باید شامل بسازند یک نقل (کوپی) از توافقنامه قانونی شراکت را امضاء شده توسط یک عضو (افسر) صاحب صلاحیت از هر یک از شرکت ها و دربرداشته باشد معرفی این شراکت را توسط هر یک از رئیسان (مدیران) اجرایی هر نهاد و باید ترجمه شده باشد به انگلیسی, اگر توافقنامه اصلی به زبان دیگری به جز از انگلیسی میباشد. یک مدرک قیر قابل فسخ و قانونی همراه با تمام معلومات مورد نیاز تحت این بخش با عنوان شراکت (جوینت وینچر) باید شامل باشد.

اگر تقدیم مینمایید یک پیشنهاد را تحت عنوان یک شراکت (Joint Venture) دست آورد هایی هر کدام از شرکا در تجربه, اجرائات گذشته, و مدیریت میتواند تقدیم شود بعنوان دست آورد برایی شراکت موجود. تجربه هر کدام از سهامداران شراکت مورد توجه قرار میگیرد بعنوان تجربه شراکت موجود. شرکا (جوینت وینتچرها) باید تقدیم نمایند مدارک اضافی زیر را در رابطه با نهادهایی تجاری شان:

a. یک بیانیه با جزئیات برایی بیان طرح کلی موارد زیر را در رابطه با فیصدی (سهم), در جایی که مناسب است.

(1) روابط طرفین شراکت درمورد شرایط مالکیت تجارت, همکاری عالی(اساسی), و توزیع مفاد و تقسیم ضرر ها.

(2) دست آورد هایی مدیریتی این شراکت در موارد اینکه کی هدایت, راهنمایی, بازبینی و کنترل مینماید پروژه را و حفاظت و کنترل دارایی هایی شراکت و انجام وظایف لازم برایی تکمیل کار را بر عهده دارد.

(3) ساختار شراکت , مسؤلیت ها و مراتب تصمیم گیری طرفین شراکت در مورد اینکه کی کنترل میکند طرز و روشهایی اجراء کار.

(4) معرفی پرسونل کلیدی که دارایی صلاحیت قانونی الحاق نمودن شراکت (امضاء قرارداد) با قراردادیهایی فرعی با بیان اینکه چی کسی تهیه مینماید و یا قرارداد میکند مواد و کارگران را برایی شراکت.

(5) معرفی طرفی که حفظ مینماید حساب بانکی شراکت را برایی پرداخت تمام هزینه ها و ذخیره تمام دریافتی ها, نگهداری مینماید کتاب ها و ثبت مینماید اسناد را و پرداخت مالیات (تاکس) هایی قابل اجراء را برایی شراکت بر عهده دارد.

(6) معرفی طرفی که تهیه مینماید امکانات را, مثل مواد لازم دفتر را و سرویس تلیفون.

(7) معرفی طرفی که کنترل کلی شراکت را بر عهده دارد.

دیگر بخش هایی پیشنهاد باید معرفی نماید, در جایی که مناسب بود, اینکه آیا پرسونل کلیدی کارکنان طرفین انفرادی شراکت هستند یا که خیر. همچنان پیشنهاد سپس باید مشخص نماید اینکه برایی کدام طرف شراکت کارکنان کار مینمایند. اگر پرسونل کلیدی کارمند شراکت (جوینت وینچر) باشد, پیشنهاد باید تأکید نماید براینکه این وضعیت کارمند میباشد.

اگر یکی از طرفین شراکت مالک تجربه مشابه / یا اجرائات گذشته به تنهایی باشد تجربه و / یا اجرائات گذشته آن شرکت مورد توجه قرار میگیرد بعنوان تجربه و/یا اجرائات گذشته شراکت.

***** تمام اعضایی شراکت (جوینت وینچر) باید امضاء نمایند SF 1442 و توافقنامه شراکت (جوینت وینچر) را و باید شامل بسازند آنها را بعنوان بخشی از پیشنهاد تکنیکی.**

قراردادیهایی فرعی

اگر یک پیشنهاد دهنده میخواهد که صاحب امتیاز شود بخاطر یک قراردادی فرعی یا (شرکت) تهیه کننده مواد(برایی مثال شرکتی که قراردادی اصلی یا جزئی از یک شراکت (جوینت وینچر) نمی باشد) , یک تعهد نامه امضاء شده بوسیله قراردادی فرعی و قراردادی اصلی را باید تقدیم نماید. تعهد نامه باید تقدیم شود هرچند که شرکت (فرعی, تهیه کننده مواد) به نوعی مرتبط میباشد به طرف شراکت (برایی مثال, قراردادی فرعی تابع یکی از طرفین شراکت میباشد, یا تابع یک شرکتی میباشد که که یکی از طرفین شراکت (جوینت وینچر) نیز تابع آن شرکت میباشد). اگر پیشنهاد دهندگان تقدیم میکنند پروژه هایی را که نشان میدهد تجربه کاری را توسط یک قراردادی فرعی, جزء تابع, یا تهیه کننده(مواد), برخلاف (یا متفاوت با قوانین موجود برایی) قراردادی اصلی یا یکی از طرفین شراکت (جوینت وینچر), پیشنهاد دهندگان باید تقدیم نمایند یک تعهد نامه امضاء شده توسط قراردادی که کار را انجام و کامل نموده است. اگر یک تعهد نامه تقدیم نشود, تجربه کاری مورد توجه قرار نمیگیرد.

*****تعهد نامه باید شامل پیشنهاد تکنیکی باشد**

8. دستورات مخصوص برایی جلد 1 - پیشنهاد تکنیکی

(1) تعداد مجموعی پیشنهاد تکنیکی. تقدیم کنید یک کوپی اصلی (پرینت شده) و سه کوپی اضافی پیشنهاد تکنیکی را ,هر مجموعه در یک صحاف جداگانه باشد.

(2) ویرایش و محتویات پیشنهاد تکنیکی و فهرست عناوین (صفحات فهرست) (Tabs). (پرینت) اصلی و تمام کپی هایی

پیشنهاد تکنیکی نام گذاری میشود بطور مناسب و همانند یکدیگر. هر مجموعه باید منظم شده باشد با استفاده از فهرست عناوین که مشخص شده در جدول زیر. یاداشت:فهرست عناوین اصلی مستقیماً مرتبط است با فاکتور هایی تعریف شده در بخش 00120.

TAB	**محتویات پیشنهاد تکنیکی**	**محدودیت صفحات**
فاکتور 1 فهرست عنوان 1	تجربه	**5**
فاکتور 2 فهرست عنوان 2	پرسونل کلیدی	2 صفحه برایی هر خلاصه تجربیات
فاکتور 3 فهرست عنوان 3	امنیت	10
فاکتور4 فهرست عنوان 4	اجرائات گذشته	5
فاکتور 5 فهرست عنوان 5	افزایش ظرفیت افغانها	2

(3) محدودیت صفحات. محدودیات صفحات زیر گذاشته شده است برایی هر فاکتور شرح داده شده در بالا:

فاکتور# 1, تجربه – محدود به 5 صفحه (حد اکثر 5 فورم)

تقدیم تعهد نامه ها همراه قراردادی فرعی (اگر قابل تطبیق بود).این ها شمارش نمیشود خلاف محدودیت صفحات شما.

تقدیم توافقنامه هایی شراکت (جوینت وینچر) (اگر قابل تطبیق بود). این ها شمارش نمیشود بر خلاف محدودیات صفحات شما

فاکتور#2, پرسونل کلیدی – ممحدود به دو (2) صفحه برایی هر خلاصه تجربه کاری

فاکتور#3 , امنیت – محدود به حداکثر 10 صفحه

تقدیم تعهد نامه (اگر قابل تطبیق بود) از یک شرکت قراردادی امنیتی خصوصی دارایی لیسانس.این تعهدنامه شمارش نمیشود بر خلاف محدودیت صفحات شما.

فاکتور#4 , اجرائات گذشته _ محدود به 5 صفحه (حداکثر 5 فورم)

تقدیم توصیه نامه ها, تقدیر نامه ها, ارزیابی ها و/یا اهداء نامه ها (اوراق قرارداد), این هاشمارش نمیشود برخلاف محدودیت صفحات شما.

فاکتور #5 , افزایش ظرفیت افغانها – محدود به 2 صفحه (یک صفحه برایی خلاصه تجربیات و یک صفحه برایی فورم افزایش ظرفیت افغانها)

صفحات تقدیم شده که زیادتر شود از محدودیات برایی صفحات چنانکه لیست شده است در بالا ارزیابی نمی شود. جداول محتویات, ورق هایی جلد پیشنهاد (پوش), فهرست عناوین بین اطلاعات پیشنهاد شمارش نمیشود برخلاف کدام محدودیات صفحه برایی پیشنهاد.

9. راهنمایی هایی مخصوص برایی جلد دوم (2) - پیشنهاد (پروپوسل) قیمت

(1) تعداد مجموعی پیشنهاد قیمت. تقدیم نمایید یک کوپی اصلی (پرینت شده) پیشنهاد قیمت را در یک صاحف.

(2) محدودیت اندازه (سایز) و محدودیت صفحه. تنها استفاده نمایید کاغذ هایی A4 یا "11 x 8 ½" را. هیچ محدودیتی برایی صفحات در پیشنهاد قیمت وجود ندارد. هرچند که, بهتر است جوابهایی خود را به اطلاعات خواسته شده توسط این درخواست محدود کنید. اطلاعات اضافه مورد توجه قرار نمیگیرند در ارزیابی توسط قول اردویی انجینری امریکا.

(3) ویرایش و محتویات پیشنهاد قیمت و لیست/فهرست عناوین **(Tabs)**. پیشنهاد قیمت باید بطور مناسب نامگذاری و منظم شده باشد چنانچه در جدول زیر آمده است.

فهرست عناوین Tab	محتویات پیشنهاد قیمت
فهرست عنوان 1	جلد بیرونی پیشنهاد (پوش), شامل ایمل آدرس پیشنهاد دهندگان, شماره مبایل, نام, آدرس, , دنس (DUNS) , کج (CAGE) و شماره شناسایی مالیات (Tax Identification Number) پیشنهاد دهندگان
فهرست عنوان 2	SF 1442 و تصدیق تمام تصحیحات (Amendments)(امضاء شده و تاریخ زده شده)
فهرست عنوان 3	بخش 00010, جدول/لیست قیمت ها برایی هر جزء/بخش
فهرست عنوان 4	خلاصه معلومات در مورد شرکت و مالکین آن, گواهی نامه ها (سرتیفیکت), و دیگر بیانیه هایی پیشنهاد دهنده گان

(4) راهنمایی ها با جزئیات برایی تحویلدهی پیشنهاد قیمت

فهرست عنوان 1(TAB 1): جلد بیرونی پیشنهاد (پروپوسل) نیاز است بوسیلهٔ ((FAR 52.215-1(2) (c) (i)-(v) و باید تقدیم شود توسط تمام پیشنهاد دهندگان. این بند عنوان شده است "راهنمایی ها برایی پیشنهاد دهندگان—اکتساب رقابتی،" و ویرایش برایی جلد بیرونی(پوش) تهیه شده در جایی دیگر این بخش.

فهرست عنوان 2 (TAB 2): The SF 1442, درخواست, پیشنهاد, و یک اهداء نامه باید کامل شود بوسیله تمام پیشنهاد

دهندگان بر حسب وظیفه و بموقع خود اجراء شود توسط امضایی اصلی یک فرد رسماً صلاحیتدار که مقید و پایبند به شرکت باشد بر حسب (FAR 4.102) . هر کدام و تمام تصحیحات (مواد حذفی/ اضلفی) برایی درخواست (Amendment) , باید تصدیق شود توسط پیشنهاد دهندگان بر حسب راهنمایی هایی فورم استاندارد 30 .

فهرست عنوان 3 (TAB 3) : بخش 00010 برایی کامل شدن کلی آن توسط تمام پیشنهاد دهندگان است. ببینید بخش 00010 همراه با یادداشت هایی ضمیمه شده, برایی دستورات بعدی.

فهرست عنوان 4 (TAB 4) : تمام پیشنهاد دهندگان باید کامل کرده باشند از طریق الکترونیکی معلومات سالانه در مورد شرکت و مالکین آن و همچنان سرتیفیکیت ها را (Annual representation and certifications) بر رویی ویب سایت برایی راجستر کردن معلومات/تغییرات شرکت و سرتیفیکت ها (ORCA)
"Online Representation and Certifications Application" و یا پاسخ دهند به (فورم هایی) کامل شده معلومات در مورد شرکت/سرتیفیکت موجود در درخواست. پیشنهاد دهندگان مسؤل اطمینان از به روز بودن (اپدیت) معلومات در مورد شرکت و سرتیفیکت ها چنانکه مورد نیاز است برایی منعکس ساختن تغییرات بوجود آمده حداقل سالانه یکبار تا مطمئن شوند از جاری بودن, دقیق بودن و کامل بودنشان هستند. اگر (معلومات در مورد شرکت در ویب سایت) او.آر.سی.اِ (ORCA) کامل نیست, پیشنهاد دهندگان باید کامل نمایند و بازگردانند " معلومات در مورد شرکت, سرتیفیکت ها و دیگر بیانیه هایی پیشنهاد دهندگان) را
"Representations, Certifications, and Other Statements of Offerors"
که شامل درخواست شده اند. اگر پیشنهاد دهندگان یک شراکت (جوینت وینچر) هستند باید تمام شرکا بطور جداگانه کامل نمایند معلومات در مورد شرکت و سرتیفیکت ها را در او.آر.سی.اِ (ORCA).

(10) ویرایش (فورمت) پیشنهاد– جلد اول

فهرست عنوان 1 (TAB 1) : فاکتور 1 – تجربه کاری

پیشنهاد باید پیشتر از پنج (5) پروژه را در بر نداشته باشد با استفاده از فورم ضمیمهٔ شده معلوماتی تجربه کاری در آخر بخش 00110 که نشان میدهد تجربه کاری اجراء شده که مورد نیاز است برایی این درخواست. **" (تجربه کاری) یکسان یا مشابه "** چنانکه مرجع داده شده است در پایین تعریف شده است بعنوان تجربه کاری بر رویی پروژه ایکه یکسان یا مشابه میباشد در اندازه, مقدار و نوع کار, دشواری (پیچیدگی) و مقدار دالری با پروژه شرح داده شده در درخواست.

*****تجربه منعکس میسازد اینکه آیا پیشنهاد دهندگان انجام داده اند کارهایی مشابه را قبلاً یا که خیر.**

شرح بدهید بوضوح تجربه کاری پیشنهاد دهندگان و/یا تیم مورد نظر را شامل قراردادیهایی فرعی و شرکا.

پیشنهاد دهندگان نباید پیشتر از پنج (5) پروژه را در جواب به این فاکتور ذکر نمایند, فورم معلوماتی تجربه کاری ضمیمهٔ شده است در اخر بخش 00110 . تمام خانه خالی ها باید پر شده باشند و تمام اطلاعات باید دقیق, جاری و کامل باشد.

حداقل دو (2) عدد از پروژه هایی تقدیم شده باید **یکسان و یا مشابه** با پروژه ای شرح داده شده در درخواست باشد.

تمام پروژه هایی تقدیم شد باید حداقل 50% کامل شده باشد.

حداقل یکی (1) از پروژه هایی تقدیم شده باید به ارزش بالاتر از 500,000.00 $ باشد **و** تکمیل شده باشد در 3 سال اخیر. این پروژه باید **یکسان و یا مشابه** به پروژه ای شرح داده شده در درخواست باشد.

بعلاوۀ , پیشنهاد دهندگان باید تقدیم نمایند:

حداقل یک (1) پروژه را که کامل شده باشد مؤفقانه در ولایتی که پروژه موجود در درخواست در آن موقعیت دارد در بین سه (3) سال اخیر. این پروژه باید % 100 کامل شده باشد. این پروژه **نیازی نیست** که **یکسان و یا مشابه** پروژه ای شرح شده در درخواست باشد.

فهرست عنوان 2 (TAB 2) **: فاکتور 2 – پرسونل کلیدی:**

پیشنهاد دهندگان باید تهیه نمایند یک خلاصۀ تجربیات کاری برایی پرسونل کلیدی زیر را:

فهرست عنوان 2 (TAB 2)**: فاکتور 2 – پرسونل کلیدی:**

پیشنهاد دهندگان باید تهیه نمایند یک خلاصۀ تجربیات کاری برایی پرسونل کلیدی زیر را:

مدیر پروژه برایی دیزاین
مدیر پروژه برایی ساختمان
انجینر ارشد برق,
انجینر ارشد مکانیک,
انجینر ارشد ساختمان,
سرکارگر ساختمان بر رویی ساحه,
افسر ایمنی
مدیر کنترل کیفیت
برنامه ریز زمانی پروژه (خلاصه تجربیات کاری باید بیان نماید تجربه کار با نرم افزار برنامه ریز زمانی را (برایی مثال پرایم اویرا, مایکروسافت پروجکت)

تمام خلاصه هایی تجربه کاری باید شامل اطلاعات زیر باشد و نباید اضافه تر از دو (2) صفحه برایی هر خلاصه تجربیات کاری شود:

نام و عنوان
پروژه ای که بر روی آن کار نموده است
اسم شرکتی که فرد به آن وابسته بوده است
سالهایی تجربه کاری با این شرکت (در رشته تخصصی / تحصیلی تان) **و** شرکت هایی دیگر(در رشته تخصصی / تحصیلی تان)
درجه تحصیل, سال, و انستیوت (محل فراغت)
راجستر کردن فعال بطور حرفه ای, سال اول که راجستر کرده اید, اگر قابل تطبیق بود
تجربه هایی دیگر و صلاحیت هایی کاری مرتبط به کاری یکسان/مشابه کار مورد نیاز تحت این قرارداد.
لیست پروژه هایی که کارکنان شما بطور انفرادی در آن کار نموده اند شامل نام و موقعیت پروژه.

پرسونل کلیدی زیر باید دیپلوم داشته باشند به ترتیب مورد نیاز:

مدیر پروژه برایی دیزاین – دیپلوم آرشیتیکت یا انجینری
مدیر پروژه برایی ساختمان - دیپلوم آرشیتیکت یا انجینری

انجینر ارشد برق – دیپلوم انجینری برق
انجینر ارشد مکانیک – دیپلوم انجینری مکانیک
انجینر ارشد ساختمان – دیپلوم انجینری ساختمان

تمام پرسونل کلیدی باید جداقل سه سال تجربه کاری تخصصی در رشته شان را داشته باشند. برایی مثال انجینر ارشد ساختمان باید دیپلوم داشته باشد در انجینری ساختمان و حداقل سه سال تجربه کاری تخصصی انجینری ساختمان را داشته باشد.

فهرست عنوان 3(TAB 3) : فاکتور 3 – پلان امنیتی

پیشنهاد دهندگان باید تقدیم نمایند یک "طرح خلاصهٔ" پلان امنیتی را مخصوص به ساحه جغرافیایی موقعیت پروژه. پلان امنیتی طرح شده باید شرح دهد اینکه چطور پیشنهاد دهندگان برآورده میکنند نیازمندیهایی مشخص در بخش مشخصات تکنیکی 01040, "امنیت" ("Technical Specification Section 01040, "Security) پلان طرح شده امنیتی باید حداقل آدرس دهد موارد زیر را:

نگهبانان مسلح صاحب لیسانس – بخش 01040 پاراگراف 6.0
کنترل دستیابی/ورود برایی محدود ساختن ورود (افراد و وسایط) – بخش 01040 پاراگراف 4.0
امنیت برایی پروژه هایی سرک, نقل و انتقالات و کاروان ها – بخش 01040 پاراگراف 4.2
انتقال/جابجایی وسایل و مواد تأمیناتی پروژه – بخش 01040 پاراگراف 4.2.1
برآورد/تخمین تهدیدات – بخش 01040 پاراگراف 5.2
هماهنگی با پولیس محلی – بخش 01040 پاراگراف 5.5

بعلاوهٔ, پیشنهاد دهندگان باید تقدیم نمایند یک:

1) تعهد نامه از یک قراردادی امنیتی خصوصی دارایی لیسانس (PSC)

یا

2) یک بیانیه که تأکید مینماید که آنها خودشان کارها/مسایل امنیتی را بدوش میگیرند.

فهرست عنوان 4 (TAB 4): فاکتور 4 , اجرائات کاری گذشته

پیشنهاد باید پیشتر از پنج پروژه را در بر نداشته باشد با استفاده از فورم اجرائات گذشته در آخر بخش 00100, که نشان میدهد اجرائات گذشته پیشنهاد دهندگان را مرتبط با پروژه موجود در درخواست. اجرائات گذشته مرتبط تعریف شده است بعنوان اجرائات گذشته بر رویی پروژه هایی که یکسان یا مشابه پروژه شرح داده شده در درخواست باشند در اندازه, مقدار و نوع کار, دشواری/پیچیدگی و مقدار دالری.

***** اجرائات گذشته شرح میدهد اینکه پیشنهاد دهندگان با چی کیفیتی کار را به انجام رسانده اند.**

شرح بدهید بوضوح تجربه کاری پیشنهاد دهندگان و/یا تیم مورد نظر را شامل قراردادیهایی فرعی و شرکا.

پیشنهاد دهندگان باید کامل و تقدیم کنند نه پیشتر از پنج (5) فورم (یک (1) فورم برایی هر پروژه) ضمیمهٔ شده در آخر بخش 00110 در جواب به این فاکتور. فورم هایی اجرائات گذشته تقدیم شده باید برایی پروژه هایی که حداقل 50% تکمیل شده است در حدود سه (3) سال اخیر.

پیشنهاد دهندگان باید حداقل یک (1) فورم اجرائات گذشته برایی یک پروژه ای که مؤفقانه تکمیل شده باشد (برایی مثال 100%) در ولایتی که پروژه موجود در درخواست در آن موقعیت دارد در بین سه سال اخیر. این پروژه **نیازی نیست** که **یکسان یا مشابه** پروژه ای شرح داده شده در درخواست باشد.

تهیه نمایید شماره خودتان را در سیستم نمبر گذاری جهانی اطلاعات(DUNS) را در بلاک / خانه دوم . یک دنس نمبر باید تهیه شود اگر قراردادی بدست آورده است یک نمبر را.

پیشنهاد دهندگان بسیار تشویق میشوند به اینکه تقدیم نمایند توصیه نامه ها, تحسین نامه ها و یا اهداء نامه ها برایی پروژه ها را که بوضوح نشان میدهد تجربه کاری ساختمانی را, اگر در دسترس بود.

فهرست عنوان 5(TAB 5) : فاکتور 5 – انکشاف ظرفیت افغان ها:

پیشنهاد دهندگان باید تهیه نمایند یک (1) صفحهٔ خلاصه تجربیات کاری برایی مدیر انکشاف ظرفیت افغان ها (ACDM).

خلاصهٔ تجربیات کاری باید شامل اطلاعات زیر باشد و نباید که زیادتر شود از یک (1) صفحهٔ:

نام
تجربه ظرفیت سازی (شامل اما نه محدود به بهتر سازی مهارتهایی کارگران افغان شامل آموزش (ترینینگ) هایی در حین انجام کار, کار کردن یا همکاری/هماهنگی با مکاتیب حرفه ای/ تکنیکی کسب (کار), تجربه با استخدام و اجاره کارگران با مهارت ا افغان).

پیشنهاد دهندگان باید فورم انکشاف ظرفیت افغان ها را در آخر بخش 00110 که بیان مینماید حداقل فیصدی نیرویی کار افغان را در ستون دوم کامل و تقدیم نمایند .

خانه/بلاک محل امضاء بر رویی فورم انکشاف ظرفیت افغان ها باید تکمیل شده باشد توسط یک افسر اجرایی شرکت که صلاحیت قانونی دادن / انجام تعهدات را دارد.

پیشنهاد دهندگان باید ستون دوم بر رویی فورم انکشاف ظرفیت افغان ها را پر نمایند برایی نشان دادن فیصدی: 1) کارگران با مهارت و تکنیکی افغان را و 2) کارگران با مهارت بسیار زیاد و تکنیکی افغان که استخدام میشوند برایی این پروژه. این کارگران تکنیکی با مهارت و با مهارت بسیار زیاد تکنیکی افغان باید فارغ شده باشند از مکاتیب حرفه ای – تکنیکی یا فنی در افغانستان و ترجیحاً در ولایتی که پروژه در آن ساخته میشود.

کارگران با مهارت تکنیکی شامل اما نه محدود به : متصدی (گرداننده) تجهیزات, سنگ کار, سیم کار, قالب بند (کانکریت ریز) ,تکنیسین لابراتوار, رنگمال و نجار ها.

کارگران با مهارت بسیار زیاد و تکنیکی شامل: برقی ها و نلدوان هایی که تکمیل کرده باشند دوره ها (کورس هایی) با گرفتن سرتیفیکیت.

فیصدی (%) گارگرانی را که شما بیان میکنید در ستون (2) باید مساوی یا بزرگتر باشد از فیصدی نشان داده شده در ستون (3).

یادداشت مهم
بعد از اهداء قرارداد, مدیر انکشاف ظرفیت برایی افغانها باید تقدیم نماید یک پلان انکشاف ظرفیت به افسر قرارداد و در آن شرح دهد اینکه چطور پیشنهاد دهندگان پیشرفت/ترقی میدهند تحصیلات را و انکشاف میدهند

مهارت هایی شهروندان افغان را. پلان انکشاف ظرفیت باید شرح دهد اینکه چطور پیشنهاد دهندگان برآورده میکنند نیازمندیهایی مشخص شده در بخش مشخصات تکنیکی 01065 انکشاف ظرفیت افغان ها.
(Technical Specification Section 01065) مخصوصاً, پلان بوضوح باید نشان بدهد موارد زیر را:

چطور پیشنهاد دهندگان (و قراردادیهایی فرعی) استخدام (کارمند جدید), اجاره, تربیت و حفظ میکنند کارمندان با مهارت افغان را به شمول حرفه ساختمانی اما نه محدود به آن: متصدی (گرداننده) تجهیزات, سنگ کار, سیم , تکنیسین لابراتوار, رنگمال و نجار ها. کار, قالب بند (کانکریت ریز)

چطور پیشنهاد دهندگان (و قراردادیهایی فرعی) استخدام (کارمند جدید), اجاره, تربیت و حفظ میکنند صنعتکاران با مهارت بسیار بالایی افغانرا شامل برقی ها و لوله کش ها.

چطور پیشنهاد دهندگان (و قراردادیهایی فرعی) پلان میکنند تا همکاری و کار کنند با فاکولته ها و مکاتیب تکنیکی و حرفه ای در ولایتی که پروژه در آن ساخته میشود تا به حد اکثر برسانند استفاده از فارغین فاکولته ها و مکاتیب را و تهیه نمایند فرصت ها را برایی محصلین مکاتیب تا تجربه و آموزش ببیند در حین انجام کار.

در حین انجام/اجرایی پروژه, دیپلوم هایی مناسب برایی این کارگران با مهارت باید تهیه شود به قول اردویی انجینری ایالات متحده بمحض تقاضا.

11. ویرایش (فورمت) پیشنهاد– جلد دوم

فهرست عنوان 1 (TAB 1): فاکتور 6 – قیمت

قیمت هایی پیشنهاد دهندگان باید دربر داشته باشد تمام قیمت ها/مخارج برایی کامل کردن کار شامل برنامه/لیست داوطلبی که بخشی از این درخواست است. قیمت هایی پیشنهاد دهندگان باید تمام قیمت ها/مخارج شامل مفاد, تمام مخارج کلی (شامل مخارج کلی ساحه و دفتر), مصارف کارگران, بیمه, تعدیلات در قیمت هایی لیست شده, مخارج کلی و اداری, افزایش نرخ قراردادیهایی فرعی, تجهیز و غیر تجهیز ساختن ساحه و شامل تمام قیمت هایی دیگر اما نه محدود به تطبیق قانون هایی محیطی, جواز ها, آماده سازی گزارش ها پاسخگویی و تهیه اسناد مورد ضرورت بوسیلهٔ قانون و یا این مشخصات, قانونهایی مالیات (تاکس), حفاظت و یا انتقال دادن ملکیت هایی قول اردویی انجینری امریکا و سرویسهایی انجینری. (سرویسهایی انجینری شامل سرویسهایی است که تابع کار ساختمانی و کامل کردن مدارک تحویلی **(Submittals)** برایی کار ساختمانی میباشد.
قیمت ها باید همچنان دربرداشته باشد مصارف ضروری برایی تعامل (برقراری ارتباط) همراه نمایندگان قول اردویی انجینری امریکا, و هماهنگی با مستقر شوندگان و دیگر قراردادیها چنانچه ضرورت بود. برایی معلومات زیادتر ببینید خلاصه کاررا **(Summary of Work)**.

<u>معلوماتی که باید تهیه شود در جلد دوم:</u>

ورق جلد (پوش) پیشنهاد (ببینید دستورات پایین را)
آدرس ایمل و شماره تلفن همراه پیشنهاد دهندگان
نام, آدرس, دنس(DUNS) , شماره شناسایی کج (CAGE) و تاکس (TAX) قراردادی ایکه تقدیم می نماید پیشنهاد را .
SF1442, فورم درخواست پیشنهاد و اهداء (Solicitation offer and award)
تمام تغییرات (موارد حذفی و اضافی برایی درخواست) (Amendments) , امضاء شده و تاریخ زده شده

برنامه/لیست کامل شده داوطلبی (Bidding Schedule), شامل قیمت هایی مشخص شده قراردادی.
ارائه معلومات در مورد شرکت و سرتیفیکیت ها, بخش 00600

ورق رویی جلد پیشنهاد (پروپوسل)

ورق رویی جلد پیشنهاد (پروپوسل)

1. نمبر درخواست (Solicitation)

2. نام, آدرس, شماره تلیفون و تلیفون همراه پیشنهاد دهندگان (آدرس الکترونیکی اگر در دسترس بود):

3. یک بیان که مشخص میکند موجودیت مؤافقت با تمام بند ها, شرایط و قیدهایی که شامل درخواست شده است و مؤافقت با تهیه کدام یا تمام اقلام به همان قیمت پیشنهادی که در مقابل هر فقره از مواد نوشته شده است. بیانیه برایی شامل ساختن هر استثناء در پیشنهاد تکنیکی یا قیمت و یا استثنائات مربوط به شرایط و قیدهایی استاندارد پیشنهاد دهندگان.

4. اسامی, عناوین و شماره هایی تلیفون و تلیفون همراه (و آدرس الکترونیکی اگر در دسترس بود) افراد صلاحیتدار برایی گفتگو از طرف پیشنهاد دهندگان با قول اردویی انجینری ایالات متحده در ارتباط با این درخواست.

5. اسم, عنوان و امضاء شخصی که دارایی صلاحیت امضاء پیشنهاد است. پیشنهاد هایی امضاء شده توسط یک کارمند باید همراه شده باشد با مدارک نشاندهنده صلاحیت کارمند مذکور, مگر اینکه شواهد قبلاً تهیه شده باشد برایی دفتر مسؤل.
6. ایمل آدرس پیشنهاد دهندگان, شماره تلیفون همراه, نام, آدرس, دنس (DUNS) , کج (CAGE) و شماره شناسایی مالیات (TAX Identification Number).

ارزیابی پیشنهاد قیمت

یک تجزیه و ارزیابی اولیه قیمت انجام میشود بر رویی قیمت هایی پیشنهاد هندگان با استفاده از تکنیک هایی متعاقب (FAR 15.404-1(b)) و برحسب درخواست. یک ارزیابی برایی قابل قبول بودن انجام میشود برروی هر پیشنهاد بر حسب (FAR 15.101-2(b)). قول اردویی انجینری ایالات متحده ارزیابی میکند بترتیب زیر. اول, ارزیابی کنندگان قیمت قول اردویی انجینری ایالات متحده انجام میدهند یک تحلیل قیمت بر رویی قیمت هایی کلی و بعد از آن یک تحلیل واقعگرانه را انجام میدهند بمنظور اندازه گیری درک نیازمندیها توسط هر قراردادی و تا تخمین بزنند خطر (ریسک) مرتبط با پیشنهاد هر قراردادی را. قیمت هایی کلی تقدیم شده بوسیلهٔ پیشنهاد دهندگانی که مشخص شده اند زیادتر از 25% بالاتر یا پایینتر از برآورد مستقل قول اردویی انجینری امریکا **(IGE)** و یا زیادتر از 25% بالاتر یا پایینتر از میانگین (حد وسط) تمام پیشنهاد هایی قیمتی که دریافت شده است در جواب به این درخواست مورد توجه قرار میگیرند بدون دلیل دارایی قیمت بالا یا دارایی قیمت پایین غیر واقعی برایی اینکه کار را انجام دهند و مورد توجه قرار نمیگیرند برایی اهداء.

در صورتیکه قول اردویی انجینری ایالات متحده دریافت کند زیادتر از ده پیشنهاد را در جواب به این درخواست, قول اردویی انجینری ایالات ارزیابی میکند پیشنهادات را به شکل زیر. اولاً, قول اردویی انجینری ایالات متحده مشخص میسازد اینکه کدام ده (10) پیشنهاد کامل دارایی پایینترین قیمت در کل قیمت هایی پیشنهاد شده در پروپوسل ها میباشند. جلد هایی تکنیکی (نه جلد هایی قیمت/بدون قیمت) هر کدام از این پیشنهادات داده میشود به ارزیابی کنندگان تکنیکی برایی دوره کردن/ ارزیابی, بدون همراه کردن قیمت با آنها و یا کدام دسته بندی/درجه بندی قیمت ها. اگر هیچکدام از پیشنهادات قابل

قبول نبود از لحاظ تکنیکی در این گروپ اول پیشنهادات, سپس پروسهٔ شرح داده شده دوباره انجام میشود به تعداد دفعات مورد نیاز تا زمانیکه قول اردویی انجینری ایالات متحده مشخص سازد یک پیشنهاد قابل قبول تکنیکی را.

12. پروسهٔ پایینترین - قیمت و قابل قبول از لحاظ تکنیکی

یک ارزیابی برایی قابل قبول بودن اجراء میشود بر رویی هر پیشنهاد بر حسب FAR 15.101-2(b) . پیشنهادی که که دارایی پایینترین قیمت و از طرف دیگر قابل قبول باشد از لحاظ تکنیکی در تمام فاکتور ها انتخاب میشود برایی اهداء. برایی مورد توجه قرارگرفتن بعنوان قابل قبول از لحاظ تکنیکی, هیچکدام از فاکتور هایی تکنیکی در پیشنهاد ممکن نیست که (نباید) غیر قابل قبول مشخص شود. عدم مؤفقیت یک پیشنهاد در برآورده ساختن حداقل استاندارد قبولیت نتیجه میشود ارزیابی شود بعنوان غیر قابل قبول از لحاظ تکنیکی و مانع میشود از اهداء (پروژه به شرکتی که مؤفقیت کسب نکرده است در برآورده کردن فاکتور هایی تکنیکی) . همچنان ببینید بخش 00120 .

معلومات تجربه (برایی کامل شدن توسط قراردادی)	
1.نام قراردادی: آدرس:	2.شماره قرارداد /قراردادهایی بزرگ **(Task Order(TO) (MATOC)** / قرارداد برایی خریداری اجناس/سرویس **(Purchase Order (PO))**:
	3. ارزش دالری قرارداد/تی.او**(TO)**/پی.او **(PO) :**
	4. حالت قرارداد/ تی.او**(TO)** /پی.او **(PO)**: فعال ☐ کامل ☐ تاریخ کامل شدن یا تاریخ احتمالی تکمیل شدن:

5. عنوان پروژه: قراردادی اولیه ☐ قراردادی فرعی ☐

موقعیت (شهر و ولایت):

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6. توضیحات پروژه:
ترکیب/اجزایی کاری که پیشنهاد دهندگان کامل نموده اند تا شامل بسازند ارزش دالری کلی قرارداد را برایی کار تکمیل شده:

اجرائات گذشته (برایی کامل شدن توسط قراردادی)
1. شماره قرارداد /قراردادهایی بزرگ**(Task Order(TO) (MATOC)** / قرارداد برایی خریداری اجناس/سرویس **(Purchase Order (PO))**:
2. (شماره در) سیستم نمبر گذاری جهانی قراردادی **(DUNS)** #:
3. ارزش دالری قرارداد/تی.او**(TO)**/پی.او **(PO) :**
4. عنوان پروژه: موقعیت (شهر و ولایت): درصد تکمیلی: تاریخ تکمیل شدن: آیا پروژه تکمیل شده بود طبق برنامه زمانی و در حدود قیمت (تعیین شده در قرارداد یا که زیادتر از آن)؟
5. اگر نه لطفاً تهیه نمایید یک خلاصهٔ مختصر از اقدامات اصلاحی که انجام شده بود:
6. لیست پروژه هایی فعلی, ارزش دالری آنها, شماره قرارداد, فیصدی(%) تکمیل آنها:
6. لیست پروژه هایی فعلی, ارزش دالری آنها, شماره قرارداد, فیصدی(%) تکمیل آنها: اطلاعات برایی تماس (معرفی شخص برایی تماس گرفتن) **(POC)**/ مرجع (حداقل دو آدرس مورد نیاز است و باید آدرس هایی مالکین یا مشتریان (تامین کنندگان مالی) پروژه باشد. برایی مثال – **(USACE, USAID):** نام: نام: شماره تلیفون # : شماره تلیفون # : آدرس ایمل: آدرس ایمل:

فورم انکشاف ظرفیت افغان ها		
ستون اول	**ستون دوم**	**ستون سوم**
موقعیت (شغل)	حد اقل فیصدی نیرویی کاری که افغان است (این ستون برایی پر شدن توسط پیشنهاد دهندگان است)	((حداقل فیصدی) در ستون دوم باید بزرگتر یا مساوی باشد به فیصدی زیر)
پیشه وران با مهارت		50%
کارگران با مهارت بسیار بالا (صنعتگران)		25%

توسط امضایم در پایین, من اطمینان میدهم از اینکه من بخش 001065 "انکشاف ظرفیت افغانها" "Afghan Capacity Development" را خوانده ام و اینکه شرکت برآورده میکند نیازمندیها برایی استخدام کارگران با مهارت و تکنیکی افغان را (برایی مثال, حداقل 50%) و کارگران با مهارت بسیار بالا و تکنیکی افغان را (برایی مثال, حداقل 25%). من تصدیق مینمایم اینکه شکست در برآورده کردن نیازمندیهایی اولیهٔ برایی استخدام افغانها ممکن است که سبب شود قرارداد به دلیل اشتباه قراردادی فسخ شود (Terminated for Default).

امضاء _____

نام نوشته شده (با دستخط) _____

عنوان _____

SECTION 00120
PROPOSAL EVALUATION AND CONTRACT AWARD

LOWEST-PRICED, TECHNICALLY ACCEPTABLE (LPTA)

1. ELIGIBILITY FOR CONTRACT AWARD.

In accordance with the Federal Acquisition Regulation (FAR), no contract shall be entered into unless the Contracting Officer ensures that all requirements of law, executive orders, regulations, and all other applicable procedures, including clearances and approvals, have been met. This includes the FAR requirement that no award shall be made unless the contracting officer makes an affirmative determination of responsibility. To be determined responsible, a prospective contractor must meet the general standards in FAR Part 9 and any special standards set forth in the solicitation.

2. LOWEST PRICE TECHNICALLY ACCEPTABLE (LPTA) SOURCE SELECTION PROCESS.

An evaluation for acceptability will be performed on each proposal in accordance with FAR 15.101-2 (b) (1). The proposal that provides either the lowest price within 25% above or below the Independent Government Estimate or within 25% above or below the average of all of the offers received and is otherwise technically acceptable in all factors will be selected for award. To be considered technically acceptable, no technical factor in the proposal may be determined to be unacceptable. The failure of a proposal to meet all of the requirements under any Factor will result in a technically unacceptable rating and preclude award.

The Government will evaluate proposals as follows. Each proposal will be evaluated by a single evaluator of the Source Selection Evaluation Board (SSEB). If any Factor is determined "NO GO" by the evaluator, the evaluator will fully disclose the issue(s) to the other SSEB evaluators of the Source Selection Evaluation Board. The other members of the SSEB will then review the individual adverse assessment. No factor will be rated as a No Go unless there is a consensus among the SSEB members that the assessment is consistent with the evaluation criteria stated in Section 00120.

The Government price evaluators will conduct a price analysis of overall prices and then perform a realism analysis for the purpose of measuring each Offeror's understanding of the requirements and to assess the risk inherent in an Offeror's proposal. Total prices submitted by the Offeror that are determined to be more than 25% above or below the Independent Government Estimate and more than 25% above or below the average of all the price proposals received in response to the solicitation will be considered to be unreasonably high or unrealistically low and will not be considered for award. In the event the Government receives more than ten proposals in response to this solicitation, the Government will evaluate proposals as follows. First, the Government will determine which ten complete proposals have the lowest overall proposed prices. The technical (non-pricing) volume(s) of each of these proposals will be given to the Technical Evaluators for review, without

identification of the prices or any rank order of prices. If no proposals are found to be technically acceptable within this first group of proposals, then the process described will be conducted again, as many times as necessary, until such time as the Government identifies a technically acceptable proposal(s). Should no proposal be determined technically acceptable, the Contracting Officer will establish a competitive range consisting of the most highly rated proposals. After receipt of the Offeror's responses raised during Discussions with all Offerors included in the competitive range, responses will be rated again in the same manner as in the initial evaluation.

3. BASIS OF AWARD.

Subject to the provisions contained herein, award will be made to one (1) Offeror who is deemed responsible in accordance with the Federal Acquisition Regulation who conforms to the solicitation requirements; and whose proposal, judged by an overall assessment of the evaluation criteria and other considerations specified in this solicitation meets the technically acceptable standard for the non-cost factors and provides the lowest evaluated price.

4. EVALUATION OF THE PRICE PROPOSALS

Price will be evaluated and considered but will not be scored or combined with other aspects of the proposal evaluation. The proposed prices will be analyzed for reasonableness. They will also be analyzed to determine whether they are realistic for the work to be performed, reflect a clear understanding of the requirements, and are consistent with the information provided by the Offeror. Additionally, all offers will be analyzed for unbalanced pricing.

The otherwise technically-acceptable lowest-priced Offeror may be required to confirm/validate its price on a Contract Line Item (CLIN), element, or total price basis, and/or provide additional information in support of their price, prior to contract award at the Government's request and discretion.

5. EVALUATION OF THE TECHNICAL PROPOSAL.

The Technical Proposal will be evaluated based on the following evaluation criteria:

A. <u>FACTOR 1 - EXPERIENCE:</u> The Government will review the Experience of the Offeror, including subcontractors and Joint Ventures, on projects submitted in response to Section 00110, Factor 1. "**<u>Same or Similar</u>**" as referenced below, is defined as experience on projects that are the same or similar in size, scope, complexity and dollar magnitude as the project described in the solicitation. Offerors must meet all of the following standards to receive a "GO" or acceptable rating on this factor:

- Offeror shall complete no more than five (5), Experience Information forms on projects. All blocks must be completed and all data must be accurate, current, and complete.

- At least two (2) of the projects submitted must be the **<u>same or similar</u>** to the project described in the solicitation.

- All projects submitted must be at least 50% complete.

- At least one (1) of the projects submitted must be valued at over $500,000.00 **AND** must have been completed within the last 3 years. This project must be the **same or similar** to the project described in the solicitation.

- At least one (1) project must have been successfully completed in the Province in which the solicitation project is to be located within the last three (3) years. This project must be 100% complete. This project **does not** have to be the **same or similar** to that described in the solicitation.

***Failure to meet all of the requirements under this factor will result in a "NO GO" or unacceptable rating and possible elimination from further consideration for contract award.

B. FACTOR 2 - KEY PERSONNEL: The Government will review the resumes provided in response to Section 00110, Factor 2. Offerors must meet all of the following standards to receive a "GO" or acceptable rating on this factor.

The Offeror must submit resumes for the following Key Personnel:

Project Manager for Design
Project Manager for Construction
Senior Electrical Engineer
Senior Mechanical Engineer
Senior Civil Engineer
On-Site Construction Superintendent
Safety Officer
Quality Control Manager
Project Scheduler (Resume must indicate Scheduling Software experience (e.g., Primavera, Microsoft Project)

All resumes must include the following information and may NOT exceed two (2) pages.

- Name and title
- Project assignment
- Name of firm with which associated
- Years experience with this firm (to include your field of expertise/discipline) **and** years of experience with other firms (to include your field of expertise/ discipline)
- Education degree(s), year, and institution
- Active professional registration, year first registered, if applicable
- Other experience and qualifications relevant to same/similar work required under this contract
- List of projects in which the individual has worked to include Name of project(s) and project location(s)

The following key personnel must have degrees in the required disciplines:

- Project Manager for Design – Architectural or Engineering Degree
- Project Manager for Construction – Architectural or Engineering Degree
- Senior Electrical Engineer – Electrical Engineering Degree
- Senior Mechanical Engineer – Mechanical Engineering Degree
- Senior Civil Engineer – Civil Engineering Degree

ALL Key Personnel shall have a minimum of three (3) years of professional experience in that field. For example, a Civil Engineer must have a degree in Civil Engineering and 3 years of professional civil engineering experience.

***Failure to meet all of the requirements under this Factor will result in a "NO GO" or unacceptable rating and elimination from further consideration for contract award.

C. FACTOR 3 - SECURITY PLAN: The government will evaluate the Offeror's "draft" Security Plan describing how they intend to meet the requirements found in Technical Specification Section 01040 "Security". The plan shall be specific to the geographic area of the project. At a minimum, the draft Security Plan must address the following:

- Licensed Armed Guards - Section 01040 paragraph 6.0
- Access Control to Limit Entry – Section 01040 paragraph 4.0
- Security for Road Projects, Transportation and Convoys - Section 01040 paragraph 4.2
- Movement of Project Equipment and Supplies - Section 01040 paragraph 4.2.1
- Threat Assessment - Section 01040 paragraph 5.2
- Coordinate with Local Police - Section 01040 paragraph 5.5

The Offeror also must submit either a:

1) letter of commitment from a licensed Private Security Contractor (PSC)

OR

2) a statement indicating that they will self-perform the security functions.

***Failure to meet all of the requirements under this Factor will result in a "NO GO" or unacceptable rating and elimination from further consideration for contract award.

D. FACTOR 4 - PAST PERFORMANCE: The Government will review the relevancy of the Offeror's Past Performance, including subcontractors and Joint Ventures, on projects submitted in response to Section 00110, Factor 4. Relevant Past Performance is defined as past performance on projects that is the same or similar in size, scope, complexity and dollar magnitude as the project described in the solicitation. Offerors

must meet all of the following standards to receive a "GO" or acceptable rating on this factor:

- The Offeror shall complete and submit no more than five (5) Past Performance forms attached at the end of Section 00110 in response to this factor. Past Performance forms submitted must be on projects that are at least 50% completed within the last three (3) years.

- At least (1) one of the Past Performance forms submitted must be for a project that has been successfully completed (i.e., 100% completed) in the Province in which the solicitation project is located within the last three (3) years. This project <u>does not</u> have to be the <u>same or similar</u> to that described in the solicitation.

- All blocks on the Past Performance form must be completed and all data must be accurate, current and complete, to include the DUNS number, if available and the two (2) Points of Contact/References for each project.

- Letters of recommendation, commendations, and/or awards on projects, which demonstrate construction experience will be reviewed and evaluated if provided by the Offeror.

***Failure to meet all the requirements under this factor will result in a "NO GO" or unacceptable rating.

***In the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available, the Offeror may not be evaluated favorably or unfavorably on past performance.

The Contractor Performance Assessment Reporting System (to include ACASS, CCASS, and CPARS) will be utilized to validate past performance ratings on Department of Defense contracts, as well as any other past performance information source the Government deems necessary to evaluate a contractor's past performance.

The U.S. Army Corps of Engineers, Afghanistan Engineer District-North, maintains final evaluations of Offeror's performance in the Resident Management System (RMS), hard copies in contract files, and previous past performance evaluations conducted by the Government. Any and all of this information may be used when evaluating past performance of Offerors if it is determined to be recent and relevant by the Contracting Officer.

The Government may use the list of projects under way, and other information, to contact references provided as part of Factor 1 – Experience, or any other sources, for information regarding the Offeror's past performance on projects and for the purposes of assessing and verifying the scope of the work performed.

E. <u>FACTOR 5 - AFGHAN CAPACITY DEVELOPMENT:</u> The Government will review the Resume for the Afghan Capacity Development Manager and the Afghan

Capacity Development Form provided in response to Section 00110, Factor 5. Offerors must meet all of the following standards to receive a "GO" or acceptable rating on this factor.
The Resume must include the following information and may not exceed one (1) page:

- Name
- Capacity building experience (to include but not limited to improving Afghan laborer skills including on-the-job training; working or coordinating with vocational/technical trade schools; experience with recruitment and hiring of skilled Afghan labor).

The Offeror must complete and submit the Afghan Capacity Development Form at the end of Section 00110 stating the minimum percentage of workforce to be Afghan in Column 2.

The signature block on the Afghan Capacity Development Form must be completed by an executive officer in the company who has legal authority to make the commitments and who certifies that Section 001065 "Capacity Development" was read, and that the company must comply with the hiring requirements for skilled Afghan technical worker (i.e. minimum of 50%) and highly skilled Afghan technical workers (i.e. minimum of 25%).

The Offeror must fill-in Column (2) on the Afghan Capacity Development Form to show the percentage of 1) skilled Afghan technical workers and 2) highly skilled Afghan technical workers to be employed on this project.

- Skilled Technical Workers include, but are not limited to: equipment operators, masons, reinforcing steel workers, concrete finishers, laboratory technicians, painters, and carpenters.

- Highly Skilled Technical Workers include: electricians and plumbers who have completed advanced electrical or plumbing courses with certification.

The percentage (%) of workers you indicate in column (2) must be equal to or greater than the percentage shown in column (3).

***Failure to meet all the requirements under this factor will result in a "NO GO" or unacceptable rating.

6. OTHER AWARD FACTORS. The Contracting Officer shall consider several factors in the selection process which are important, but not quantified, such as:

(1) Agreement by the Offeror to all general and special contract provisions and clauses.

(2) Determination of responsibility of the contractor by the Contracting Officer in accordance with the provisions of the Federal Acquisition Regulation, Part 9.1. In order to be determined responsible, a prospective contractor must:

(a) Have adequate financial resources to perform the contract or the ability to obtain them.

(b) Be able to comply with the required or proposed delivery or performance schedule taking into consideration all existing commercial and Governmental business commitments.;

(c) Have a satisfactory performance record.

(d) Have a satisfactory record of integrity and business ethics.

(e) Have the necessary organization, experience, accounting and operational controls, and technical skills, or the ability to obtain them.

(f) Have the necessary production, construction, and technical equipment and facilities, or the ability to obtain them.

(g) Be otherwise qualified and eligible to receive an award under applicable laws and regulations.

7. GENERAL TECHNICAL CRITERIA

a. Material omission(s) may cause the technical proposal to be rejected as unacceptable.

b. Proposals which are generic, vague, or lacking in detail may be considered unacceptable. The Offeror's failure to include information that the Government has indicated should be included may result in the proposal being found deficient if inadequate detail is provided.

c. The Government cannot make award based on a deficient offer. Therefore, receipt of a "NO GO" determination of acceptability for any factor will make the offer ineligible for award, unless the Government elects to enter into discussions with that Offeror and all deficiencies are remedied in a revised proposal.

این مدارک تهیه شده است تنها برایی معلومات. نسخه انگلیسی نسخه رسمی است. اگر کدام اختلاف بین دو نسخه فارسی و انگلیسی وجود دارد, نسخه انگلیسی برتری دارد.

بخش 00120

ارزیابی پیشنهاد و اهداء قرارداد

پایینترین قیمت, قبول شده از لحاظ تکنیکی (اِل.پی.تی.اِ)(LPTA)

1. شایستگی برایی اهداء قرارداد. برحسب فار(FAR), هیچ قراردادی باید عضو (اهداء) نشود تا زمانیکه افسر قرارداد مطمئن سازد از اینکه تمام نیازمندیهایی قانون, مراتب اجرایی, مقررات و تمام طرزالعمل هایی قابل تطبیق دیگر , شامل اجازه (ترخیص) و موافقتها (تصویب) برآورده شده است. این در بردارد نیازمندیهایی فار (FAR) را که هیچ اهدایی نباید صورت گیرد تا زمانیکه افسر قرارداد تعیین مثبت مسؤلیت ها را انجام دهد. برایی مسؤل تعیین شده بودن, یک قراردادی آتی (آینده) باید استاندارد هایی کلی در فصل 9 فار(FAR) و کدام استانداردهایی مخصوص دیگر که خارج از درخواست آمده است را مراعات نماید.

2. پروسهٔ انتخاب قراردادی (SOURCE SELECTION) استفاده میکند از پروسهٔ پایینترین قیمت و قابل قبول از لحاظ تکنیکی.

یک ارزیابی برایی قابل قبول بودن انجام میشود برروییی هر پیشنهاد بر حسب ((FAR 15.101-2(b)) .
پیشنهادی که تهیه میکند پایینترین قیمت را بین 25% بالاتر یا پایینتر از برآورد مستقل قول اردویی انجینری امریکا **(IGE)** و یا بین 25% بالاتر یا پایینتر از میانگین (حد وسط) تمام پیشنهاد هایی که دریافت شده است و همچنان از لحاظ تکنیکی قابل قبول باشد در تمام فاکتور ها انتخاب میشود برایی اهداء. برایی مورد توجه قرارگرفتن بعنوان قابل قبول از لحاظ تکنیکی, هیچ فاکتور تکنیکی در پیشنهاد باید غیر قابل قبول نباشد. شکست یک پیشنهاد در برآورده کردن تمام نیازمندیهایی تحت کدام فاکتور نتیجه میشود ارزیابی شدن بعنوان غیرقابل قبول از لحاظ تکنیکی و مانع میشود اهداء را.

قول اردویی انجینری ایالات متحده ارزیابی می کند پیشنهادات را بترتیب زیر.هر پیشنهاد ارزیابی میشود توسط یک ارزیابی کننده انفرادی از هیئت ارزیابی و انتخاب قراردادی **(Source Selection Evaluation Board (SSEB))** اگر کدام فاکتور "غیر قابل قبول" **"NO GO"** مشخص شد توسط ارزیابی کننده, ارزیابی کننده کاملاً موضوع را آشکار میکند به اعضایی دیگر هیئت ارزیابی و انتخاب قراردادی **(SSEB)**. اعضایی دیگر **(SSEB)** سپس بازبینی میکنند تک تک (نکات و یا) ارزیابی هایی منفی (مغایر/مخالف) برایی پیشنهادات را.هیچ فاکتوری ارزیابی (نرخ گذاری) نمیشود بعنوان "غیر قابل قبول" تا زمانیکه توافق نظر موجود نباشد در بین اعضایی **(SSEB)** در مورد اینکه ارزیابی سازگار است همراه با معیار هایی ارزیابی که بیان شده در بخش 00120.

ارزیابی کنندگان قیمت قول اردویی انجینری ایالات متحده انجام میدهند یک تحلیل قیمت بر روییی قیمت هایی کلی و بعد از آن یک تحلیل واقعگرانه را انجام میدهند بمنظور اندازه گیری درک نیازمندیها توسط هر قراردادی و تا تخمین بزنند خطر (ریسک) مرتبط با پیشنهاد هر قراردادی را. قیمت هایی کلی تقدیم شده بوسیلهٔ پیشنهاد دهندگانی که مشخص شده اند زیادتر از 25% بالاتر یا پایینتر از برآورد مستقل قول اردویی انجینری امریکا **(IGE)** و زیادتر از 25% بالاتر یا پایینتر از میانگین (حد اوسط) تمام پیشنهاد هایی قیمتی که دریافت شده است در جواب به درخواست توجه میشوند بدون دلیل دارایی قیمت بالا یا دارایی قیمت پایین غیر واقعی و مورد توجه قرار نمیگیرند برایی اهداء. در صورتیکه قول اردویی انجینری ایالات متحده دریافت کند زیادتر از ده پیشنهاد را در جواب به این درخواست, قول اردویی انجینری ایالات ارزیابی میکند پیشنهادات را به شکل زیر. اولاً, قول اردویی انجینری ایالات متحده مشخص میسازد اینکه کدام ده (10) پیشنهاد کامل دارایی پایینترین قیمت در کل قیمت هایی پیشنهاد شده در پروپوسل ها میباشند. جلد هایی تکنیکی (نه جلد هایی قیمت/بدون قیمت) هر کدام از این پیشنهادات داده میشود به ارزیابی کنندگان تکنیکی برایی دوره کردن/ ارزیابی, بدون همراه کردن

قیمت با آنها و یا کدام دسته بندی/درجه بندی قیمت ها. اگر هیچکدام از پیشنهادات قابل قبول نبود از لحاظ تکنیکی در این گروپ اول پیشنهادات, سپس پروسهٔ شرح داده شده دوباره انجام میشود به تعداد دفعات مورد نیاز تا زمانیکه قول اردویی انجینری ایالات متحده مشخص سازد یک پیشنهاد قابل قبول تکنیکی را. در صورتیکه هیچ پیشنهادی از لحاظ تکنیکی قابل قبول مشخص نشد, افسر قرارداد ایجاد میکند یک حد (رنج) رقابتی را که شامل پیشنهادات با بالاترین امتیازات است. بعد از دریافت پاسخ پیشنهاد دهندگان که بهتر شده است /ارتقاء پیدا کرده است در طول مباحثات با پیشنهاد دهندگانی که شامل رنج (حد) رقابت بوده اند, پاسخ ها نرخ گذاری/ارزیابی میشوند بهمان ترتیب ارزیابی اول.

3. **اساسات اهداء.**

بر اساس شرایطی که شامل این بخش بود, قرارداد اهداء میشود به یک پیشنهاد دهنده که مسئول بنظر میرسد بر حسب قوانین اکتسابی فدرالی **(Federal Acquisition Regulation)** که مطابق با نیازمندیهایی درخواست است و کسی که پیشنهاد آن قابل قبول واقع شده باشد از لحاظ تکنیکی (بدون قیمت) و استاندارد باشد در تمام فاکتور ها بعد از بررسی تمام معیار ها و ارزیابی نکات دیگر که مشخص شده است در درخواست و همچنین پایینترین قیمت را ارائه بدهد.

4. ارزیابی پیشنهاد هایی قیمت

قیمت ارزیابی میشود و مورد توجه قرار میگیرد اما امتیاز نمیگیرد و با دیگر جنبه هایی ارزیابی پیشنهاد ترکیب نمیشود. قیمت هایی پیشنهادی تجزیه و تحلیل(آنالیز) میشوند برایی معقول بودن. آنها همچنان ارزیابی میشوند برایی تعیین اینکه آیا آنها واقعگرانه هستند برایی کاری که باید انجام شود, اینکه منعکس میسازند یک درک واضح از نیازمندیها و اینکه سازگارند همراه با اطلاعات تهیه شده توسط پیشنهاد دهندگان. بعلاوهٔ, تمام پیشنهادات تحلیل میشوند برایی قیمت گذاری نا متعادل.

از لحاظ دیگر پیشنهاد دهندگان با پیشنهاد قابل قبول از لحاظ تکنیکی و پایینترین قیمت ممکن است نیاز داشته باشند تا ارائه نمایند لیست قیمت هایشان با جزئیات و برایی هر بخش کار بطور جداگانه **((Contractor Line Item (CLIN)** , (قیمت شان برایی هر) واحد یا بر اساس قیمت هایی کلی و یا تهیه معلومات اضافی در حمایت از قیمت هایشان قبل از اهداء قرارداد براساس درخواست و صلاحدید قول اردویی انجینری امریکا.

5. ارزیابی پیشنهاد تکنیکی.

پیشنهاد تکنیکی ارزیابی میشود بر اساس معیارهایی ارزیابی زیر:

A. فاکتور 1 – تجربه کاری

قول اردویی انجینری ایالات متحده بازرسی میکند تجربه کاری پیشنهاد دهندگان را, شامل قراردادی هایی فرعی و شرکا بر رویی پروژه هایی که تهیه شده در جواب به بخش 00110, فاکتور 1. **" (تجربه کاری) یکسان یا مشابه "** چنانکه مرجع داده شده است در پایین تعریف شده است بعنوان تجربه کاری بر رویی پروژه ایکه یکسان یا مشابه میباشد در اندازه, مقدار و نوع کار, دشواری (پیچیدگی) و مقدار دالری با پروژه شرح داده شده در درخواست. پیشنهاد دهندگان باید تمام استاندارد هایی زیر را مراعات نمایند تا یک "GO" "قابل قبول" ارزیابی شده باشند برایی این فاکتور.

پیشنهاد دهندگان نباید پیشتر از پنج (5) فورم معلوماتی تجربه کاری را تکمیل نمایند در جواب به این فاکتور. تمام خانه خالی ها باید پر شده باشند و تمام اطلاعات باید دقیق, جاری و کامل باشد.

حداقل دو (2) عدد از پروژه هایی تقدیم شده باید **یکسان و یا مشابه** با پروژه ای شرح داده شده در درخواست باشد.

تمام پروژه هایی تقدیم شد باید حداقل 50% کامل شده باشد.

حداقل یکی (1) از پروژه هایی تقدیم شده باید به ارزش بالاتر از 500,000.00 $ باشد **و** تکمیل شده باشد در 3 سال اخیر. این پروژه باید **یکسان و یا مشابه** به پروژه ای شرح داده شده در درخواست باشد.

حداقل یک (1) پروژه را که کامل شده باشد مؤفقانه در ولایتی که پروژه موجود در درخواست در آن موقعیت دارد در بین سه (3) سال اخیر. این پروژه باید % 100 کامل شده باشد. این پروژه **نیازی نیست** که **یکسان و یا مشابه** پروژه ای شرح شده در درخواست باشد.

*** شکست در مراعات کردن تمام نیازمندیها ها تحت این فاکتور نتیجه میشود دریافت یک "NO GO" "غیر قابل قبول" را یا ارزیابی شدن (بعنوان) غیر قابل قبول و حذف احتمالی از توجهات بعدی برایی برنده شدن یک قرارداد .

B. فاکتور 2 – پرسونل کلیدی:

قول اردویی انجینری ایالات متحده ارزیابی میکند خلاصه تجربیات تهیه شده را در جواب به بخش 00110, فاکتور2 . پیشنهاد دهندگان باید مراعات کنند تمام استاندارد هایی زیر را تا دریافت کنند یک "GO" "قابل قبول" را یا ارزیابی شوند بعنوان قابل قبول برایی این فاکتور.

مدیر پروژه برایی دیزاین
مدیر پروژه برایی ساختمان
انجینر ارشد برق,
انجینر ارشد مکانیک,
انجینر ارشد ساختمان,
سرکارگر ساختمان بر رویی ساحه,
افسر ایمنی
مدیر کنترل کیفیت
برنامه ریز زمانی پروژه (خلاصه تجربیات کاری باید بیان نماید تجربه کار با نرم افزار برنامه ریز زمانی را (برایی مثال پرایم اویرا, مایکروسافت پروجکت)

تمام خلاصه هایی تجربه کاری باید شامل اطلاعات زیر باشد و نباید اضافه تر از دو (2) صفحه برایی هر خلاصه تجربیات کاری شود:

نام و عنوان
پروژه ای که بر روی آن کار نموده است
اسم شرکتی که فرد به آن وابسته بوده است
سالهایی تجربه کاری با این شرکت (در رشته تخصصی / تحصیلی تان) **و** شرکت هایی دیگر(در رشته تخصصی / تحصیلی تان)
درجه تحصیل, سال, و انستیوت (محل فراغت)
راجستر کردن فعال بطور حرفه ای, سال اول که راجستر کرده اید, اگر قابل تطبیق بود
تجربه هایی دیگر و صلاحیت هایی کاری مرتبط به کاری یکسان/مشابه کار مورد نیاز تحت این قرارداد.
لیست پروژه هایی که کارکنان شما بطور انفرادی در آن کار نموده اند شامل نام و موقعیت پروژه.

پرسونل کلیدی زیر باید دیپلوم داشته باشند به ترتیب مورد نیاز:

مدیر پروژه برایی دیزاین – دیپلوم آرشیتیکت یا انجینری

مدیر پروژه برایی ساختمان - دیپلوم آرشیتیکت یا انجینری
انجینر ارشد برق – دیپلوم انجینری برق
انجینر ارشد مکانیک – دیپلوم انجینری مکانیک
انجینر ارشد ساختمان – دیپلوم انجینری ساختمان

تمام پرسونل کلیدی باید جداقل سه سال تجربه کاری تخصصی در رشته شان را داشته باشند. برایی مثال انجینر ارشد ساختمان باید دیپلوم داشته باشد در انجینری ساختمان و حداقل سه سال تجربه کاری تخصصی انجینری ساختمان را داشته باشد.

*** شکست در مراعات کردن تمام نیازمندیها تحت این فاکتور نتیجه میشود دریافت یک "NO GO" " غیر قابل قبول" را و یا ارزیابی شدن بعنوان غیر قابل قبول و حذف از توجهات بعدی برایی برنده شدن یک قرارداد را.

C. فاکتور 3 – پلان امنیتی: قول اردویی انجینری ایالات متحده ارزیابی میکند پلان امنیتی طرح شده را که شرح میدهد اینکه چطور پیشنها دهندگان قصد دارند نیازمندیهایی موجود در بخش مشخصات تکنیکی 01040 "امنیت" (Technical Specification Section 01040, "Security") را مراعات نمایند. پلان طرح شده امنیتی باید حداقل آدرس دهد موارد زیر را:

نگهبانان مسلح صاحب لیسانس – بخش 01040 پاراگراف 6.0
کنترل دستیابی/ورود برایی محدود ساختن ورود (افراد و وسایط) – بخش 01040 پاراگراف 4.0
امنیت برایی پروژه هایی سرک, نقل و انتقالات و کاروان ها – بخش 01040 پاراگراف 4.2
انتقال/جابجایی وسایل و مواد تأمیناتی پروژه – بخش 01040 پاراگراف 4.2.1
برآورد/تخمین تهدیدات – بخش 01040 پاراگراف 5.2
هماهنگی با پولیس محلی – بخش 01040 پاراگراف 5.5

بعلاوۀ, پیشنهاد دهندگان باید تقدیم نمایند یک:

1) تعهد نامه از یک قراردادی امنیتی خصوصی دارایی لیسانس (PSC)

یا

2) یک بیانیه که تأکید مینماید که آنها خودشان کارها/مسایل امنیتی را بدوش میگیرند.

*** شکست در مراعات کردن تمام نیازمندیها تحت این فاکتور نتیجه میشود دریافت یک "NO GO" " غیر قابل قبول" را و یا ارزیابی شدن بعنوان غیر قابل قبول و حذف از توجهات بعدی برایی برنده شدن یک قرارداد را.

D. فاکتور 4 , اجرائات کاری گذشته: قول اردویی انجینری ایالات متحده بررسی میکند مرتبط بودن اجرائات کاری گذشته پیشنهاد دهندگان را شامل قراردادیهایی فرعی و شرکا (با پروژه موجود در درخواست) بر رویی پروژه هایی تقدیم شده در پاسخ به بخش 00110, فاکتور 4. اجرائات گذشته مرتبط تعریف شده است بعنوان اجرائات گذشته بر رویی پروژه هایی که یکسان یا مشابه پروژه شرح داده شده در درخواست باشند در اندازه, مقدار و نوع کار, دشواری/پیچیدگی و مقدار دالری. پیشنهاد دهندگان باید مراعات نمایند استاندارد هایی زیر را تا دریافت نمایند یک "GO" "قابل قبول" را یا اینکه ارزیابی شوند بعنوان قابل قبول برایی این فاکتور:

پیشنهاد دهندگان باید کامل و تقدیم کنند نه پیشتر از پنج (5) فورم ضمیمهٔ شده در آخر بخش 00110 را در جواب به این فاکتور. فورم هایی اجرائات گذشته تقدیم شده باید برایی پروژه هایی باشد که حداقل 50% تکمیل شده است در حدود سه (3) سال اخیر.

پیشنهاد دهندگان باید حداقل یکی (1) از فورم هایی اجرائات گذشته را تکمیل نمایند برایی یک پروژه ای که مؤفقانه تکمیل شده باشد (برایی مثال 100%) در ولایتی که پروژه موجود در درخواست در آن موقعیت دارد در بین سه سال اخیر. این پروژه **نیازی نیست** که **یکسان یا مشابه** پروژه ای شرح داده شده در درخواست باشد.

تمام خانه خالی ها (بلاک ها) در فورم اجرائات گذشته باید کامل شده باشد و تمام داده ها (اطلاعات) باید دقیق, جاری و کامل باشد و شامل دنس نمبر(DUNS) و دو نقطه (فرد) مورد تماس/مراجع برایی هر پروژه.

توصیه نامه ها, تحسین نامه ها و اهداء نامه برایی پروژه هاییکه نشان میدهد بوضوح تجربه کار ساختمانی بررسی و ارزیابی میشود اگر تهیه شده بودند بوسیلهٔ پیشنها دهندگان.

*** شکست در مراعات کردن تمام نیازمندیها تحت این فاکتور نتیجه میشود دریافت یک "NO GO" " غیر قابل قبول" را و یا ارزیابی شدن بعنوان غیر قابل قبول.

*** در موردی که یک پیشنهاد دهنده دارایی هیچ (ریکورد) سابقه کاری مرتبط نیست و یا اینکه اطلاعات در مورد تجربه کاری آنها موجود نمیباشد, پیشنهاد دهندگان ممکن است که ارزیابی نشوند بطور مطلوب و یا نا مطلوب برایی اجرائات کاری گذشته.

سیستم گزارش دهی برایی ارزیابی اجرائات قراردادی (شامل اِ.سی.اِ.اِس.آس, سی.سی.اِ.اِس.اِس و سی.پی.اِ.آر.اِس)(ACASS, CCASS, and CPARS) استفاده میشود برایی معتبر ساختن و ارزیابی قرارداد هایی وزارت دفاع امریکا, بعلاوهٔ هر منبع اطلاعاتی دیگری که ضروری بنظر برسد برایی بررسی اجرائات گذشته قراردادی توسط قول اردویی انجینری امریکا ممکن است که آن منبع مورد استفاده قرار گیرد برایی بررسی اجرائات گذشته قراردادی.

قول اردویی انجینری ایالات متحده, ساحه انجینری افغانستان-شمال, حفظ میکند ارزیابی نهایی اجرائات پیشنهاد دهندگان را در سیستم مدیریت محلی (RMS) , کوپی هایی سخت (اوراق) را در فایل هایی قرارداد و (همچنین) نگهداری میکند ارزیابی هایی قبلی اجرائات گذشته که صورت گرفته است بوسیله قول اردویی انجینری ایالات متحده را. کدام و یا تمام این اطلاعات ممکن است که استفاده شود موقع ارزیابی اجرائات گذشته پیشنهاد دهندگان اگر مشخص شود که آن (اطلاعات) جدید و مرتبط است توسط افسر قرارداد.

قول اردویی انجینری ایالات متحده ممکن است که استفاده نماید لیست پروژه هایی تحت کار را و یا اطلاعات دیگر را تا تماس بگیرد با مراجعی که تهیه شده اند بعنوان بخشی از فاکتور 1 – تجربه ویا کدام منابع دیگر را برایی اطلاعات مربوط به اجرائات گذشته پیشنهاد دهندگان بر رویی پروژه ها و بمنظور برآورد و مشخص کردن نوع و مقدار کار انجام شده توسط پیشنهاد دهندگان.

E. فاکتور 5 – انکشاف ظرفیت افغانها: قول اردویی انجینری امریکا بررسی میکند خلاصهٔ تجربیات کاری مدیر انکشاف ظرفیت برایی افغانها و فورم انکشاف ظرفیت افغانها را که تهیه شده است در پاسخ به بخش 00110, فاکتور 5. پیشنهاد دهندگان باید مراعات نمایند استاندارد هایی زیر را تا دریافت نمایند یک "GO" "قابل قبول" را یا اینکه ارزیابی شوند بعنوان قابل قبول برایی این فاکتور:

خلاصهٔ تجربیات کاری باید شامل اطلاعات زیر باشد و نباید که زیادتر شود از یک (1) صفحهٔ:

نام
تجربه ظرفیت سازی (شامل اما نه محدود به بهتر سازی مهارتهایی کارگران افغان شامل آموزش (ترینینگ) هایی در حین انجام کار, کار کردن یا همکاری/هماهنگی با مکاتیب حرفه ای/ تکنیکی کسب (کار), تجربه با استخدام و اجاره کارگران با مهارت ا افغان).

پیشنهاد دهندگان باید فورم انکشاف ظرفیت افغان ها را در آخر بخش 00110 که بیان مینماید حداقل فیصدی نیرویی کار افغان را در ستون دوم کامل و تقدیم نمایند .

خانه/بلاک محل امضاء بر رویی فورم انکشاف ظرفیت افغان ها باید تکمیل شده باشد توسط یک افسر اجرایی شرکت که صلاحیت قانونی دادن / انجام تعهدات را دارد و کسی که اطمینان میدهد که بخش 001065 " انکشاف ظرفیت" "Capacity Development" خوانده شده است , شرکت باید به تعهدات خود نسبت به ضرورت استخدام کارگران با مهارت تکنیکی افغان (برایی مثال حداقل 50%) و کارگران با مهارت بسیاربالایی تکنیکی افغان (حداقل 25%) عمل کند.

پیشنهاد دهندگان باید ستون دوم بر رویی فورم انکشاف ظرفیت افغان ها را پر نمایند برایی نشان دادن فیصدی: 1) کارگران با مهارت و تکنیکی افغان را و 2) کارگران با مهارت بسیار زیاد و تکنیکی افغان که استخدام میشوند برایی این پروژه. این کارگران تکنیکی با مهارت و با مهارت بسیار زیاد تکنیکی افغان باید فارغ شده باشند از مکاتیب حرفه ای – تکنیکی یا فنی در افغانستان و ترجیحاً در ولایتی که پروژه در آن ساخته میشود.

کارگران با مهارت تکنیکی شامل اما نه محدود به : متصدی (گرداننده) تجهیزات, سنگ کار, سیم کار, قالب بند (کانکریت ریز) ,تکنیسین لابراتوار, رنگمال و نجار ها.

کارگران با مهارت بسیار زیاد و تکنیکی شامل: برقی ها و نلدوان هایی که تکمیل کرده باشند دوره ها (کورس هایی) با گرفتن سرتیفیکیت.

فیصدی (%) گارگرانی را که شما بیان میکنید در ستون (2) باید مساوی یا بزرگتر باشد از فیصدی نشان داده شده در ستون (3).

*** شکست در مراعات کردن تمام نیازمندیها تحت این فاکتور نتیجه میشود دریافت یک "NO GO"" غیر قابل قبول" را و یا ارزیابی شدن بعنوان غیر قابل قبول

فاکتور هایی دیگر اهداء. افسر قرارداد باید که توجه کند چندین فاکتور را در پروسهٔ انتخاب که مهم استند اما نه قابل اندازه گیری, همانند:

(1) موافقت با تمام بند ها و قیدهایی کلی و خاص قرارداد توسط قراردادی.

(2) تشخیص مسؤلیت پذیری قراردادی توسط افسر قرارداد بر حسب بند هایی قوانین اکتسابی فدرالی , بخش 9.1 (Federal Acquisition Regulation, Part 9.1). برایی اینکه یک قراردادی مسؤلیت پذیر تشخیص شود , قراردادی مورد نظر باید:

(a) دارایی منابع کافی مالی و یا توانایی بدست آوردن آنها را برایی اجراء قرارداد باشد.

(b) قادر به تحویلدهی (مواد و یا پروژه) یا اجرایی قرارداد بر حسب برنامه زمانی با توجه به تمام تعهدات تجاری و انجام تجارت با قول اردویی انجینری امریکا باشد.

(c) دارایی یک سابقه اجرائات گذشته رضایت بخش باشد.

(d) دارایی یک سابقه رضایت بخش در درستی و پایبندی به اصول تجارت باشد.

(e) دارایی توانایی کافی برایی برقرارکردن ارتباطات با شرکت /سازمان هایی دیگر, تجربه کافی, کنترل کافی بر سیستم مالیات و طرزالعمل ها / طرز اجرایی کار باشد و یا توانایی بدست آوردن آنها را داشته باشد.
(f) دارایی تولیدات, مواد و وسایط ساختمانی , وسایط و امکانات تکنیکی مورد نیاز باشد و یا توانایی بدست آوردن آنها را داشته باشد.

(g) از طرف دیگر دارایی شایستگی و قابلیت برایی برنده شدن قرارداد تحت قوانین و مقررات قابل تطبیق باشند.

6. معیارهایی کلی تکنیکی

a. حذفیات مواد (مهم) ممکن است سبب رد شدن پیشنهاد بعنوان غیر قابل قبول شود.

b. پیشنهاداتی که کلی, مبهم یا فاقد جزئیات هستند ممکن است که توجه شوند بعنوان غیر قابل قبول. شکست پیشنهاد دهندگان در شامل ساختن اطلاعاتی که قول اردویی انجینری ایالات متحده تأکید نموده است که باید شامل باشد ممکن است که باعث شود که پیشنهاد ناقص یافت شود اگر جزئیات ناکافی تهیه شده باشد.

c . قول اردویی انجینری ایالات متحده نمیتواند اهداء نماید (پروژه را) مبنی بر یک پیشنهاد ناقص. بنابراین, دریافت یک"NO GO" "غیر قابل قبول" در حین تشخیص قابلیت برایی کدام فاکتور پیشنهاد را فاقد شایستگی برایی برنده شدن قرارداد میسازد, بجز از موقعیکه قول اردویی انجینری ایالات متحده انتخاب میکند تا وارد بحث شود همراه با آن پیشنهاد دهنده و تمام نواقص اصلاح شود در یک پیشنهاد اصلاح شده.

SECTION 00150

THE SITE ADAPT PROCESS

1.0 GENERAL

1.1 SITE ADAPT PROCESS

The facility shall be site adapt designed and built by a single contractor. Site adapt means the contractor shall construct work in exact conformance to all drawings and construction specifications furnished in the Contract; perform design analysis to prepare all drawings and specifications necessary to complete all other remaining contract requirements. The design analysis and contractor-developed drawings and construction specifications shall be submitted for review in accordance with Section 01335. For this site adapt project, construction specifications shall also be completely developed for work shown in the furnished drawings and provided for AED review per Section 01335.

The contractor may be a single firm or a team of firms that includes registered Architects and Engineers either employed by or subcontracted to the contractor. Licensing jurisdiction of Architects and Engineers of record shall be shall be verifiable. The contractor shall be the Architect/Engineer-of-Record for all work not associated with the furnished drawings, whether the contractor utilizes services of licensed architects and engineers employed by its firm or subcontracts with independent architectural and/or engineering firm(s). The contractor shall be solely liable for design errors and/or omissions and should be insured as the A-E firm against design errors and omissions.

Section 00555, DESIGN CONCEPT DOCUMENTS identifies project documents furnished herewith to be used as the basis for the project design and construction documents. The successful Offeror shall be required to complete the design and construction documentation, and construct the project in compliance with these completed requirements.

2.0 OUTLINE DESCRIPTION OF THE DESIGN PHASE

No work can begin on any phase of the process until an authorization Clearance For Construction (CFC) for that phase is issued.

2.1 PROPOSAL PHASE

The Proposal Phase includes the period from the time from the issuance of the Request for Proposals (RFP) through the selection process and the final award of the Site Adapt contract.

The proposals to be submitted include a Management/Technical Proposal and a Cost/Price Proposal. The contents and organization of the proposal are described in SECTION 00110 PROPOSAL PREPARATION. The Government will evaluate and award the Site Adapt contract to a single Offeror based upon the criteria which are outlined in SECTION 00120 - PROPOSAL EVALUATION AND CONTRACT AWARD.

2.2 DESIGN PHASE

The successful contractor shall develop and submit for formal review two submittals and the final design. The contractor is encouraged to develop and submit multiple cost saving proposals for innovative design alternatives. The Design Phase will consist of three parts as follows:

a. A Pre-design meeting will be conducted to distribute drawings to the contractor, finalize and clarify technical information, and clarify other necessary information.

b. Basic services required to develop the first submittal which represents: 65% complete drawings and specifications for site preparation work, utility construction, paving, foundation, water and wastewater features of all facilities. After approval of the 65% design submittal (drawings and specifications), the Government may issue a CFC letter to commence with the Build Phase for all site and off-site utilities, clearing, grubbing, rough grading the site, demolition work, parking lot base course, foundation, and all building features.

c. All design services required to complete the 95% design submittal: 100% complete drawings and specifications for site preparation work, utility construction, paving, foundation, and structural diaphragm of all work. 95% design shall not begin until an approval of the 65% design submittal is issued.

3.0 BUILD PHASE

The Build Phase will be initiated by an authorization letter. The authorization letter will be provided separately by the Contracting Officer for each phase of the work. The Government may give the contractor authorization for the Build Phase for portions of the work following review and approval of the 65% design submittal. Weekly coordination meetings will be held at which, as a minimum, the contractor's Project Manager, a representative of the Designer, the site Superintendent, and the Quality Control Manager shall be present.

4.0 PROJECT SCHEDULE:

The following is an internal design schedule and is subject to modification by the Offeror to suit their particular method of operation. Overall time constraints are required and cannot be changed except by contract modification. Prospective offerors shall be required to submit a complete

schedule for design and construction that meets or exceeds the overall time goals of the Government for this project.

Notice to Proceed	following Award of Contract (upon written notification)
Design Phase - Basic Services Pre-design Meeting	within 7 days from Award of Contract
Design Submittal Due	within 30 days following Award of Contract
Submittal Review Conference ***(location TBD)***	within 7 days following submittal review
Incorporate Changes to Submittal (Re-Submit for Review and Approval 100% design submittal)	within 7 days following review conference
Build Phase Authorization for Remainder of Work	Upon approval of design submittal
Total Design and Construction Period	**365** days + weather days as allotted for province in 1060 - 1.20.1 (performance period includes design and construction phases)

5.0 LIQUIDATED DAMAGES:

Liquidated damages in the amount of **$628.00** every calendar day of delay shall be assessed and charged to the Contractor.

All days are in calendar days.

--END OF SECTION--

SECTION 00555

DESIGN CONCEPT DOCUMENTS

1. GENERAL

1.1 GENREAL

This section identifies documents issued with this RFP which establish the concept or basis for the project design. These requirements are minimum standards and may be exceeded by the Offeror. Deviations from these concepts and standards may be approved if considered by the Government to be in its best interests.

The extent of development of these requirements in no way relieves the successful Offeror from the responsibility of completing the design, construction documentation, and construction of the facility in conformance with applicable criteria and codes.

1.2 ENGINEERING AND DESIGN CRITERIA

General design requirements are set forth in this RFP herein. The Specifications Divisions 02 thru 43 provided is the primary specifications criteria for the site adapt portion of the design and construction of the project. The provided specifications shall not be changed or altered and shall be used as required for the construction of the project. It is the contractor's responsibility to completely develop construction specifications necessary to complete the design particular to the site provided. No design criteria will be furnished by the Afghanistan Engineer District except that which may be required for design and is not available from commercial sources or from the Construction Criteria Base (CCB) or 'Techinfo' website located at http://www.wbdg.org/ccb/ . The references within CCB must be obtained by the A/E if the criteria are required or desired. All design, unless otherwise specified, shall be based on nationally recognized industry standard, criteria, and practice.

1.3 APPENDIX DOCUMENTS

See Appendices for further technical requirements, criteria, and parameters that are a part of this contract.

1.4 SPECIFICATIONS

Specifications included herein shall be utilized and followed completely as design criteria and minimum standards for the corresponding construction work. The successful Offeror shall develop any further necessary construction specifications using the criteria included in these specifications to develop a complete design.

The Government will provide Division 01 specifications sections and Division 2 thru 43 construction specifications, to the successful Offeror; these sections shall be included in the final construction specifications without change. The Contractor shall furnish any additional construction specifications that are necessary to complete the site adapt portion of the design. The Contractor prepared construction specifications shall be submitted with other required contractor prepared project construction documents during the General Design Review (65%) of the Design Phase in accordance with Section 01335 SUBMITTAL REQUIREMENTS.

1.5 ORDER OF PRECEDENCE

In case of conflict, duplication, or overlap of design criteria specified in the documents referenced in this section, the following order of precedence shall be followed:

1. Contract Award Document and referenced publications therein.
2. Written requirements supersede drawings.

1.6 MANDATORY CRITERIA

Portions of the design criteria documents provide mandatory criteria. Mandatory criteria consists of drawings, schematics, specifications, and other requirements which shall not be altered or modified for proposal submittal or subsequent final design except for minor adjustments for coordination or except for cost reduction proposals as specified in Section 00150 - THE DESIGN BUILD PROCESS. Non-mandatory criteria shall be considered minimum requirements and may be enhanced, improved, or substituted to better suit design requirements or to improve evaluation consideration. Mandatory requirements are as listed below. All other design criteria shall be considered non-mandatory.

Work Plan

Boundary survey plan

Topographic survey plan

Any mandatory criteria referenced within Project Program.

Any other criteria listed herein which is listed, shown or implied as mandatory.

1.7 ADDITIONAL DOCUMENTS/CRITERIA FURNISHED BY THE GOVERNMENT

The following documents will be furnished to the Site Adapt Contractor when requested by the Offeror or Contractor:

Design Criteria published by the Government such as Technical Manuals (TM), Engineer Manuals (EM), Engineer Technical Letters (ETL) and other documents related to the design referenced herein which are not available on the Internet, including the CCB website.

Commercial design criteria and specifications will not be furnished by the Government.

Conversion of electronic media to other formats shall be the responsibility of the Design Build Contractor.

-- END OF SECTION --

SPECIFICATION SECTION 01010

SCOPE OF WORK

(1 STORY POLICE SECURITY BUILDING)

1.0 GENERAL

This project consists of the design and construction of Afghanistan National Police (ANP) Uniformed Police District Headquarters facilities (approximately 600 SM in size and a population of [60] persons; see furnished drawings and specifications) to be located at Goshta, Nangarhar Province, Afghanistan. This project is defined as the management, planning, design, material, labor, and equipment, to site adapt and construct all utilities, vehicular access, buildings, force protection measures, site security, de-mining activities, and other features as referenced herein. The work within this contract shall meet and be constructed in accordance with current U.S. design and International Building Codes (IBC), Life Safety Codes (NFPA-101), Force Protection and security standards. A partial listing of references is:

IBC, International Building Codes 2006

NFPA 101, Life Safety Codes

UFC 4-010-01, DoD Minimum Anti-Terrorism Standards for Buildings.

1.1 ENGLISH LANGUAGE REQUIREMENT

All information shall be presented in English. The Contractor shall have a minimum of one English-speaking representative to communicate with the COR at all times when work is in progress.

1.2 PERIOD OF PERFORMANCE

All work under this contract by the contractor shall be completed within the period of performance. Period of performance is the sum of 365 calendar days and the number of total weather days appropriate for the province in which the project is located, as defined by Section 1060 – 1.20.1. This period of performance starts from receipt of notice to proceed, and is the total period of performance for the Base Items and all Optional Items, inclusive. Liquidated damages in the amount of $628.00 dollars shall be assessed for each calendar day beyond the scheduled contract completion date until contract completion and charged to the Contractor. Contract completion includes both Base and Option Items, as applicable.

This schedule allows for up to 15 days for the Contractor to achieve approval of site specific submittals.

1.3 SUBMITTALS

Submittals and a Submittal Register are required as specified in Section 01335 of the Basic Contract.

1.4 CQM TRAINING REQUIREMENT

Before project design and construction begin, the Contractor's Quality Control Manager is required to have completed the U.S. Army Corps of Engineers (USACE) Construction Quality Management (CQM) course, or equivalent. The CQM course will be offered periodically by the Afghanistan Engineer District (AED), USACE. Additional approved CQM courses include those offered by the Commercial Technical Training Center (in Jalalabad) and the Champion Technical Training Center (in Kabul). The Quality Assurance Branch of the AED can provide information related to AED offerings of the CQM course, as well as contact information for training centers. Alternative CQM courses, other than those mentioned above, must be approved by the Quality Assurance Branch.

The contractor's quality control plan, as defined in USACE Guide Specification 01451 (or 01 45 04.00 10), entitled "Contractor Quality Control", must include "The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function." For the QC Manager, qualifications must include a certificate demonstrating completion of an approved CQM course.

1.5 SECURITY

Security is critical to construction in Afghanistan, especially on roads and remote areas away from Coalition Force bases. The risk/threat level for the area surrounding this project site is (High,), relative to the chance of attack, improvised explosive devices (IEDs), kidnapping, theft, and vandalism. The Contractor must have an appropriate amount of security/protection to match the threat in the project area and along the supply routes. A detailed security plan in accordance with Section 01040 SECURITY shall be in accordance with Section 01335 SUBMITTAL PROCEDURES and approved by the Government before construction notice to proceed.

1.5.1 SITE SECURITY

The Contractor shall provide perimeter force protection security for the developing site. Security may include but is not limited to fence and private security guards. Perimeter security shall prevent unauthorized site access and provide safety protection to the Contractor work force and government personnel for the duration of the project. The contractor is solely responsible for security however local police shall be coordinated with regarding security.

1.6 ELECTRICAL WORKERS QUALIFICATIONS

Electrical work shall be performed by Qualified Personnel with verifiable credentials who are thoroughly knowledgeable with applicable code requirements. Verifiable credentials consist of a certificate of graduations from an approved trade school and required amount of experience, depending on work being performed, and should be identified in the proposal that is submitted. Qualified personnel is one who has received training in and has demonstrated skills and

knowledge in the construction and operation of electrical equipment and installations and the hazards involved. This includes the skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment, to determine the nominal voltage of exposed live parts, the clearance distances and corresponding voltages to which the qualified person will be exposed.

1.6.1 SUPERVISORY ELECTRICIAN

Supervisory electricians must be graduates of an approved trade school, and must have two years of relevant electrician experience. Approved programs include but are not limited to the Afghanistan Technical and Vocational Institute (in Kabul), the Kunar Trades Training Center Center, and the Commerical Technical Training Center (in Jalalabad). Work experience resumes and graduation certificates shall be submitted and approved prior to commencement of any design or construction involving electrical work. Approval is granted by the Contracting Officer's Representative with guidance by the Quality Assurance Branch and/or the Safety Office of the Afghanistan Engineer District, US of the Army Corps of Engineers.

1.6.2 ELECTRICIANS

Electricians must be graduates of an approved trade school and must be able to provide upon request a certification of successful course work completion and graduation in addition to a resume of work experience.

2.0 LOCATION

The site is in Goshta,Nangarhar Province, Afghanistan at the location indicated in the attached site assessment.

3.0 UNEXPLODED ORDNANCE (UXO)

3.1 UXO REMOVAL AND CLEARANCE

The contractor shall search for, identify and clear all mines and unexploded ordnance (UXO) from the entire site. The contractor may only provide clearance/removal services via UN Mine Action Center for Afghanistan (UNMACA) accredited entities, and clearance shall be accomplished to the anticipated foundation depth as indicated in the contract. If sub-surface construction activities are to be performed on this site the minimum clearance depth will be 1 meter. Sub-surface clearance for construction activities in excess of 1 meter as defined by the contract parameters will also be the responsibility of the contractor. Clearance by definition is an investigation and clearance of all sub-surface metallic anomalies on the site. Clearance/removal may only be undertaken in accordance with International Mine Action Standards (IMAS), Afghanistan Mine Action Standards (AMAS), and applicable U.S. Army Corps of Engineer (USACE) Ordnance & Explosives (OE) safety standards. When mines and/or UXO's are identified, the Contractor shall place them in a location in accordance with

IMAS/AMAS/USACE until destruction of the items can take place. Construction work shall not occur inside the safety exclusion zone based on the most probable munition (MPM) expected on the site. Construction will not commence in any area that has not been cleared to the specified depth. If sub-surface activities

The contractor will provide a standard UXO/Demining safety work plan to the US Army Corps of Engineers UXO / Demining COR for review prior to commencement of all UXO clearance / demining activities on the project sites. Once the UXO/ Demining clearance has concluded, the contractor shall provide the US Army Corps of Engineers UXO / Demining COR a clearance certificate for review and approval before any construction activities are to commence.

NOTE 1: The USACE does not need written clearance certificate approval from the UNMACA to approve the construction start activities. However, the contractor is responsible for providing a copy of the clearance certificate to the UNMACA for entry into their country wide database. A final signed copy of the UNMACE certificate must then be provided to the USACE UXO/Demining COR.

It is the responsibility of the Contractor to be aware of the risk of encountering UXO/mines and to take all actions necessary to assure a safe work area to perform the requirements of this contract. The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder. The Contractor and its subcontractors may not handle, work with, move, transport, render safe, or disarm any UXO/mine, unless they have appropriate accreditations under the IMAS/AMAS from the UNMACA.

If a UXO/mine is encountered after a UNMACA-approved clearance certificate is provided to the Government, UXO/mine disposal shall be handled in accordance with Section 01015, Technical Requirements.

NOTE 2: Point of Contact for UXO/Demining Safety Work Plan review and approval shall be directed to the US Army Corps of Engineers Demining Safety/COR:

UXO Safety/ Demining COR, USACE
tan.uxo.demining.safety@usace.army.mil, Roshan:079-778-6848 Comm:540-667-2127

4.0 SUMMARY OF WORK

4.1 GENERAL REQUIREMENTS FOR FACILITIES

Work shall be executed in accordance with the Section 01015 TECHNICAL REQUIREMENTS, furnished drawings and specifications. All requirements set forth in this Section, but not included in the Technical Requirements and/or drawings and specifications, shall be considered as set forth in both and vice versa. In case of question or ambiguity, the Contracting Officer (KO) shall make the final decision. The KO shall furnish the decision in writing if requested by the Contractor. Site adaptation of the provided designs and specifications shall be approved by the Contracting Officer's Representative (COR) prior to the start of work. The Contractor shall verify all dimensions provided in the scope of work prior to the start of any construction.

The contractor is encouraged to use Afghan labor and subcontractors to the maximum extent possible commensurate with technical, security or other requirements or necessary considerations. The intent of this contract is also to use locally procured materials and labor to the maximum extent possible, but this does not allow the contractor to make changes to the Government-provided drawings or specifications.

The Site Adapt work shall include the preparation of design documents and the subsequent construction of the site improvements described within this Section, Section 01015 and the Government-furnished drawings and specifications, with design adaptations to fit the actual site selected. The facilities required for each site shall include structures and all utilities as indicated in the drawings and/or specifications as provided. Site work and facilities may require design adaptations to meet site conditions, and these adaptations shall be designed and constructed in accordance with current U.S. and International Building Codes and standards and as described in these documents. The contractor must submit any changes to the Government-provided drawings and specifications in accordance with Contract Section 1335, Paragraph "Variations."

Any standard that can be determined to be substantially equivalent to the standards specified in this document may be used, but it is the Contractor's responsibility to show the equivalency of the alternate standard. Reviewable documentation must be provided to the KO for approval prior to use. Equivalency documentation must be submitted in a timely manner so as not to affect the schedule of the project. No part of the time lost due to such actions shall be made the subject of claim for extension of time, excess costs, or damages by the Contractor. A partial listing of references is included within the Request for Proposal.

Work at individual projects sites consists of the construction of a District Headquarters compound in accordance with the contract documentation. The compound consists of a one-story Multi-Purpose Police Security facility (approx 27 m x 24 m) for sixty (60) police which includes a Dining Facility (DFAC), berthing areas and offices/conference areas, armory and jail cells. It also includes force protection structures, electrical system, plumbing/sewage system, and water system. The contractor will insure that all seismic requirements are met in the construction of the facilities.

Site assessments will be provided for all of the sites, but must be verified by the contractor. The contractor is responsible for surveying, grading and drainage, and de-mining activities for the entire site. The entire site is defined by the limits of the Rights of Entry (ROE) and the site assessment.

Development of the compound contained within the required perimeter wall should utilize the most suitable land for construction based on a maximum 75 meters by 75 meters area. Area developed within the perimeter wall should not exceed 5625 square meters, nor should the length of perimeter wall exceed 300 meters. Site plans should be submitted that conform to this requirement and the requirements of the contract documents.

Leach fields may be installed outside the perimeter wall but must be installed within the limits defined by the ROE.

Manufacturer's standard performance guarantees or warranties that extend beyond a 1 year period shall be provided.

4.2 SEQUENCE OF WORK

After de-mining, but prior to the construction of any structures, the Contractor shall submit a well test plan, drill and test the water well, conduct well design activities, and submit all required information to AED for review and acceptance **prior** to installing any permanent well features (per AED Design Requirements document). Failure to follow this process may, at AED's discretion, result in the contractor having to remove the well casing and screen, re-drill the well and reinstall the proper features per the approved design. It is acknowledged that water may not be available at the site despite Contractor good faith efforts to find it. The Contractor shall drill a minimum of two wells to a minimum depth of 120 meters in an attempt to find water. If water cannot be found the contractor shall immediately notify the Contracting Officer's Representative (COR). The Contractor will be considered to have fulfilled the terms of the contract and will be entitled to the full price of the contract CLIN for well drilling, however, the Contractor must still furnish all other parts of the water distribution system as described in the specifications.

Dry wells must be de-commissioned in accordance with ASTM D 5299. The contractor must submit a written plan for de-commissioning wells.

4.3 PROGRAMATIC DESIGN CHARRETTE

The contractor shall prepare a programmatic Master Site Plan that will be generally applied to all construction locations. The Master Site Plan shall include all locations of construction office/storage containers, lay-down and construction debris removal area. The development of the master plan will include participation in a charrette that will be conducted at the Corps of Engineers Area or Resident Office administering the contract. The charrette shall be scheduled by the Government to occur within ten (10) calendar days of notice to proceed. The programmatic Master Site Plan shall be submitted to the Government no later than twenty (20) days after Notice to Proceed. Site specific adaptations of the programmatic Master Site Plan shall be submitted to the Government according to the schedule provided above.

4.4 SITE SPECIFIC SURVEYS & SUBMITTALS

For each individual construction site, the Contractor shall perform a geotechnical investigation as defined in Section 01015, perform a topographic survey of the site; adapt the programmatic Master Site Plan to the conditions applicable for specific locations; prepare a complete grading and drainage plan with existing grades, proposed grades, and building finished floor elevations based on the technical requirements; prepare a landscaping plan; prepare a water supply, disinfection, and distribution layout plan; and prepare a wastewater collection, septic tank, and leach field layout plan. If there is a requirement for on-site demolition, the Contractor shall prepare and submit a demolition plan for that particular site. The Contractor shall not locate facilities in wadis or dry river beds. The finish floor elevation of all facilities and slabs shall be a minimum of 150 mm above the 10-year flood elevation. The contractor shall provide drawings and details to describe any adaptations to the standard design that will be required for individual project sites as a site specific submittal as necessary. At a minimum, site specific submittals shall include: the geotechnical investigation report; drawings, details and calculations associated with well construction; drawings and details associated with demolition; drawings, and details associated with site grading; drawings, details, and calculations associated with well pump,

disinfection system, distribution system construction; and drawings, details and calculations associated with sanitary sewer and leach field construction.

4.5 DEMOLITION AND GRADING

As applicable, the contractor shall demolish all existing structures and buildings at the site prior to commencement of new work. The Contractor shall remove and dispose of all debris, concrete, and foundations. The Contractor shall verify the location of debris disposal with the Contracting Officer's Representative. The Contractor shall perform complete final site grading after installation of all required drainage structures per the Drainage Plan that shall be prepared as part of this project and after installation of any other buried utilities or other project components.

Native crushed stone 100 mm thick shall be placed around all buildings, from the building wall or building landscaping out 2,000 mm and all areas of anticipated foot or vehicle traffic to reduce erosion and to provide dust control. Contractor shall compact underlying subgrade to a minimum 95% of the laboratory maximum dry density as determined by ASTM D 1557, Modified Proctor test.

4.6 WATER SYSTEM

Design and construct a Potable Water System (PWS), to include a well, protected in an enclosed water well house, water well pump(s), elevated water storage tank, and an underground pipe distribution network system. The elevated water storage tank shall be constructed in strict conformance with the furnished drawings and specifications. The water system shall be designed and constructed in accordance with the AED Design Requirements, latest version, and UFC 3-230-03A Water Supply which include the use of a capacity factor. Water demand required for fire fighting and for irrigation and landscaping needs shall not be included in design demand calculations.

A manually operated, lever, hand pump shall be installed at the well head. The pump shall be used to supply water when there is no electricity.

4.7 SANITARY SEWER SYSTEM

The sanitary sewer collection and treatment system shall be designed and constructed by the Contractor. The sanitary sewer collection system shall consist of gravity sewer pipe network and accessories such as manholes, cleanouts, and building service connections.

The sanitary sewer system shall be designed to accommodate the total facility compound population as specified in the Scope of Work and verified by the contractor, including use of the required Capacity Factor from UFC 3-240-09FA Domestic Water Treatment, Chapter 4.

System capacity shall be calculated based on a hydraulic waste load equivalent to 80 percent of the water usage rate.

The gravity sewer collection system shall connect to the sewage treatment system which shall be a traditional septic tank absorption field effluent disposal system, facultative pond system or other low maintenance, cost effective system.

Geotechnical investigation of the proposed sewage treatment site is required and the contractor shall design the sewage treatment system to be compatible with site and soil conditions.

At a minimum, design shall include the following:

(a) Site Survey. The Contractor shall conduct a topographic survey to determine existing site characteristics. The Contractor shall conduct a utility survey to determine the locations of any nearby water lines, wells, sanitary sewers, storm sewers and electrical lines.

(b) Percolation Testing. At proposed sites for holding ponds and the absorption field, the Contractor shall perform percolation tests in accordance with AED Design Requirements: Sanitary Sewer and Septic Systems. Percolation testing may be carried out with a shovel, posthole digger, solid auger or other appropriate digging instruments. Percolation tests shall be accomplished uniformly throughout the area where the absorption field is to be located. Percolation tests determine the acceptability of the site and serve as the basis of design for the liquid absorption.

(c) Sanitary system layout. The Contactor shall design a sanitary system layout following requirements of Section 01015 this contract. Pipe, fittings, and connections shall conform to the respective specifications and other requirements as listed in Contract Section 01015 and all of its referenced codes.

(d) Septic system design. The Contractor shall design a septic tank and absorption field system including all tank geometry, hydraulic loading, and inlet and outlet configurations, number of compartments and related site preparation and earthwork. Design will be per specifications provided in Section 01015.

4.8 SITE POWER, ELECTRICAL, DISTRIBUTION SYSTEM, AND FUEL STORAGE

Contractor shall site adapt the provided electrical design, modifying it where required to meet NEC (NFPA 70) requirements. Contractor shall refer to Section 01015 for detail descriptions and requirements of the Systems. Major Electrical Systems are, but not limited to: (a) On-Site Power Plant, (b) Site Secondary Power Distribution System, and (c) Interior Secondary Power Distribution System. A bulk fuel storage tank is required for a 30 day supply of fuel and shall be filled with fuel upon completion of the contract.

4.8.1 ON-SITE POWER PLANT

Power Plant shall consist of one (1) 80 KW (100 KVA) generator to provide service to the Headquarters Compound. Generator shall be provided inside “weather-proof” (IP54 or better) enclosure. Generator pad shall be constructed with a reinforced concrete floor slab. A covered shelter shall be provided. The shelter shall be pole mounted and shall provide coverage for the generator and switchboard pads.

4.8.2 SITE SECONDARY POWER DISTRIBUTION SYSTEM:

Site Secondary Power Distribution System shall include installation of underground cables in direct buried, thick walled, Schedule 80 PVC conduit from the Power Plant to the individual facilities. Except under traffic areas where the conduit shall concrete encased.

4.8.3 INTERIOR SECONDARY POWER DISTRIBUTION SYSTEM:

Interior Secondary Power Distribution System, rated at 380/220 volts, 3 phase, 4 wire and 50 Hz. with wiring installed in embedded PVC or corrosion resistant metal conduits or surface mounted metal conduits, shall be provided in all facilities, including guard towers and guard shacks.

4.8.4 GENERATOR FUEL STORAGE:

The work shall include the fabrication and installation of the entire fuel storage and distribution system. Tanks shall be skid mounted and be provided with a concrete dike. The dike shall have enough capacity for the entire contents of the tank, plus 10 percent. Provide a molded neoprene isolation pad to isolate an above-ground tank from the concrete pad underneath. Steel tank supports specifically are prone to encounter premature rusting due to constant exposure to moisture and their incompatibility with concrete. Tank shall be designed and manufactured for horizontal installation. Tank shall be mounted on the tank manufacturer's standard support skid. Skid shall span the entire length of the tank and shall separate the tank from the reinforced concrete slab by a minimum of 200 mm. Indicate on the drawings the number and size of each tank man way required. Tanks of 3,780 to 45,430 L to capacity will be provided with 760 mm diameter man ways. Tanks larger than 45,430 L will be provided with 915 mm diameter man ways. Tanks 3,780 L and larger will be provided with a minimum of 1 tank man way to allow for internal tank access. Piping will not penetrate through access man ways. Tank shall be provided with a combination cleanout and gauge connection. Vent pipe sizing shall be not less than 32 mm nominal inside diameter. Vent shall be the rupture disc type calibrated to burst at 13.8 kPa pressure, and operate at 80 percent of burst setting. Tank shall be provided with an overfill alarm system. Tank shall be provided with 2 stick gauges graduated in m and mm. Stick gauge shall be of wood and treated after graduating to prevent swelling or damage from the fuel being stored. Each storage tank shall be provided with an automatic analog reading gauge which is directly mounted to a tank's man way cover. Provide an in-line centrifugal pump as part of the day tank package for fuel transfer from the bulk storage tanks to the day tank. Day tanks shall provide sufficient fuel for four hours of generator operation without refill. Provide cathode protection for metal components. Storage tanks shall be handled with extreme care to prevent damage during placement and shall be installed in accordance with the manufacturer's installation instructions. Piping shall be inspected, tested, and approved before buying, covering, or concealing. Piping shall be installed straight and true to bear evenly on supports. Piping shall be free of traps, shall not be embedded in concrete pavement, and shall drain toward the corresponding storage tank. Any pipe, fittings, or appurtenances found defective after installation shall be replaced. Below ground nonmetallic pipe shall be installed in accordance with pipe manufacturer's instructions. Belowground piping shall be laid with a minimum pitch of 25 mm per 6 m.

4.9 FORCE PROTECTION MEASURES

The Contractor shall construct force protection measures as detailed in the drawings which include perimeter walls, gates, vehicle barriers, guard shacks and guard towers. Construct perimeter walls as indicated on the site plan from native stone, as shown on the drawings. Install outriggers and single-strand concertina wire on top of the wall. The walls shall measure at least 2.4 m high from grade inside the compound. Interior grade shall be higher than exterior grade.

Wall thickness shall be not less than 600 mm. Guard towers shall be constructed at all four site corners at an offset to allow visual observation along the outside face of the wall. Outrigger supporting arms shall be "Y" shaped with post securely embedded into the top of the wall. Posts shall conform to the IBC standard for Pipe, Steel, Hot Dipped Zinc Coated (Galvanized) Welded.

4.9.1 PERIMETER WALL

Masonry or native stone walls shall be constructed around the perimeter of the site. The height of the walls shall measure at least 2.4 meters from the inside and outside grades. The wall shall be topped with barbed wire outriggers and single-coil concertina style razor wire. The ground grade shall slope away from the wall for at least 5 meters and shall be kept a minimum of 2.4 meters below the top of wall for a minimum distance of 10 meters. The wall shall be designed to keep all pedestrian and truck traffic outside the compound from having a visual line of site into the compound.

4.9.2 ECP

The Entry Control Point (ECP) will include a manually operated swing steel gate for vehicles and a separate steel swing gate for personnel. The ECP will also include two guard shacks. Design vehicle for ECP entrance is a fuel delivery/septic tank truck typical for region of project site.

The Escape Hatch will include a manually operated, steel, swing gate.

4.9.3 GATES

The gates shall be swing type. Hinged gates shall be a pair of 3.65 m wide x 2.4 m high leafs, constructed of steel plates, steel tube frame, and steel tube intermediate posts and rails at the ECP and a single gate, 3.65 m wide x 2.4 m high and similarly constructed at the Escape Hatch. Where site constraints prohibit vehicular sized swing gate at the Escape Hatch provide personnel sized steel swing gate.

The design of the gates shall insure that it is dimensionally stable, square, true and planar. Gate leafs shall not rack or deflect when install on its hinges. Gates shall have a sufficient number of hinges, anchor mounted to the exterior masonry walls, to support each gate leaf. Provide a locking mechanism that holds the gates together when in the closed position as well as a drop bolt that engages a steel sleeve embedded in the pavement.

4.9.4 GUARD SHACKS

Construct one guard shack, located outside the compound at the stand-off ECP location of 3.1 meters. Construct a second guard shack inside the perimeter wall adjacent to the personnel gate. Construction shall be in accordance with the drawings.

4.9.5 GUARD TOWERS

The contractor shall construct four (4) guard towers in accordance with the drawings at the four corners of the compound. Guard towers shall be offset from force protection wall corner to allow sight down the outside face of the wall. Access ladders shall be constructed per OSHA

Standards. Guard towers shall be provided with general lighting and shall be fitted with one 360-degree omni- directional searchlight. Two weather-resistant duplex receptacles shall be provided as required for general use. The area in the immediate exterior vicinity of the guard tower shall be provided with an all weather non-slip surface and shall be graded to sufficiently drain away from structure.

4.10 FENCING AND BARRICADES

Fencing shall consist of the types shown or described herein. Chain link fences, 2 meters in height, shall be provided around both the water supply and power generation/fuel storage areas. Double swinging gates should be provided in both fences to allow direct vehicular access to the well, and to the generator. Gates should include locking mechanisms that can be secured with a padlock to prevent unauthorized entry. Entire fences, including gates, should be topped with triple strand barb wire.

4.11 PARKING, ROADS, & WALKWAYS

The Contractor shall design and construct the entire road and parking network. The roads shall be designed to carry traffic of a 40 metric-ton five-axle vehicle. A storm drainage system shall also be included. The road layout shall provide access to entry control points, parking lots, vehicle maintenance facilities, fuel points, generator yard, sewage septic tank, and the trash collection point. Provide parking area for a minimum of 4 vehicles inside the compound. Road design shall be designed per Section 01015, Technical Requirements. Roadways and sidewalks are required as shown on attached drawings and shall be designed and constructed based upon recommendations from geotechnical analysis as required herein.

Design and provide a network of sidewalks to connect the buildings.

4.12 VEHICLE RE-FUELING POINT

The Contractor shall design and construct a low profile vehicle re-fueling point, as specified in Section 01015, capable of storing 19,000 liters of diesel. It shall be located as near as practicable to the Generator fuel storage facility. The Contractor shall provide a full supply of fuel to the tanks at the time of turnover to the Government. The Contractor shall provide capability for fuel delivery from two locations – one from outside the wall surrounding the compound and one directly into the fuel tanks. The delivery point outside the compound wall shall be lockable and securable from tampering or sabotage. Provide a fuel dispensing island with one fuel dispenser. Vehicle Re-Fueling Point shall have a metal roof covering.

A typical vehicle refueling point drawing is provided in the Appendix. Contractor shall modify the vehicle refueling point for only diesel fuel and one dispensing pump.

4.13 TRASH POINT

The Contractor shall place, in a location convenient for easy removal, a trash collection point. It shall be located outside the compound walls. The trash point shall be a 1.8 m x 1.8 m concrete pad with 1.8 meter high stucco finished masonry wall about the perimeter. Wall shall be paced on reinforced concrete footings and shall have a concrete coping similar to the force protection wall. One side shall have a 1.2 m wide gate entrance.

4.14 DISTRICT HEADQUARTERS BUILDING

The contractor shall site adapt and construct the Police Security Building in accordance with the scope of work, technical specifications, and drawings. The District Headquarters Building shall consist of a reinforced concrete frame, foundation, floor slab, and roof slab, with masonry infill walls. Truss supported metal roof shall be provided over concrete roof slab.

This facility will contain the following functions: berthing of personnel; kitchen/dining; latrines to include sinks, toilets, showers; security area to include holding cells, latrines, weapons storage, and guard room; and administrative space (offices). An outside wood stove kitchen shall be provided. Specific requirements are as indicated below:

(a) Foundation Work and Floor - Construct the foundation in accordance with the contract documentation. Foundation excavation shall extend a sufficient distance from walls and footings to allow for placing and removal of forms. The Contractor shall direct surface water away from the excavation to prevent erosion and undermining the foundation by constructing diversion ditches, dikes, or other site grading.

(b) Holding Cells - Construct holding cells in accordance with all contract documents. The holding cells shall not have windows and each holding cell shall have solid reinforced walls as indicated in the drawings. Each holding cell will have a 11-13 gauge steel door with a dead-bolt lock. The door shall have a pass-through slot for passing of food trays with a hinged cover lockable from the outside. Built into the bottom of the door shall be a 300 mm wide by 500 mm tall door for passing a bucket in and out with a hinged cover lockable from the outside. Install a 2400 mm long bench securely bolted to the floor with a wall mounted steel bar. Contractor will construct an Afghan toilet (eastern style) oriented in the correct cultural direction with a screen about 1300 mm high in front of the toilet. Per design, separate gender holding cells will be constructed. An adjacent small mechanical room, as shown on drawing A-1, is required for hot water tank storage and a small air handling unit to provide ventilation and heating to the cells.

(c) Armory (Weapons Storage) - The armory shall have solid reinforced walls, as indicated in the drawings, with a 11-13 gauge steel door with a dead-bolt lock. Roof slab shall be a 200mm reinforced concrete slab.

(d) Dining Area and Kitchen – The Contractor shall design and construct a kitchen and dining area in accordance with the contract documents. The complete and functional dining and kitchen facility shall be capable of feeding up to thirty (30) personnel at one sitting based on the menu and functional requirements of the ANP and the local availability of food service equipment and supplies. Dining area walls and doors shall have no interior glazing. The contractor shall provide 14 gauge, type 304, (18-8) minimum stainless steel work counters, shelving, scullery sink, stoves, electrical capacity, outlets, and space for future refrigerators and freezers (not in contract) within the DFAC. A 1200 x 1800 mm serving opening is required between the dining area and kitchen with the purpose of both serving food and for dish return. Opening shall have fire rated shutter and no glazing allowed. Equipment shall be durable, easy to operate, maintain, clean, and be locally available. All work counters and scullery shall have an 800 mm deep work surface at 900 mm above the floor and supported by pairs of stainless

steel legs (front and back of counters) at 1800 mm maximum centers. Provide integral stainless steel backsplashes at each side adjoining a wall (trim as required at the pass-thru opening). Work counters shall be continuous and fixed to the walls or 800 x 1800 minimum units. See floor plan for proposed kitchen layout. Design must be submitted and approved by the contracting officer prior to purchasing or installing any equipment or furnishings.

The stoves in the kitchen shall be propane type. Stoves in exterior kitchen annex shall be wood burning type. Propane shall be provided with standard 100 lb bottles. Trench type floor drains shall be installed in front of the dishwashing area and the propane and cooking stoves. Install a large wash basin with a low rim height designed for washing very large pots. Fire protection is to be provided by portable fire extinguishers at easily accessible locations. Kitchen adjacent pantry room storage is required.

Technical requirements for the propane stoves, kitchen ventilation and wood stoves are provided in Section 01015.

(i) Plumbing – Plumbing fixtures shall be in accordance with section 01015

(j) Clotheslines – Provide clotheslines behind the building, approximately 5 m in length with 4 lines across spaced 410 mm apart and of sufficient strength to prevent sagging when all of the lines are loaded.

4.15 FIRE PROTECTION FEATURES:

No sprinkler system is required, but alarm and smoke detection system is required and detailed in section 01015. All walls, both interior and exterior area 200 mm CMU construction and constitute fire wall protection. All corridor doors shall be 20 minute rated. Both dining room doors shall be 90 minute rated, contain no glazing and have panic hardware. All door glazing must be fire rated and not exceed 0.065 SM in area. Complete fire door requirements are shown on the attached drawings.

-- END OF SECTION --

SECTION 01015

TECHNICAL REQUIREMENTS – SITE ADAPT

1.0 GENERAL

1.1 COMPLIANCE

The Contractor's design and construction must comply with technical requirements contained herein. The designer shall have a minimum of 5 years experience with the design and construction of the same magnitude and complexity as required in this project. The Contractor shall provide design and construction using the best blend of cost, construction efficiency, system durability, ease of maintenance and environmental compatibility.

1.2 MINIMUM & ALTERNATE REQUIREMENTS

The design and product requirements stated in these documents are minimum requirements. The technical requirements listed in Codes and Technical Criteria, Section 1.8, apply to this project. Any deviation from the technical requirements and furnished drawings and specifications shall be approved by the Contracting Officer. Request for deviations shall be submitted for approval. The Contractor is encouraged to propose alternate design or products (equipment and material) that are more commonly used in the region; but these variations shall be equal in performance from a technical standpoint as well as more cost effective or allow for more timely completion. Variations shall furnish the same system safety, durability, ease of maintenance and environmental compatibility. The Contractor will be required to submit information as specified in Section 01335, 3.6.4 Variations, for all proposed variations with which to make a comprehensive comparison of the proposed alternate. All variations of approved designs must be approved by the Contracting Officer.

1.3 ASBESTOS CONTAINING MATERIALS

Asbestos containing material (ACM) shall not be used in the design and construction of this project. If no other material is available which will perform the required function or where the use of other material would be cost prohibitive, a waiver for the use of asbestos containing materials must be obtained from the Contracting Officer.

1.4 SAFETY

1.4.1 UNEXPLODED ORDNANCE (UXO)

It is the responsibility of the Contractor to be aware of the risk of encountering UXO/mines and to take all actions necessary to assure a safe work area to perform the requirements of this contract. If during construction, the contractor becomes aware of or encounters UXO/mines or potential UXO/mines, the contractor shall immediately notify the COR, mitigate any delays to

scheduled or unscheduled contract work, and clear/remove the UXO/mines. The contractor may only provide clearance/removal services via UNMACA accredited entities. Clearance/removal may only be undertaken in accordance with IMAS/AMAS/USACE standards. The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder. Scrap metal shall be the property of the Host Government. The scrap metal on site shall be moved to an area away from the site perimeter as directed by the Contracting Officer's Representative and left for the Host Government to remove and/or salvage.

NOTE: For previous UXO/mine information, and a copy of the clearance certification the following points of contact from the UN Mine Action Center of Afghanistan are provided:

Mohammad Sediq, Chief of Operations,
Email: sediq@unmaca.org
Cell: +93 070 295207

Hansie Heymans, Chief Information Officer,
Email: hansie@unmaca.org
Cell: +93 070 294286

1.4.2 UNEXPLODED ORDNANCE (UXO) SAFETY SUPPORT DURING CONSTRUCTION.

It is the responsibility of the Contractor to be aware of the risk of encountering UXO and to take all actions necessary to assure a safe work area to perform the requirements of this contract. If after the entire site has been cleared of UXO/mines per the International Mine Action Standards (IMAS) and clearance is done to the anticipated foundation depth, the Contractor becomes aware of or encounters UXO or potential UXO during construction, the Contractor shall immediately stop work at the site of the encounter, move to a safe location, notify the COR and Demining Contractor/ Demining Sub-Contractor, and mitigate any delays to scheduled or unscheduled contract work. The Demining Contractor/ Demining Sub-Contractor shall remove and dispose of UXO's per the International Mine Action Standards (IMAS). These standards can be found at http://www.mineactionstandards.org. The Contractor assumes the risk of any and all personal injury, property damage or other liability, arising out of and resulting from any Contractor action hereunder. In these cases the contractor shall be required to identify and dispose of the ordnance.

1.5 LIMITATION OF WORKING SPACE

The Contractor shall, except where required for service connections or other special reason(s), confine his operations strictly within the boundaries of the site. Workmen will not be permitted to trespass on adjoining property. Any operations or use of space outside the boundaries of the site shall be by arrangement with all interested parties. It must be emphasized that the Contractor must take all practical steps to prevent his workmen from entering adjoining property and in the event of trespass occurring the Contractor will be held entirely responsible.

Areas located immediately outside the construction area are known to contain mines and unexploded ordnance (UXO). Contractors assume all risks when venturing in or out of the designated work area.

1.6 TEMPORARY STRUCTURES

The Contractor shall erect suitable temporary fences, lighting, and necessary structures to safeguard the site, materials and plant against damage or theft and for the protection of the general public and shall adequately maintain the same throughout the course of the contract.

1.7 SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the contractor.

1.8 LIST OF CODES AND TECHNICAL CRITERIA

The following codes and technical criteria and those referenced therein shall be required for this project. References within each reference below shall be required and adhered to. If there is conflict in the criteria the most stringent requirement shall be applied. This list is not exhaustive and is not necessarily complete.

ACI 318 Building Code Requirements for Structural Concrete (2002), American Concrete Institute

ACI 530/ASCE 5/TMS 402, Building Code Requirements for Masonry Structures latest

Air Force Manual 32-1071, Security Engineering, volumes 1-4, 1 May 1994

American Institute of Steel Construction (AISC), Specifications for Structural Steel Buildings

American Water Works Association, ANSI/AWWA C651-99 standard

ASCE 7, Minimum Design Loads for Buildings and Other Structures latest

ASHRAE - American Society of Heating, Refrigeration and Air-Conditioning

ASME - American Society for Mechanical Engineering

ASTM - American Society for Testing and Materials

ASTM-D-1586 Standard Test Method for Standard Penetration Test

AWS D1.1, Structural Welding Code – Steel (2000), American Welding Society

EIA ANSI/TIA/EIA-607: (1994) Commercial Building Grounding/Bonding Requirement Standard

Factory Mutual (FM) Approval Guide-Fire Protection latest

IBC - International Building Codes, 2006 edition (and its referenced codes including those inset below); except structural design.

IEEE C2, National Electrical Safety Code (NESC), latest edition

IFGC – International Fuel Gas Code, latest edition

IMC – International Mechanical Code, latest edition

IPC – International Plumbing Code, latest edition

Lighting Handbook, IESNA, latest edition

NFPA 1, General Fire Protection, latest edition

NFPA 10, Portable Fire Extinguishers, latest edition

NFPA 58, Liquefied Petroleum Gas Code, latest edition

NFPA 70, National Electrical Code, latest edition

NFPA 72, National Fire Alarm Code, latest edition

NFPA 75, Standard for the Protection of Information Technology Equipment

NFPA 80, Fire Rated Doors and Windows, latest edition

NFPA 101, Life Safety Code, latest edition

NFPA 110, Standard for Emergency and Standby Power Systems, latest edition

NFPA 221, Standard for

Chimneys, Fireplaces, Vents, And Solid Fuel–Burning Appliances, latest edition

NFPA 1141, Site Fire Protection, latest edition

SMACNA - Sheet Metal and Air Conditioning Contractors' National Association, Standards and Guides, latest editions

International Mine Action Standards, latest edition; (see http://www.mineactionstandards.org for copy of standards)

TM 5-811-1 Electrical Power Supply and Distribution

UFC 1-200-01, Design: General Building Requirements

UFC 1-300-07A Design Build Technical Requirements

UFC 3-220-03fa Soils and Geology

UFC 3-230-03a, Water Supply, 16 Jan 2004

UFC 3-230-04a, Water Distribution, 16 Jan 2004

UFC 3-230-06a, Subsurface Drainage, 16 Jan 2004

UFC 3-230-07a, Water Supply: Sources and General Considerations, 16 Jan 2004

UFC 3-230-08a, Water Supply: Water Treatment, 16 Jan 2004

UFC 3-230-09a, Water Supply: Water Storage, 16 Jan 2004

UFC 3-230-10a, Water Supply: Water Distribution, 16 Jan 2004

UFC 3-230-13a, Water Supply: Pumping Stations, 16 Jan 2004

UFC 3-230-17FA, Drainage in Areas Other than Airfields, 16 Jan 2004

UFC 3-240-03N, Operation and Maintenance: Wastewater Treatment System Augmenting Handbook, 16 Jan 2004

UFC 3-240-04a, Wastewater Collection, 16 Jan 2004

UFC 3-240-09fa Domestic Wastewater Treatment 16 Jan 2004

UFC 3-240-07fa Gravity Sewers 16 Jan 2004

UFC 3-240-04A Wastewater Collection 16 Jan 2004

UFC 3-250-01FA Pavement Design for Roads, Streets, Walks, and Open Storage Areas

UFC 3-250-18FA General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Areas

UFC 1-300-09N, Design Procedures

UFC 3-310-01, Structural Load Data

UFC 3-310-02A, Structural Design Criteria for Buildings

UFC 3-501-03N, Electrical Engineering Preliminary Considerations, 16 Jan 2004

UFC 3-520-01, Interior Electrical Systems, 10 June 2002

UFC 3-530-01AN, Design: Interior and Exterior Lighting and Controls, 19 Aug 2005

UFC 3-540-04N Design: Diesel Electric Generating Plants, 16 Jan 2004

UFC 3-550-03FA Design: Electrical Power Supply and Distribution Systems, 1 Mar 2005

UFC 4-020-03, Security Engineering: Fences, Gates, and Guard Facilities, 14 June 2007

UFC 4-022-01, Security Engineering: Entry Control Facilities/Access Control Points, 25 May 2005

UL 752, Bullet Resisting Equipment, 2000 or later

USCINCCENT OPORD 97-1

Overseas Environmental Baseline Guidance Document, Department of Defense, May 2007

The publications to be taken into consideration shall be those of the most recent editions.

Unified Facility Criteria (UFC) is available online at
http://www.wbdg.org/ccb/browse_cat.php?o=29&c=4

In addition, technical criteria provided in USACE-AED Design Requirements (most recent version) shall be required for use in design and construction specifications as indicated in the following documents. The following design criteria shall be used:

AED Design Requirements - Site Layout Guidance, latest version

AED Design Requirements - Well Pumps & Well Design/Specifications, latest version AED Design Requirements – Water Tank and Water Distribution Systems, latest version AED Design Requirements – Chlorinators, latest version AED Design Requirements - Hydro-Pneumatic Tanks, latest version

AED Design Requirements – Hydrology, latest version

AED Design Requirements - Sanitary Sewer and Septic Systems, latest version AED Design Requirements - Grease Trap, latest version AED Design Requirements - Oil-Water Separator, latest version

AED Design Requirements - Package Wastewater Treatment Plants and Lagoons, latest version

AED Design Requirements – Geotechnical Investigations for USACE Projects, latest version

AED Design Requirements – Voltage Drop Calculations Process, latest version

Standards other than those mentioned above may be accepted if the standards chosen are internationally recognized and meet the minimum requirements of the specified standards. The Contractor shall be prepared to submit proof of this if requested by the Contracting Officer.

1.9 AED DESIGN REQUIREMENTS DOCUMENTS

AED Design Requirements documents listed above shall be adhered to in this contract. These documents are available from the Contracting Officer and shall be used as the basis for design and construction, and for selecting options within the United Facilities Guide Specifications (UFGS). It is the contractor's option to use specifications contained in the AED Design Requirements Documents, when provided, or to adapt the UFGS specifications to match the requirements provided in the AED Design Documents and specifications. Site or project specific data and requirements in the AED Design Requirements documents shall supersede UFGS language where there are differing criteria which must be evaluated and selected.

2.0 SITE DEVELOPMENT

2.1 GENERAL

The project includes furnishing all materials, equipment and labor for constructing electrical, water, communication, sanitary sewer and storm sewer service lines, as applicable, and connecting to the existing utility networks.

2.2 ENVIRONMENTAL PROTECTION

The Contractor shall comply with all requirements of Section 01355 ENVIRONMENTAL PROTECTION.

2.3 CIVIL SITE DEVELOPMENT

2.3.1 SITE PLAN

The contractor shall prepare plat or plan of property as part of the design package consists of a Boundary Survey. The survey shall show the closure of the property boundary consisting of identifying all property corners, establishing horizontal and vertical control listing all bearing and distances of property lines from the centerline of all adjacent roads. The contractor shall place property corner markers and a monument on the property showing site elevations, coordinate grid systems and WGS 84 latitude longitude. This survey shall meet the requirements of World Geodetic System 1984 (WGS 84 UTM Zone 42N in decimal degrees. The survey design shall include topographic map and the locations of all building corners, structures, major trees, road right of ways, names of roads, widths of roads, easements, right of ways, setbacks, parking and paving areas, storage containers, stoops, sidewalks and walkways, above ground utilities, electrical and bunker locations. The contractor shall identify and show perimeter walls, fences, Hesco barriers, guard towers and entry control point structures. The contractor shall

locate the facilities in general agreement with the drawings included and any requirements in the Scope of Work 01010. All site features shall be clearly defined and dimensioned on the site plan. Buildings shall be located to provide access for emergency vehicles and fire fighting. Roads and parking areas shall be designed for turning radius of the largest vehicle entering the compound. The site plan shall show geometric design of the site, including applicable dimensions of all exterior facilities, mechanical equipment, pavements, utilities, etc. Required facilities are described in the following sections of this specification. All roads and areas where tractor-trailer vehicles will travel shall be designed for the worst case turning radius. Design and construction of roads and pavements shall be based on recommendations from geotechnical investigation required herein. All site plans and master plans shall be drawn in the following projection and datum for incorporation into the U.S. Army Corps of Engineers GIS system: WGS 1984 UTM Zone 42 N

2.3.2 DEMOLITION

Demolition shall include removal of all structures, foundations, pavements, and utilities, to include clearing and grubbing. All refuse and debris shall be disposed of off of the site as described in paragraph 2.2.4 DISPOSAL. Holes and depressions shall be backfilled and compacted in lifts not to exceed 300mm in height. Fill materials shall be composed of satisfactory soils or aggregates defined in ASTM D 2487 as GW, GP, GM, SP, SM, and SW. Minimum soil compaction shall be 95 percent of maximum density as defined in ASTM D 1557

Scrap metal shall be the property of the Host Government. The scrap metal on site shall be moved to an area away from the site perimeter as directed by the Contracting Officer's Representative and left for the Host Government to remove and/or salvage. Demolished fencing and concertina wire shall be neatly rolled up for reuse by the host government. Likewise, used fence posts and outriggers shall be neatly stockpiled for reuse by the host government.

2.3.3 SITE GRADING & DRAINAGE

The contractor will provide all necessary site grading to insure adequate drainage so that no areas will be flooded due to a rainfall of a 10-year frequency. Drainage of the area should be compatible with the existing terrain. Building floor elevation shall be a minimum 150mm above grade and slope away from the building on all sides at a minimum of 5% for 3 meters. Protection of facilities from flood waters originating offsite of an installation is required and shall be based on a rainfall for a 25-year frequency event. This shall include the design or evaluation of bridges, culverts, and causeways.

Rainfall data utilized for hydrology calculations shall be based on data obtained from meteorological records collected in Afghanistan. National agencies may be consulted for data. In the absence of site specific data, intensity-duration-frequency curves contained in the AED Design Requirements – Hydrology July 2009 shall be used by extrapolating the rainfall intensity information from the stations in closest proximity to the project. Under no circumstances will relationships developed by extrapolation from foreign countries be used for hydrologic studies.

2.3.4 ROADS

Aggregate roads are required within the compound. All roads shall be a surface 7.3 meters (24 feet) wide, unless otherwise noted, graded for proper drainage, provided with necessary drainage structures and completed with prescribed surfaces in accordance with applicable sections of UFC 3-250-18FA and UFC 3-250-01FA. Aggregate pavement surface should consist of 150mm (6 inches) thick aggregate base course material compacted to 95% maximum proctor density, placed above 150mm of scarified subgrade compacted to 95% maximum density. Provide 1.0 meter wide shoulder on both sides of roadways, consisting of a surface of aggregate base course material and it should be 150mm thick @ 2.0% slope. Contractor shall notify the Contracting Officer immediately if initial site survey determines that the area hydrology requires major drainage structures or bridges.

For Optional Item: Paved roads are required where stated. All roads shall be of wearing surface 7.3 meters (24 feet) wide, unless otherwise noted, graded for proper drainage, provided with necessary drainage structures and completed with prescribed surfaces in accordance with applicable sections of UFC 3-250-18FA and UFC 3-250-01FA. The compound (cantonment area) roads sections shall have 200 mm (8 inch) base course minimum compacted at 98% maximum proctor density and shall be surfaced with minimum 50 mm (2 inch) hot mix asphalt concrete compacted at 100%, unless otherwise noted. Contractor shall notify the Contracting Officer immediately if initial site survey determines that area hydrology requires major drainage structures or bridges. Also, the Contracting Officer shall be immediately notified if the required lengths of road or preexisting conditions are determined to be substantially or materially different than the above-described conditions/estimates

2.3.4.1 BRIDGES AND SITE GRADING PLAN

Preliminary investigation indicates no need for bridges or major drainage structures. The Contractor shall notify the Contracting Officer immediately if initial site survey determines that area hydrology requires major drainage structures or bridges. The contractor shall design a site grading plan that provides positive drainage and minimizes the requirement for major structures in a cost effective manner.

2.3.4.2 PARKING AREAS AND MOTOR POOLS

Contractor shall construct parking and storage areas using aggregate surface (AC pavement is an option item that will be itemized on the 00010 Proposal Schedule). Aggregate surface should consist of 150mm (6 inches) thick Aggregate Base Course (ABC) material compacted to 95% maximum proctor density, placed above 150mm of scarified subgrade compacted to 95% maximum density. Provide 1.0 meter wide shoulder around all parking areas and motor pools, consisting of a surface of ABC material and it should be 150mm thick @ 2.0% minimum slope.

ABC material must be well graded, durable, uniformly moistened, and mechanically stabilized by compaction. Degree of compaction shall be expressed as a percentage of the maximum density obtained by the test procedure in ASTM D 1557.

2.3.5 FORCE PROTECTION DESIGN

The Contractor shall design and construct force protection measures to include a complete perimeter wall, Guard Towers, Compound Illumination System, Security Communication Systems and Entry Control Points (ECP). ECP shall be composed of a Primary ECP, a Stand-Off ECP, and a Secondary ECP. The Force Protection design shall incorporate minimum setbacks for new facilities to maximum extent possible as permitted by size of the site and the requirements of the user. See Appendix A for Guard Shack and Guard Tower building designs with standard details for Perimeter Security wall, and Active and Passive Vehicle Barriers.

2.3.5.1 PERIMETER SECURITY WALL

Native stone masonry walls, 600mm thick, shall be constructed around the perimeter of the site. The height of the walls shall measure at least 2.4 meters from the inside grade. Inside grade shall in all cases be higher than outside grade. The foundation width shall be based on USACE standard drawings. The wall shall be capped with a cast-in-place reinforced concrete capping. Outriggers see paragraph 2.3.5.2.3, to support 6 strands of barbed wires and a single-coil concertina style razor wire shall be provided and installed by the contractor. Site grading must slope away from the walls for at least a distance of 5 meters. The wall shall be designed to prevent visual access to the inside of compound by all pedestrian and vehicular traffic outside the compound which may require the wall to be built at a higher level in some locations. Any penetrations through the Perimeter Security Wall shall only be for site drainage purposes and shall have force protection such as a welded bar grill, welded grating, or other pre-engineered barrier.

2.3.5.2 PERIMETER WALL ACCESS GATES

2.3.5.2.1 SWINGING GATES

Double Swing Gates shall be provided for vehicle access at the Primary Entry Control Point and be constructed of steel and be a pair of 3.65 m wide x 2.4 m high steel leaves, constructed of 6mm steel plate skins, steel tube frame, and steel tube intermediate posts and rails. A Personnel Gate shall be provided for personnel access and be constructed of steel and be 1.5 m wide x 2.4 m high steel leaves, constructed of 6mm steel plate skins, steel tube frame, and steel tube intermediate posts and rails. A single swing gate shall be provided on the opposite side of the compound for an escape hatch and shall be a minimum of 3.65m x 2.4 m. Gate design shall insure it is dimensionally stable, square, true and planar. Gate leaves shall not rack, shake or deflect during operation and the hinges are to be designed and constructed to support the entire weight of each leaf. Gates shall have a sufficient number of hinges, anchor mounted to the exterior masonry walls, to support each gate leaf. Provide a locking mechanism that holds the gates together when in the closed position as well as a drop bolt that engages a steel sleeve embedded in the pavement. Each gate shall be provided with viewports 200mm x 50mm.

2.3.5.3 OUTRIGGERS

Outrigger supporting arms shall be “Y” shaped with middle post, securely embedded 400mm by a 50mm diameter metal tube into the top of the wall. Posts shall conform to ASTM F 1083,

Pipe, Steel, Hot Dipped Zinc Coated (Galvanized) Welded. Outriggers shall be spaced a maximum of 3000mm on center.

2.3.5.4 REINFORCED BARBED TAPE

Reinforced barbed tape shall be 600 mm diameter concertina style coil consisting of 31 loops. Each loop shall consist of 19 barb clusters per loop. Adjacent coils loops shall be alternately clipped together at three points about the circumference to produce the concertina effect upon deployment. Spacing between attachments points when deployed shall be 400 mm. The reinforced barbed tape shall be fabricated from 430 series stainless steel with hardness range of Rockwell (30N) 37-45 conforming to the requirements of ASTM A 176. Each barb shall be a minimum of 30.5 mm (1.2 inch) in length, in groups of 4, spaced on 102 mm (4 inch) centers. The stainless steel core wire shall have a 2.5 mm (0.098 inch) diameter with a minimum tensile strength of 895 MPa. Sixteen gauge stainless steel twistable wire ties shall be used for attaching the barbed tape to the barbed wire. The reinforced barbed tape shall be equivalent to NSN: 5660-01-457-9852.

2.3.5.5 CHAIN-LINK FENCE AND GATES

Provide chain-link fence and gates around Well House chain link fence and gate fabric shall be No. 9 gage wires woven into a 50 mm diamond mesh. Fabric shall be coated with 366 grams per square meter zinc galvanizing. Posts shall be ASTM F 1083 Pipe, Steel, Hot Dipped Zinc Coated (Galvanized) Welded or equal. Top of fence and gates shall be provided with outriggers and reinforced barbed tape as indicated above. Post sizes shall be as shown on drawings.

The gates shall be swing type. Hinged gates shall be a pair of 3 m wide x 2.4 m high leafs, constructed of a steel tube frame and steel tube intermediate posts and rails. The design of the gates shall insure that it is dimensionally stable, square, true and planar. Gate leafs shall not rack or deflect when install on its hinges. Gates shall have a sufficient number of hinges, anchor mounted to the exterior masonry walls, to support each gate leaf. Provide a locking mechanism that holds the gates together when in the closed position as well as a drop bolt that engages a steel sleeve embedded in the pavement.

2.3.5.6 PRIMARY ENTRY CONTROL POINT (ECP)

Primary ECP shall be laid out and constructed by the Contractor to facilitate secure entrance of authorized vehicles into the compound. A Guard Shack shall be provided both inside and outside the compound as part of the Primary ECP. Entrance to the Primary ECP shall be paved with the same surface as required for the interior roads of the compound, and shall have a two-leaf steel swinging gate. The gate shall be considered the Active Vehicular Barrier (AVB). A drop arm and guard shack shall be provided and located at a distance of one and a half vehicles away from the entrance to serve as a checkpoint. Jersey Barriers or other approved alternatives shall be used to design and construct a Passive Vehicular Barrier (PVB) beyond and away from the checkpoint to significantly slow down approaching vehicles. The PVB shall be laid out to force approaching vehicles into a snake-like manoeuvre while approaching the checkpoint and to significantly slow them down. See Appendix A for Guard Shack drawings.

Provide a rejection lane after vehicle inspection and before entrance to the compound.

2.3.5.6.1 DROP ARM GATES

The height of the beam shall be a minimum of 30 inches above finished grade. The crash beam must be capable of blocking a minimum road width of 7.3 meters. The crash beam shall be manually raised and lowered with less than 30 pounds of force. The end of the crash beam should include a locking pin with padlock acceptance for securing the beam when it is in the down position capable of stopping large (10,000 lb.) trucks, in addition to heavy duty steel gates into the compound.

2.3.5.6.2 TIRE SHREDDER AVB

Additional active barriers shall be tire shredder type with manual latch down capability. Shredders shall extend the entire width of the roadway opening where installed. At minimum provide one shredder at rejection lane entrance to prevent unauthorized gate access.

2.3.5.6.3 CONCRETE PVB

Barriers shall be concrete blocks of one meter by one meter by one meter dimensions. Similar arrangements of large stones (one cubic meter size), jersey barriers or equal sized obstacles may be used.

2.3.5.6.3.1 HESCO PVB

Hesco barriers shall be made of geo-textile fabric shall be 2mm (0.08”) non-woven polypropylene and bound with 8 gauge galvanized steel wire mesh size 7.62 cm (3”) grid. The coil hinges and joining pins shall be 8 gauge hardened steel. Fill material shall be a mixture of sand and gravel. The gravel shall not be more than 1.8 cm (¾”) in size. The materials shall be compacted in lifts no greater than 25 cm (10”).

Bastions shall be provided with suitable foundations as recommended by the manufacturer depending on the height, and filled with a sand & gravel mixture. Provide a gravel base at least 50 cm (20”) deep, and extending around the bottom edge of the barrier by at least 50 cm (20”), for proper support and drainage. The gravel base material shall have no stones large than 2.5 cm (1”), due to the risk of becoming projectiles in a blast.

Protection from UV light shall be provided with an application of a protective coating such as UV CAM, cement slurry not greater than 0.3 cm (1/8”) thick. The cement slurry is a mixture of cement powder and water, mixed to a proportion of 1:1, but this may be adjusted to suit the application method. Sand may also be added as necessary.

Submittal Requirements:

a. The manufacturer of this product must have been in this business for at least 5 years.

b. Welded mesh and wire shall meet the requirements of ASTM A641, Class 3.

c. Geo-textile shall meet the requirements of ASTM D4632, D6241, D4355, D4751 & D4491.

2.3.6 LOUDSPEAKERS AND ALARM SYSTEM

Install Loud Speaker & Alarm System that can alert the entire compound via panic button from any tower or guard post station. Speaker & Alarm System shall be exterior grade components to withstand severe weather conditions of cold, heat, rain, sleet, and dust storms and to be completely understandable during these conditions from any point within the compound. All wires shall be installed in conduits.

2.4 CIVIL UTILITIES

2.4.1 WATER

2.4.1.1 GENERAL

The Contractor shall provide water distribution mains, branches, service connections to include all pipe, valves, bends, thrust blocking, fittings and appurtenances. Exterior water line construction shall include service to all buildings as described in the Scope of Work Section 01010. The required average daily flow (ADF) shall be the average daily demand (ADD) per person - derived from 190 liters (or 50 gallons) per capita per day (lpcd) – times a capacity factor, times the effective population. A capacity factor of 1.5 shall be used. The capacity factor shall be utilized as described in the following paragraph. In the event potable or non-potable use water is required prior to completion of the water facilities infrastructure the Contractor may be issued a Request for Proposal to provide non-potable (tank truck) and potable (bottled or other reliable source) consumption. Provide a minimum of one (1) outside water hydrant (hose spigot) for all buildings with water service.

Features of the water system shall be sized to provide flow or storage capacity as follows:

- Water Well Pump Capacity - Capacity and total dynamic head (TDH) shall be based on an adjusted ADF (ADD, times the population, times the capacity factor) over a 16 hour period).

- Water Tanks - Capacity shall be based on ADF (ADD x c x CF). (NOTE: If a minimum volume of storage is provided in the contract documents, and it is determined that the value provided does not account for the capacity factor, that value will be multiplied by the capacity factor to determine the actual required storage volume for the facility.)

- Water Mains – Diameter shall be 100mm. A larger diameter may be installed based on maximum velocities determined using the installation fixture unit flow or two times the ADF (ADD x c x CF). The flow through the system shall be distributed on the basis of fixture unit flow in each the buildings serviced or per contract

- Water Service Lines - Diameter based on fixture units of the building serviced or per contract

2.4.1.2 WATER WELLS

The contractor shall construct water well(s) inside the compound, to provide sufficient supply for the facility. The new well capacity shall be based on the allowable safe yield of the new well determined by a well pump test as described in the USACE-AED Water Well Guide Specification. The new well site shall be at a location approved by the Government. The new well site shall be no closer than 60 meters from any existing wells. Well construction shall be in accordance with the USACE-AED Water Well Guide Specification.

After de-mining, but prior to the construction of any structures, the Contractor shall submit a well test plan to drill and test the water well, conduct well design activities, and submit all required information to AED for review prior to installing any permanent well features. Drilling shall not proceed without an AED Engineering approved well drilling plan. A plan for decommissioning dry wells shall be included with the well drilling plan. It is acknowledged that water may not be available at the site despite Contractor good faith efforts to find it. The Contractor shall include in his proposal, services required to drill two (2) wells each to a maximum of 120m or one (1) well to a maximum depth of 240m. The decision whether to drill one or two wells shall be at the discretion of the COR and shall be made at any point before or during the drilling of the initial well. The contractor is responsible for having appropriate equipment on site to execute either drilling scenario at the contract price. If water is not found after drilling a total linear depth of 240m, the Contractor will be considered to have fulfilled the terms of the contract and will be entitled to the full price of the contract CLIN for well drilling. Even if water is not found, the Contractor must still furnish all other parts of the water distribution system as described in the specifications. At this time, off site water wells and other alternatives may be considered upon approval by the COR.

Well Capacity shall be equal to one day's demand delivered over 16 hours of pumping time.

Well construction shall be in accordance with AED Design Requirements - Well Pumps & Well Design/Specifications, latest version - which includes, but is not limited to, requirements for well screen, casing, gravel pack, well pump, disinfection, and testing requirements. All design requirements, material specifications, and testing contained in this document shall be used and submittals shall be made promptly in accordance with Section 01335. Failure to follow the construction and submittal procedures outlined may, at AED's discretion, result in rejection of the well and, the contractor having to remove the well casing and screen, re-drill the well and reinstall the proper features per the approved design.

Well Depth. The well shall be drilled to a minimum depth of 20 m below the existing water table. The depth of the permanent well shall take into consideration the drawdown depth, screen depth and pump submergence as described in the AED Design Requirements document.

Casing. Selection of the casing diameter, material and depth shall be per the AED Design Requirements document. All wells will be cased 610 mm above grade (i.e., base of pit, ground surface, etc.) and be fitted with a lockable cap with air gap (vacuum relief during pumping). Each section of casing will be joined with standard couplings and full-threaded joints, or by proper welding, so that all joints are sound and watertight. Well casing alignment shall not interfere with the proper installation and operation of the pump.

Screen. The casing will be fitted with a well screen that will permit maximum transmission of water without clogging. The material of construction, opening requirements, minimum lengths and placement shall be per the AED Design Requirements document

Sealing - The drilling process will create a hole (borehole) larger than the casing. To protect the well and properly finish construction, the entire space between the casing and the edge of the borehole will be filled with gravel, overburden, or concrete as follows:

a. The upper 3 m of the well bore will be sealed with cement grout. Grout shall be placed in one continuous mass and be impermeable.

b. The space around the well screen will be filled with material that will form a filter and not clog the slots in the screen (e.g. washed coarse sand for a fine bore wall material).

c. The space between the top of the filter pack and the base of the grout seal may be backfilled with overburden or other clean earth material.

Crushed Stone. Per the AED Design Requirements, crushed stone for well sealing shall consist of crushed stone containing angular shapes and surfaces with no rounded surfaces shall be used for sealing the solid wall casing and edge of the borehole area. All aggregate shall contain less than 5% of shale, clay lumps, coal, lignite, soft or unfragmented stone, or other deleterious materials.

Source protection - Surface drainage within 30 m of wellhead shall ensure no ponding, flooding or collection of runoff adjacent to the well. This can be accomplished through surface grading or use of gravel drains to modify site drainage in the vicinity of the well. Contractor shall identify all sources of contamination and ensure the proposed well site meets minimum standoff distances as indicated below:

Sewage storage areas (outhouses, tanks, individual sewage pits, lagoons, and WWTP) – 30 m

Septic fields (infiltration galleries) – 30 m

Fuel storage, engine maintenance/repair – 30 m

Well Pump – A submersible, centrifugal pump shall be installed inside the casing set no more than 1.5 meters from the base of the excavation. Control of the pump shall be by means of a Hand-Off-Auto (HOA) switch. In the “Auto” position, the pump shall be started and stopped automatically by water levels in the water storage tank. Pump shall start at low level and shall stop at high level. Level controls shall be adjustable. Manual start shall be the Hand position.

Expansion Tank – Provide bladder style expansion tank for well pump to minimize pressure surges and water hammer effects

2.4.1.3 WELL PUMP TESTING

Well pump testing and water clarity testing after well development shall be per the requirements in AED Design Requirements - Well Pumps & Well Design, latest version.

2.4.1.4 WATER QUALITY SAMPLING AND ANALYSIS

The Contractor shall perform water quality sampling and testing at the source. The Contractor shall utilize well-qualified and equipped testing capability in the project site area, if available. If professional testing services are not available in the area, the Contractor will submit an alternative practical testing source for approval.

See USACE-AED Well Pumps & Well Design Guide with Attachment A – Guide Specifications for Drinking Water Wells, latest version and Appendix A of TM 5-813-3 (UFC 3 230 08a Water Supply Water Treatment, January 2004) for requirements for laboratory testing.

2.4.1.5 WELL HOUSE

At new wells or springs, construct a permanent well house with reinforced concrete slab floor. The floor of the well house shall slope away from the casing approximately 3 mm per 300 mm (1/8" per foot) and drain to the outside. Floor of well house shall be minimum 300mm above adjacent grade. The well house design should be such that the well pump, motor, and drop pipe could be removed readily by providing an insulated hatch in the building roof provided with a hasp and lock. The well house shall protect valves and provide physical security and freeze protection for protect piping, valves, hand pump, and chlorination equipment. The well house shall be insulated and have a heating unit provided. The entry door shall be made of heavy duty metal and metal frame with no louvers. The well shall be protected from unauthorized use by a security fence with lockable gate. Provide outriggers, barbed wire and concertina wire on fence and gate.

2.4.1.6 RAW WATER DISINFECTION

Contractor shall perform disinfection of the well water in accordance with AED Design Requirements - Well Pumps & Well Design/Specifications, latest version. Bacteriological samples shall be collected and examined in accordance with Standard Methods for the Examination of Water and Wastewater by a qualified lab as approved by the Contracting Officer.

2.4.1.7 WATER STORAGE TANK

Contractor shall provide a steel, elevated water storage tank. The construction of the water tower supporting the water storage tank shall be performed in strict conformance with the furnished drawings and specifications. Geotechnical investigations specifically related to the water tower are outlined in the AED Dsign Requirements for Geotechnical Investigations. These investigations shall be conducted as part of the geotechnical work for the site and submitted in the 10% submittal per Section 01335. The bottom of the storage tank shall be 20 meters above the finished grade at the base of the tank and shall be at least 20 meters above the finished floor elevation of the headquarters building. Volume of the water storage tank shall be a minimum storage volume of a full days demand. The Contractor shall verify storage volume requirements based on final design population. The storage facility shall be located above drainage areas and locations subject to flooding as approved by the Contracting Officer. Overflow and air vents shall be screened so that birds, rodents and debris cannot enter the reservoir. The tank shall meet all applicable codes for potable water storage. The interior coatings for the tank shall meet NSF/ANSI 61 requirements.

2.4.1.8 DISINFECTION & CHLORINATION SYSTEM

Use hypochlorite compounds for disinfection. A hypo-chlorinator shall be used to feed a sodium hypochlorite solution of 5-15% available chlorine into the system. Hypochlorite compound may be a liquid or solid form. The hypo chlorination system shall consist of a chemical solution tank for hypochlorite, diaphragm-type pump, power supply, water pump, pressure switch and storage tank (optional hydro-pneumatic/storage). The pump shall feed a hypochlorite solution in proportion to the water demand. The hypo-chlorinator shall have a pumping rate, liters per day (lpd) (gallons per day (gpd)) adequate to deliver 5 percent (%) available hypochlorite solution adjustable to the quantity of water being produced from the source. Dosage rate will vary somewhat depending on actual pump production rate and available residual chlorine in the system. Contractor shall determine the required dosage rate milligrams per liter (mg/l) to maintain the required chlorine residual (usually 0.2-0.4mg/l) in the distribution system. Chlorine solution tank shall be large enough to hold a three days supply of hypochlorite solution. A fresh solution shall be prepared every two or three days because the solution may lose its strength over time and this will affect the actual chlorine feed rate. The hypochlorite shall be stored in a cool dry place. Sodium hypochlorite can lose from two to four percent of its available chlorine content per month at room temperature. Contractor shall verify required minimum residual chlorine in accordance with local requirements verified and approved by the Contracting Officer. The chlorination system shall have the capability for manually adjusting the dosage rate and be installed in such a manner that the system can be easily disconnected and bypassed in the event of health safety or routine maintenance and repair. Disinfection of water mains shall be in accordance with AWWA standard C651-86 and disinfection of storage facilities in accordance with AWWA standard C652-86. The package disinfection system shall be located in the well pump house.

2.4.1.9 HAND PUMP

The Contractor shall provide a hand pump with separate intake piping in the well casing to allow water supply during periods without electricity. Water drawn from the well by the hand pump shall not flow through the electric well pump. The pump shall be valved so that it can be used to fill the water storage tank or discharge to a spigot outside the well house. The capacity of the pump shall be at least 20 liters per minute (5.3 gpm). The pump shall be lever operated while standing in the well house.

2.4.2 WATER DISTRIBUTION SYSTEM

2.4.2.1 GENERAL

The Contractor shall provide a water distribution system. Distribution lines shall be 100mm (4 inches) in diameter. Water supply distribution shall connect to a building service at a point approximately 1.5m (5 feet) outside the building or structure to which the service is required. All piping and joints shall be capable of at least 1.03 MPA (150 psi) leakage testing and 1.38 MPa (200 psi) hydrostatic test pressure unless otherwise specified. Pipes should be adequate to carry the maximum quantity of water at acceptable velocities not to exceed 1.5m/sec (5 ft/sec) at maximum flows not to exceed 2.8m/sec (9.2ft/sec). Pressure shall not exceed 517kPa (75 psi) at

any point of the distribution system. If high pressures greater than 517kPa (75 psi) cannot be avoided, pressure-reducing valves shall be used.

Contractor shall not use HDPE pipe and fittings.

Adequate cover must be provided for frost protection. A minimum cover of 800mm (2'-8") is required to protect the water distribution system against freezing. Water lines less than 1.25 meters (4 feet) deep under road crossings shall have a reinforced concrete cover of at least 150 mm (6 inch) thickness around the pipe extending out to 1m from each road edge.

2.4.2.2 PIPE

The Contractor shall provide PVC pipe of adequate strength, durability and be corrosion resistant with no adverse effect on water quality.

2.4.2.2.1 WATER MAINS AND BRANCHES

Water pipe material for water mains and branches shall be PVC. Pipe diameters used in the network shall be a minimum 100mm (4 inch). Building service lines will be sized according to guidance provided below. The exterior surface of the pipe must be corrosion resistant. All pipes and joints shall be capable of at least 1.03 MPa (150 psi) and 1.38 MPa (200psi) hydrostatic test pressure unless otherwise specified herein. Polyvinyl Chloride (PVC) pipe shall conform to ASTM D 1785. Plastic pipe coupling and fittings shall be manufactured of material conforming to ASTM D 1784, Class 12454B. PVC screw joint shall be in accordance with ASTM D 1785, Schedules 40, 80 and 120. PVCu pipe couplings and fittings shall be manufactured of material conforming to ASTM D 1784, Class 12454B. Pipe less than 80mm (3 inch), screw joint, shall conform to dimensional requirements of ASTM D schedule 80. Elastomeric gasket-joint, shall conform to dimensional requirements of ASTM D 1785 Schedule 40, PVCu (or uPVC) pipe and fittings shall have SDR that provide equal or superior strength properties to ASTM 1785 SCH 40 or SCH 80 pipe and fittings.

2.4.2.2.2 WATER SERVICE

Water service connections to buildings shall vary from 19mm, 25mm, 38mm, 75mm, to 100mm as calculated, depending on the maximum flow velocity and minimum pressure requirements as determined by hydraulic analysis. Pipes for service connections may be smaller as required by plumbing code (IPC). Pipe service connections from the distribution main to the building shall be Polyvinyl Chloride (PVC) plastic Schedule 80 ASTM D 1785. PVC pipe couplings and fittings shall be manufactured of material conforming to ASTM D 1784, Class 12454B. Contractor shall not use HDPE for any of the water pipes.

2.4.2.3 HYDROSTATIC, LEAKAGE AND DISINFECTION TESTS

The Contracting Officer will be notified not less than 48 hours in advance of any water piping test and will be given full access for monitoring testing procedures and results. Where any section of water line is provided with concrete thrust blocking for fittings or hydrants, tests shall not be made until at least 5 days after installation of concrete thrust blocking, unless otherwise approved. Pressure and leakage testing shall be as specified in AED Design Requirements – Water Tank and Water Distribution Systems, latest version.

2.4.2.4 PRESSURE TEST

After the pipe is laid, the joints completed, and the trench partially backfilled leaving the joints exposed for examination, the newly laid piping or any valved section of piping shall, unless otherwise specified, be subjected for 1 hour to a hydrostatic pressure test of 1.38 MPa (200 psi). Each valve shall be opened and closed several times during the test. Exposed pipe, joints, fittings, hydrants and valves shall be carefully examined during the partially opened trench test. Joints showing visible leakage shall be replaced or remade as necessary. Cracked or defective pipe, joints, fittings, hydrants and valves discovered following this pressure test shall be removed and replaced and retested until the test results are satisfactory.

2.4.2.5 LEAKAGE TEST

Leakage tests shall be conducted after all pressure tests have been satisfactorily completed. The duration of each leakage test shall be at least 2 hours, and, during the test, water lines shall be subjected to not less than 1.38 MPa (200 psi). Leakage is defined as the quantity of water to be supplied into the newly laid pipe, or any valved or approved section, necessary to maintain pressure to within 34.5kPa (5 psi) of the specified leakage test pressure after the pipe has been filled with water and all air expelled. Pipe installation will not be accepted if leakage exceeds the allowable leakage, as determined by the following formula:

L = 0.0001351ND (P raised to 0.5 power), where:

L = Allowable leakage in gallons per hour
N = Number of joints in the length of pipeline tested
D = Nominal diameter of the pipe in inches
P = Average test pressure during the leakage test, in psi gauge

Should any test of pipe disclose leakage greater than that calculated by the above formula, the defective joints shall be located and repaired until the leakage is within the specified allowance, without additional cost to the government.

2.4.2.6 BACTERIOLOGICAL DISINFECTION

2.4.2.6.1 DISINFECTION PROCEDURE

Before acceptance of potable water operation, each unit of completed waterline shall be disinfected as prescribed by AWWA C651. After pressure tests have been completed, the unit to be disinfected shall be thoroughly flushed with water until all entrained dirt and mud have been removed before introducing the chlorinating material. Flushing will be performed in a manner and sequence that will prevent recontamination of pipe that has previously been disinfected. The chlorinating material shall be liquid chlorine, calcium hypochlorite, or sodium hypochlorite. The chlorinating material shall provide a dosage of not less than 50 ppm and shall be introduced into the water lines in an approved manner. Polyvinyl Chloride (PVC) pipelines shall be chlorinated using only the above-specified chlorinating material in solution. The agent shall not be introduced into the line in a dry solid state. The treated water shall be retained in the pipe long enough to destroy all non-spore forming bacteria. Except where a shorter period is approved, the

retention time shall be at least 24 hours and shall produce not less than 25 ppm of free chlorine residual throughout the line at the end of the retention period. Valves on the lines being disinfected shall be opened and closed several times during the contact period. The line shall then be flushed with clean water until the residual chlorine is reduced to less than 1.0 ppm. During the flushing period, each fire hydrant on the line shall be opened and closed several times.

2.4.2.6.2 SAMPLING

For each building connected to the water system, personnel from the Contractor's commercial laboratory shall take at least 3 water samples from different points, approved by the Contracting Officer, in proper sterilized containers and perform a bacterial examination in accordance with approved methods. The commercial laboratory shall be verified to be qualified by the appropriate authority for examination of potable water. Contractor shall submit a water sampling protocol for approval. This shall include at a minimum the name of the laboratory, parameters to be tested, the Company conducting the sampling, and the sample locations.

2.4.2.6.3 ACCEPTANCE REQUIREMENTS

The disinfection shall be repeated until tests indicate the absence of bacteria for at least 2 full days. The unit will not be accepted until satisfactory bacteriological results have been obtained. All retests shall be conducted at the Contractor’s expense.

2.4.2.6.4 TIME FOR MAKING TESTS

Except for joint material setting or where concrete thrust blocks necessitate a 5-day delay, pipeline jointed with rubber gaskets, mechanical or push-on joints, or couplings may be subjected to hydrostatic pressure, inspected, and tested for leakage at any time after partial completion of backfill.

2.4.2.6.5 CONCURRENT TESTS

The Contractor may elect to conduct the hydrostatic tests using either or both of the following procedures. Regardless of the sequence of tests employed, the results of pressure tests, leakage tests, and disinfection shall be recorded for submission and approval. Replacement, repair or retesting required shall be accomplished by the Contractor at no additional cost to the Government. Pressure and leakage testing may be conducted concurrently. Hydrostatic tests and disinfection may be conducted concurrently using water treated for disinfection to accomplish the hydrostatic tests. If water is lost when treated for disinfection and air is admitted to the unit being tested, or if any repair procedure results in contamination of the unit, disinfection shall be re-accomplished.

2.4.2.7 VALVES

Valves (Gate valves w/box) shall be placed at all pipe network tees and cross intersections, and the number of valves shall be one less than the number of lines leading into and away from the intersection. For isolation purposes valves shall be spaced not to exceed 3600 mm (12 feet). Gate valves shall be in accordance with AWWA C 500 and/or C509. Butterfly valves (rubber

seated) shall be in accordance with C504 et al. The valves and valve boxes shall be constructed to allow a normal valve key to be readily used to open or close the valve. Provide traffic-rated valve boxes. Provide concrete pad, 1 meter (3'-4") square, for all valve boxes. Valves shall be pressure rated to 1.38 MPa (200 psi).

2.4.2.8 VACUUM AND AIR RELEASE VALVES

Air release valves are required to evacuate air from the main high points in the line when it is filled with water, and to allow the discharge of air accumulated under pressure. Vacuum relief valves are needed to permit air to enter a line when it is being emptied of water or subjected to vacuum. Contractor shall submit manufacturer's data for properly sized combination air and vacuum release valves and determine their locations on the distribution system subject to review and approval of the Contracting Officer.

2.4.2.9 THRUST BLOCKING

Contractor shall provide concrete thrust blocking at any point where the layout of the system changes the direction of the flow, increases the velocity, or decreases or stops the flow. At these points, the pipes and fittings must be anchored and kept from moving or pulling apart by the use of thrust blocks installed against undisturbed earth.

2.4.3 SANITARY SEWER

2.4.3.1 GENERAL

There are no functional or salvageable sanitary sewer collection, treatment or disposal facilities at this site. The Contractor shall obtain topographic information or other maps that show vegetation, drainage channels and other land surface features such as underground utilities and related structures that may influence the design and layout of the collection system. If maps are not available, or do not provide satisfactory information or sufficient detail of the site, field surveys shall be performed. Sanitary sewers less than 1.25 meters (4 feet) under road crossings shall have reinforced concrete cover at least 150 mm (6 inch) thick around the pipe. Concrete cover will extend out to at least 1 m from each road edge.

Exterior sanitary sewer line construction shall include service to all buildings as described in the Scope of Work Section 01010. Contractor shall design sanitary sewer collection system using approved field survey data and finished floor elevations. Depending upon the topography and building location, the most practical location of sanitary sewer lines is along one side of the street. In other cases they may be located behind buildings midway between streets. Main collection sewers will follow the most feasible route to the point of discharge. The sewer collection system shall be designed to accommodate the initial occupancy and a reasonable expansion capability. Sewer collection capacity shall be based on the two times the average daily wastewater flow unless minimum diameter specified is adequate to provide flow and required maximum velocity; wastewater flow through the system shall be distributed on the basis of fixture unit flow in each the buildings serviced by multiplying the proportion of the total fixture flow from each building or facility times the total wastewater flow for the project or installation as determined above.

All sewers shall be located outside of the roadways as much as practical, and minimize the number of roadway crossings. To the extent practical, a sewer from one building shall not be constructed under another building, or remain in service where a building is subsequently constructed over it.

The Contractor shall use the following criteria where possible to provide a layout which is practical, economical and meets hydraulic requirements:

d. Follow slopes of natural topography for gravity sewers.

e. Check subsurface investigations for groundwater levels and types of subsoil encountered. If possible, avoid areas of high groundwater and the placement of sewers below the groundwater table.

f. Avoid routing sewers through areas which require extensive restoration or underground demolition

g. Depending upon the topography and building locates, the most practical location of sanitary sewer lines is along one side of the street. In other cases they may be located behind buildings midway between streets. The intent is to provide future access to the lines for maintenance without impacting vehicular traffic.

h. Avoid placing manholes in low-lying areas where they could be submerged by surface water or subject to surface water inflow. In addition, all manholes shall be constructed 50 mm higher than the finished grade, with the ground sloped away from each manhole for drainage.

i. Sewer lines shall have a minimum of 800 mm of cover for frost protection.

j. Locate manholes at change in direction, pipe size, or slope of gravity sewers.

k. Sewer sections between manholes shall be straight. The use of a curved alignment shall not be permitted.

l. If required by the design, locate manholes at intersections of streets where possible. This minimizes vehicular traffic disruptions if maintenance is required.

m. Sewer lines less than 1.25 meters deep under road crossings shall have a reinforced concrete cover of at least 150mm thickness around the pipe or shall utilize a steel or ductile iron carrier pipe. It is recommended to continue the reinforced concrete cover or carrier pipe a minimum of one (1) meter beyond the designated roadway.

n. Verify that final routing selected is the most cost effective alternative that meets service requirements.

2.4.3.2 PROTECTION OF WATER SUPPLIES

The Contractor shall ensure that the sewer design meets the following criteria:

o. Sanitary sewers shall be located no closer than 30m (100 feet) horizontally to water wells or reservoirs to be used for potable water supply.

p. Sanitary sewers shall be no closer than 3 m (10 feet) horizontally to potable water lines; where the bottom of the water pipe will be at least 300mm (12 inches) above the top of the sanitary sewer, horizontal spacing shall be a minimum of 1.8m (6 feet).

q. Sanitary sewers crossing above potable water lines shall be constructed of suitable pressure pipe or fully encased in concrete for a distance of 2.7m (9 feet) on each side of the crossing. Pressure pipe will be as required for force mains in accordance with local standards and shall have no joint closer than 1m (3 ft) horizontally to the crossing, unless the joint is fully encased in concrete.

2.4.3.3 QUANTITY OF WASTEWATER

The Contractor shall verify the average daily flow considering both resident (full occupancy) and non-resident (8hr per day) population. The average daily flow will represent the total waste volume generated over a 24-hour period, and shall be based on the total population of the facility and water usage rate of 190 liters (50 gallons) per capita per day (water usage). The wastewater flow rate shall be calculated as approximately 80% of water usage rate, or 155 liters (41 gallons) per capita per day times the capacity factor requirements.

2.4.3.4 GRAVITY SEWER

Sanitary sewers shall be designed to flow at a maximum in the following way: 1) sanitary sewer laterals, mains and trunk lines flow velocities shall be designed to provide a minimum velocity of 0.6 meters per second (mps) or 2.0 feet per second (fps) at the ADD flow rate, 2) a minimum velocity of 0.8 to 1.05 mps (2.5-3.5fps) at the peak diurnal flow rate, 3) flows shall be based on allocating the proportion of the average daily or peak daily flow to each building or facility on the basis of fixture unit flow developed for the plumbing design, and 4) minimum pipe slopes shall be provided regardless of the calculated flow velocities to prevent settlement of solids suspended in the wastewater. The minimum slopes are shown in the following table from AED Design Requirements for Sanitary Sewer and Septic Systems. This table does not state that slopes are designed at this slope regardless of flow depth and velocity. Other criteria must also be used to determine grade stated above. The word "minimum" is defined as "the least quantity or amount possible, assignable, allowable, or the like". Greater slopes shall be used as needed to achieve all the design requirements.

Minimum Slopes for Sewers	
Sewer Pipe Size (mm)	Minimum Slope in meters per 100 meters
100	1.00
150	1.0

Unless otherwise indicated (see Building Connections and Service Lines), gravity sewer pipe shall be installed in straight and true runs in between manholes with constant slope and direction. Adequate cover must be provided for frost protection. A minimum cover of 800 mm (2'-8") will be required to protect the sewer against freezing.

2.4.3.4.1 MANHOLES

The Contractor shall provide standard depth manholes (MH), (depth may vary) an inside dimension of 1.2m (4 ft). Manholes shall be made of cast-in-place reinforced concrete with reinforced concrete cover. Alternate pre-cast manhole option shall taper to a 750 mm (30-inch) cast iron frame that provides a minimum clear opening of 600 mm (24 inches). In every case, the manholes, frames and covers shall be traffic rated, H-20 load rating. All manholes shall be provided with a concrete bench with a flow line trough, smoothly formed to guide waste flow to the outlet pipe from the inlet pipe(s). The top surface of the bench shall be above the crown of all pipes within the manhole. All surfaces of the bench shall be sloped smoothly toward the trough to guide flow, even under peak flow conditions. Sanitary sewer lines shall enter at the manhole flow line. Where the invert of the inlet pipe would be more than 0.5 meter above the manhole floor, a drop inlet shall be provided. No internal drop structures shall be permitted at lift stations. Inlet to lift station wet wells shall enter below the lowest water level of the pump operating range, and if necessary a drop inlet approach pipe external to the lift station may be used to avoid cascading influent flow.

2.4.3.4.2 MANHOLE DESIGN REQUIREMENTS

Manholes are required at junctions of gravity sewers and at each change in pipe direction, size or slope, except as noted hereinafter for building connections. Manholes shall be installed at start of all main runs.

2.4.3.4.3 SPACING

The distance between manholes must not exceed 120m (400 ft) in sewers of less than 460mm (18 in) in diameter.

2.4.3.4.4 PIPE CONNECTIONS

The crown of the outlet pipe from a manhole shall be on line with or below the crown of the inlet pipe.

2.4.3.4.5 FRAMES AND COVERS

Frames and covers shall be cast iron, ductile iron or reinforced concrete, traffic rated in any case to an H-20 load rating. Cast iron frames and covers shall be traffic rated, circular with vent holes.

2.4.3.4.6 STEPS FOR MANHOLES

Steps shall be cast iron, polyethylene coated, at least 15mm (5/8 in) thick, not less than 400mm (16 in) in width, spaced 300mm (12 in) on center.

2.4.3.5 PIPE

Pipe shall conform to the respective specifications and other requirements as follows: Provide Polyvinyl Vinyl Chloride (PVC) conforming to ASTM D 3034, Type PSM with a maximum

SDR of 35, size 380 mm (15inch) or less in diameter. PVC shall be certified as meeting the requirements of ASTM D 1784, cell Class 12454 B. Minimum pipe sizes for the main lines shall be 150mm (6 inch) diameter and service lines/laterals shall be a minimum of 100 mm (4 inch) diameter. Contractor may use uPVC pipe provided the SDR and strength properties of the pipe equal or exceed the properties of ASTM D 1784 for PVC. Manufacturer supplied data stating that all aspects of the ASTM are met will be required for approval.

2.4.3.5.1 FITTINGS

Fittings shall be compatible with pipe supplied and shall have a strength not less than that of the pipe. Fittings shall conform to the respective specifications and requirements as follows: provide PVC fittings conforming to ASTM D 3034 for type PSM pipe.

2.4.3.5.2 JOINTS

Joints installation requirements shall comply with the manufacturers installation instructions. Flexible plastic pipe (PVC) gasket joints shall conform to ASTM D3212.

2.4.3.5.3 BRANCH CONNECTIONS

Branch connections for new piping installations shall be made using regular fittings. Branch connections for upgrades or repairs shall be made by use of regular fittings or solvent-cemented saddles as approved. Saddles for PVC pipe shall conform to Table 4 of ASTM D 3034.The minimum depth of the cover over the pipe crown shall be 0.8m (2 ft 8”).

2.4.3.5.4 BUILDING CONNECTIONS AND SERVICE LINES

Building connections and service lines will be planned to eliminate as many bends as practical and provide convenience in rodding. Bends greater than 45 degrees made with one fitting should be avoided; combinations of elbows such as 45-45 or 30-60 degrees should be used with a cleanout provided. Connections to other sewers will be made directly to the pipe with standard fittings rather than through manholes. However, a manhole must be used if the connection is more than 31m from the building cleanout. Service connection lines will be a minimum of 100 mm (4 inch) diameter and laid at a minimum 1% grade. Service laterals shall be 150 mm (6 inch) and sloped to maintain the minimum velocity as described in paragraph “Gravity Sewer.”

2.4.3.5.5 CLEANOUTS

Cleanouts must be installed on all sewer-building connections to provide a means for inserting cleaning rods into the underground pipe. Install manufactured wye fittings. In lieu of a wye fitting, an inspection chamber may be installed. The inspection chamber shall be of the same construction as a manhole. Preferably the cleanout will be of the same diameter as the building sewer, and never be smaller than 150mm (6 in). Cleanouts shall be located within 1m from the building.

2.4.3.6 GREASE INTERCEPTORS

Grease interceptors are used to remove grease from wastewater to prevent it from entering the sanitary sewer and septic systems. All Dining Facilities (DFACs) shall incorporate preliminary treatment with use of a grease interceptor prior to the sanitary sewer system. The only waste lines upstream of the grease interceptor shall be grease laden waste from the kitchen or other areas. Grease interceptor design shall be based on AED Design Requirements - Grease Trap, latest version. The grease interceptor shall be of reinforced cast-in-place concrete, reinforced precast concrete or equivalent capacity commercially available steel, with removable three-section, 9.5 mm checker-plate cover, and shall be installed outside the building. Steel grease interceptors shall in be installed in a concrete pit and shall be epoxy-coated to resist corrosion as recommended by the manufacturer. Concrete shall have 21 MPa minimum compressive strength at 28 days. The grease interceptor shall connect to the sanitary sewer system.

Contractor shall provide bollards around the tank and construct a minimum 4 m wide access road from the closest roadway to the grease interceptor for a pump truck. The access road shall be of the same material as the main roads in the compound. Under no circumstance shall the grease interceptor be installed inside the building. Provide outside water spigot for cleaning.

2.4.3.7 FIELD QUALITY CONTROL

2.4.3.7.1 FIELD TESTS AND INSPECTIONS

The Contracting Officer will conduct field inspections and witness field tests specified in this section. The Contractor shall perform field tests and provide labor, equipment and incidentals required for testing.

Check each straight run of pipeline for gross deficiencies by holding a light in a manhole; it shall show a practically a full circle of light through the pipeline when viewed from the adjoining end of the line. When pressure piping is used in a non-pressure line for non-pressure use, test this piping as specified for non-pressure pipe.

Test lines for leakage by either infiltration tests or exfiltration tests. Prior to testing for leakage, backfill trench up to at least lower half of the pipe. When necessary to prevent pipeline movement during testing, place additional backfill around pipe to prevent movement during testing, but leaving joints uncovered to permit inspection. When leakage or pressure drop exceeds the allowable amount specified, make satisfactory correction and retest pipeline section in the same manner. Correct visible leaks regardless of leakage test results.

Infiltration tests and ex-filtration tests: Perform these tests for sewer lines made of specified material, not only concrete, in accordance with ASTM C 969M, ASTM C 969. Make calculations in accordance with the Appendix to ASTM C 969M and ASTM 969.

Low-pressure air tests: Perform tests as follows:

r. PVC Plastic pipe: Test in accordance with applicable requirements of UBPPA UNI-B-6. Allowable pressure drop shall be as given in UBPPA UNI-B-6. Make calculations in accordance with the Appendix to UBPPA UNI-B-6.

2.4.3.7.2 DEFLECTION TESTING

Deflection testing will not be required however; field quality control shall ensure that all piping is installed in accordance with deflection requirements established by the manufacturer.

2.4.4 WASTEWATER TREATMENT SYSTEMS

Septic systems shall be designed and installed in accordance with AED Design Requirements - Sanitary Sewer and Septic Systems, latest version. Contractor shall provide a minimum 4 m wide access road to the septic tank. Bollards shall be installed around the absorption field as well as the septic tank. The access road construction shall be of the same thickness and material as the roadway on the compound. The access roadway shall tie to the nearest road network. Septic tank and leach field disposal systems shall be limited to effective design populations under 300 personnel.

Contractor shall not use sewage holding tanks for wastewater disposal system unless specifically required as the only method in the contract section 01010 and 01015. When soil conditions make septic systems with leach fields unfeasible, the contractor may request consideration for sewage holding tanks from the USACE-AED Engineering Branch. This policy applies only for facilities with 60 personnel or less and shall be considered on a case by case basis.

2.4.5 SEPTIC SYSTEM

Generally when determining an appropriate septic tank location, the Contractor shall provide protection for the septic system by ensuring that vehicles, material storage, and future expansion shall be kept away from the area. Signage or other prevention methods (i.e. pipe bollards) shall be used to provide this protection. The finished grade for the site shall ensure that storm water runoff shall drain away from the site to prevent ponding, inflow, and infiltration. Once an appropriate site is located, the Contractor shall conduct soil investigations for the site to determine ground water levels, soil conditions, and the percolation rate. Septic systems shall be designed and installed in accordance with UFC 3-240-09A, Domestic Wastewater Treatment, 16 January 2004 edition, and the following guidance:

2.4.5.1 SITE SURVEY

The Contractor shall conduct a topographic survey to determine existing site characteristics. The Contractor shall conduct a utility survey to determine the locations of any nearby water lines, wells, sanitary sewers, storm sewers and electrical lines.

2.4.5.2 PERCOLATION TESTING

At proposed sites for holding ponds and the absorption field, the Contractor shall perform percolation tests. Percolation testing shall be conducted in accordance with AED Design Requirements - Sanitary Sewer and Septic Systems (latest version).

2.4.5.3 SEPTIC TANK

A baffled, multi-compartment or dual chamber design shall be utilized. Refer to AED Design Requirements - Sanitary Sewer and Septic Systems (latest version) for sizing and design details. The septic tank shall be designed with a length-to-width ratio of 2:1 to 3:1 and the liquid depth shall be between 1.2 m and 1.8m. This depth is determined by the outlet pipe invert elevation. If not specified in the contract, the septic tank shall be sized based on the average daily demand of 190 liters/capita/day, plus an additional 100% for sludge storage capacity and peak flows. The tank shall be constructed of reinforced, cast-in-place concrete, with a minimum compressive strength of 21MPa at 28 days. When feasible, wastewater influent and effluent shall enter and exit on the short sides of the tank, in order to allow the wastewater longer detention and settling time. The baffle tank shall have two compartments, with the first compartment (influent entry point) having 2/3 thirds the volume capacity of the tank. The tank shall have a minimum earth backfill cover of 300mm. Access shall be provided at the entry (influent) and exit (effluent) points of the tank by installing reinforced concrete risers, with steel access hatches, that will rise 50mm above the finished grade.

2.4.5.4 ABSORPTION FIELD

Absorption fields (also termed “leach fields”) are used, in conjunction with septic tank treatment, as the final treatment and disposal process for the wastewater treatment system. Absorption fields normally consist of perforated distribution pipe laid in trenches or beds that are filled with rock. Refer to AED Design Requirements - Sanitary Sewer and Septic Systems (latest version) for absorption field sizing and performance requirements. The septic tank effluent shall be distributed by a perforate pipe and allowed to percolate through the ground, where it is filtered and treated by naturally occurring bacteria and oxygen. Once effluent is released from the septic tank, it shall travel by gravity through a solid 100mm diameter PVC pipe, at a minimum 1.0% slope, to a distribution box or dosing tank. The distribution box shall be a reinforced concrete structure that distributes the septic tank effluent evenly throughout the absorption field through several 100mm diameter perforated pipes. The distribution pipe shall be distributed evenly over the absorption trenches or beds; the perforated pipe shall have a maximum slope of 0.5% and shall be capped at the end of each pipe. If percolation testing indicates that soil absorption rates are not between 0.1 min/25cm and 60 min/25cm, the contractor shall notify the COR.

2.4.5.5 AS-BUILTS

Upon completion of installing the sanitary sewer and septic systems, the Contractor shall submit editable CAD format As-Built drawings. The drawings shall show the final product as it was constructed in the field, with the exact dimensions, locations, materials used, and any changes made to the original design.

2.4.6 STORM SEWER SYSTEMS

2.4.6.1 DESIGN STORM RETURN PERIOD (BASELINE FREQUENCY)

Developed portions of the site installation such as administration, industrial and barracks areas, shall be based on a rainfall of 10-year frequency. Basic system design shall be in accordance with UFC 3-230-17A, Chapter 2. Potential damage or operational requirements may warrant a

more severe criterion or in certain areas a lesser criterion may be appropriate. The design of roadway culverts and other on-site storm drainage features & structures will normally be based on 10-year rainfall event. Protection of installations against flood flows originating from areas exterior to the base installation shall be based on a 25-year or greater rainfall depending on cost vs. benefit considerations.

2.4.6.2 STORM DRAINAGE SYSTEM DESIGN

The Contractor shall be responsible for the complete design of the storm drainage system. Drainage of runoff from turf areas onto pavements shall be minimized. If storm drain piping is required it shall comply with the requirements in this section. Where storm drain pipes are of different diameters, the pipe crown elevations should be matched at the drainage structure. Storm drain lines shall be located outside of paved areas to the extent possible. Under no circumstance shall storm drain lines be located beneath buildings. Erosion control shall be provided for all storm drain structures during construction. Water from roof down spouts shall be drained off building site. All storm drain pipe and structures shall comply with the requirements specified in Section 33 40 01 STORM-DRAINAGE.

2.4.6.3 HYDRAULIC DESIGN

New storm drain pipes shall be designed for gravity flow during the design storm baseline unless otherwise approved by the Government. The hydraulic grade line shall be calculated for the storm drain system and all energy losses accounted for. Design computations shall adhere to procedures contained in UFC 3-230-17A. Storm drain systems shall be designed to provide a minimum flow velocity of .75 meters per second when the drains are one-third or more full. Storm drain pipes shall have a minimum diameter of 300mm. Rectangular culverts passing under roads and through perimeter walls shall have a minimum width of 300mm. Larger sizes shall be provided as required.

2.4.6.4 AREA INLETS

Area inlets shall be properly sized and designed to accommodate the design flows. All grates shall be of a “bicycle safe” design.

2.4.6.4.1 CONCRETE PIPE

Reinforced concrete pipe shall be a minimum Class III. Type I cement may be used only when sulfates in the soil are 0.1 percent or less and dissolved sulfates in the effluent are 150 ppm or less. Type II cement may be used only when sulfates in the soil are 0.2 percent or less and dissolved sulfates in the effluent are 1,500 ppm or less. Only Type V cement may be used if sulfates in the soil exceed 0.2 percent or dissolved sulfates in the effluent exceed 1,500 ppm. Concrete pipe shall be assumed to have a minimum design service life of 50 years unless the Contractor determines that conditions at the site will reduce the service life. Concrete culverts and storm drains shall be protected by a minimum of 1 meter of cover during construction to prevent damage by heavy construction equipment.

2.4.6.4.2 PLASTIC PIPE

Stiffness of the plastic pipe and soil envelope shall be such that the predicted long-term deflection shall not exceed 7.5 percent. Plastic culverts and storm drains shall be protected by a minimum of 1 meter of cover during construction to prevent damage by heavy construction equipment. Split couplers shall not be allowed for corrugated high-density polyethylene pipe. Plastic pipe shall be assumed to have a minimum design service life of 50 years unless the Contractor determines that conditions at the site will reduce the service life (then plastic pipe shall not be used).

2.4.7 OIL WATER SEPARATORS

Oil/water separators shall be utilized for all drains from industrial sites. Separators shall be installed as close as possible from the drain location. Storm sewer system shall not be mixed with sanitary sewer system and shall be in accordance with UFC 3-240-07FA, latest edition.

2.5 GEOTECHNICAL

2.5.1 SOIL INVESTIGATION

Existing geotechnical information is not available at the project site. Any site-specific geotechnical data required to develop foundations, materials, earthwork, and other geotechnical related design and construction activities for this project shall be the Contractor's responsibility. The Contractor shall develop all pertinent geotechnical design and construction parameters by appropriate field and laboratory investigations and analyses. The Contractor shall produce a detailed geotechnical report containing field exploration and testing results, laboratory testing results (particle sizes and distribution, liquid and plastic limit test, and moisture and density test, etc.). Information in the report shall include, but not limited to: existing geotechnical (e.g. surface and subsurface) conditions, location of subsurface exploration logs on site plan, exploration point, allowable soil bearing capacity and foundations recommendations, bearing capacity, pavement design criteria (e.g. CBR values, K values), ground-water levels, and construction materials (e.g. concrete cement, asphalt, and aggregates). For standard penetration test (SPT), the Contractor shall use ASTM D1586. All geotechnical laboratory and field work shall be based on standards set forth in the ASTM. Contractor shall not use any DIN standards for penetration tests in lieu of ASTM D 1586. Soil investigations shall conform with AED Design Requirements: Geotechnical Investigations for USACE Projects, latest version, or most recent version.

For foundation design, allowable soil bearing pressures, shall be based on the International Building Code (IBC) 2006 Table 1804.2. The contractor shall conduct soils classification per ASTM D 2487-06. There shall be no variation from the values listed in the table above, unless the soils investigation indicates lower allowable values should be used.

The contractor shall submit a geotechnical investigation plan prior to commencing any field investigation to the USACE-AED Engineering Branch through the COR for review and approval. Once the plan is reviewed and approved, the Contractor can start the field investigation. The Geotechnical report shall be submitted with all the design review submittals as specified in the 01335. No design review submittal shall be considered complete without an

approved geotechnical report. Geotechnical investigation plans and report of investigations shall be submitted promptly in accordance with Section 01335.

2.5.2 GEOTECHNICAL QUALIFICATIONS

A geotechnical engineer or geotechnical firm responsible to the Contractor shall develop all geotechnical engineering design parameters. The geotechnical engineer or geotechnical firm shall be qualified by: education in geotechnical engineering; professional registration; and a minimum of ten (10) years of experience in geotechnical engineering design. The geotechnical firm conducting either the field investigation or laboratory work shall be certified by the Chief, Quality Assurance Branch USACE-AED. Certification document shall be submitted as part of the Geotechnical Report.

3.0 STRUCTURAL

3.1 GENERAL

The project consists of various structures. The ANP 1-Story Headquarters Building, Guard Tower, Guard Shack, and Well House are existing structural designs based upon International Building Code 2003 and as specifically listed herein, paragraph 3.0 Structural.

The new buildings shall be provided with a reinforced concrete foundation that is properly placed on suitable compacted earth and shall be prepared in accordance with the recommendations from the geotechnical investigation. The reinforced concrete foundation shall be designed by the Contractor. Building foundations shall be founded a minimum of 800 mm below grade.

The new building foundations were designed for a soil bearing capacity of 0.75kg/cm^2. The geotechnical investigation shall confirm bearing capacity to be no less than 0.75kg/cm^2. If geotechnical investigation shows less than 0.75kg/cm^2, Contractor shall redesign footings based on the geotechnical investigation. Foundation design shall be corroborated with the geotechnical findings and recommendations.

Brick shall not be used as a construction material for the new buildings.

3.2 DESIGN

Designs for wood stove kitchen enclosure, generator sunshade, and roof trusses shall be performed and design documents signed by a registered professional architect and/or engineer. Design shall be performed and design documents signed by a registered professional architect and/or engineer. Calculations shall be in SI (metric) units of measurements.

All components of the structures shall be designed and constructed to support all loads, including all required factors of safety, without exceeding the allowable stresses for the materials of construction in the structural members and connections. All building exterior walls shall be constructed with reinforced CMU or reinforced concrete.

3.3 STANDARDS

The Contractor should use the following American standards to provide sound structural design if local standards are not available, relevant, or applicable. The Contractor shall follow American Concrete Institute Standards (ACI) for design and installation of all concrete structures. All codes are latest edition.

Concrete	ASTM C 39 and ACI 318; 28 MPa (f'_c = 4,000psi) minimum specified compressive strength @ 28 days, and maximum water-cement ratio of 0.45.
Steel Reinforcement	ASTM A 615; 420 MPa (F_y = 60ksi) yield strength.
Welded Wire Fabric	ASTM A 185.
Anchor Bolts	ASTM A 36.
Bolts and Studs	ASTM A 325.
Plaster	ASTM C 926; 14 MPa (f'_c = 2,000psi).
Concrete Masonry Units	ASTM C 90; Type I (normal weight, moisture control).
Mortar	ASTM C 270; Type S (Ultimate compressive strength of 13 MPa) Proportion: 1 part cement, 0-½ part lime and 4½ parts aggregate.
Grout	ASTM C 476; 14 MPa (2,000psi) minimum compressive strength @ 28 days (Slump between 200 mm to 250mm).
Structural Steel	ASTM A 36; 250 MPa (F_y = 36,000psi).
Shaped Structural Tubing	ASTM A 500, Grade B; 315 MPa (F_y = 46,000psi).
Welding	AWS D1.1 (American Welding Society).

3.4 DEAD AND LIVE LOADS

Dead loads consist of the weight of all materials of construction incorporated in the buildings. Live loads used for design shall be in accordance with ASCE Standards and minimum design loads for buildings and other structures, ASCE 7-2005. All facilities shall be classified as a minimum of Category II in accordance with Table 1-1.

3.5 WIND LOADS

Wind loads shall be calculated in accordance with ASCE 7-2005 using a "3-second gust" wind speed of 135 km/hr. Exposure = C. Importance Factor = 1.0.

3.6 SEISMIC

The building and all parts thereof shall be designed for the seismic requirements as defined by the International Building Code 2006.

Spectral ordinates shall be S_s = 1.65g and S_1 = 0.75g.

3.7 STRUCTURAL CONCRETE

Concrete structural elements shall be designed and constructed in accordance with the provisions of the American Concrete Institute, Building Code Requirements for Structural Concrete, ACI 318. A minimum cylinder 28 day compressive strength of 28 MPa (4,000 psi) shall be used for design and construction of all concrete. Reinforcing steel shall be deformed bars conforming to American Society for Testing and Materials publication ASTM A 615, Deformed and Plain Billet-Steel Bars for Concrete Reinforcement. Concrete shall have maximum water-cement ratio of 0.45. No concrete shall be placed when the ambient air temperature exceeds 32 degrees C (90 degrees F) unless an appropriate chemical retardant is used. In all cases when concrete is placed at 32 degrees C (90 degrees F) or hotter it shall be covered and kept continuously wet for a minimum of 48 hours.

3.8 MASONRY

Masonry shall be designed and constructed in accordance with the provisions of Building Code Requirements for Masonry Structures, ACI 530/ASCE 5/TMS 402. Mortar shall be Type S and conform to ASTM C 270. Masonry shall not be used below grade.

All cells of exterior CMU walls shall be fully grouted. For interior CMU walls, only the reinforced cells need to be grouted. All CMU walls shall have reinforced horizontal bond beams at a maximum spacing of 1,200 mm on center.

Brick shall not be used as a construction material for the new buildings.

3.9 STRUCTURAL STEEL

Structural steel shall be designed and constructed in accordance with the provisions of American Institute of Steel Construction (AISC), Specifications for Structural Steel Buildings. Design of cold-formed steel structural members shall be in accordance with the provisions of American Iron and Steel Institute (AISI), Specifications for Design of Cold-Formed Steel Structural Members.

3.9.1.1 STEEL ROOF JOISTS

Steel roof joists shall be placed according to the roof design and roof manufacturer specifications. Steel purlins shall be installed perpendicular to the steel beams. Use continuous metal roof sheets from ridge to eave to avoid constructing roof seams. In lieu of the continuous metal roof sheets, the Contractor can submit a plan for roofing seams; however, the plan must show a detail of how leaks will be avoided, and the Contracting Officer before application must approve the plan. Provide all necessary metal framing for roof fascia and soffits. See structural paragraph for structural characteristics of steel joists.

3.9.1.2 OPEN WEB STEEL JOISTS

Open web steel joists shall conform to SJI Specifications and Tables. Joists shall be designed to support the loads given in the standard load tables of SJI Specifications and Tables.

3.10 METAL DECK

Deck units shall conform to SDI Publication Number 29. Panels of maximum possible lengths shall be used to minimize end laps. Deck units shall be fabricated in lengths to span three or more supports with flush, telescoped or nested 50 mm (2 inch) laps at ends, and interlocking, or nested side laps. Metal deck units shall be fabricated of steel thickness required by the design and shall be galvanized.

3.11 FOUNDATIONS

Foundations shall be in accordance with the Geotechnical requirements of this RFP.

3.12 EARTHWORK AND FOUNDATION PREPARATION

3.12.1 CAPILLARY WATER BARRIER

ASTM C 33 fine aggregate grading with a maximum of 3 percent by weight passing ASTM D 1140, 75 micrometers, No. 200 sieve, or 37.5mm and no more than 2 percent by weight passing the 4.75mm No. 4 size sieve and conforming to the soil quality requirements specified in the paragraph entitled “Satisfactory Materials.”

3.12.2 SATISFACTORY MATERIALS

Any materials classified by ASTM D 2487 as GW, GW-GM, GW-GC, SW, SW-SM, or SW-SC and free of debris, roots, wood, scrap material, vegetation, refuse, soft unsound particles, or objectionable materials. Unless specified otherwise, the maximum particle diameter shall be one-half the lift thickness at the intended location.

3.12.3 UNSATISFACTORY MATERIALS

Any materials which do not comply with the requirements set forth in the Satisfactory Materials paragraph. Unsatisfactory materials also include man-made fills, trash, refuse, or backfills from previous construction. Unsatisfactory material also includes material classified as satisfactory which contains root and other organic matter, frozen material, and stones larger than 75mm. The Contracting Officer shall be notified of any unsatisfactory materials.

3.12.4 CLEARING AND GRUBBING

Unless indicated otherwise, remove tress, stumps, logs, shrubs, brush and vegetation, and other items that would interfere with construction operations within lines 1.5 meters outside of the building and structure line. Remove stumps entirely. Grub out matted roots and roots over 50mm in diameter to at least 460mm below existing surface.

3.12.5 STRIPPING

Strip suitable soil from the site where excavation or grading is indicated and stockpile separately from other excavated material. Material unsuitable for use as topsoil shall be stockpiled and used for backfilling. Locate topsoil so that the material can be used readily for the finished

grading. Where sufficient existing topsoil conforming to the material requirements is not available on site, provide borrow materials suitable for use as topsoil. Protect topsoil and keep in segregated piles until needed.

3.12.6 EXCAVATION AND COMPACTION OF FILL

Excavate to contours, elevation, and dimensions indicated. Reuse excavated materials that meet the specified requirements for the material type required at the intended location. Keep excavations free from water. Excavate soil disturbed or weakened by Contractor's operations, soils softened or made unsuitable for subsequent construction due to exposure to weather. Excavations below indicated depths will not be permitted except to remove unsatisfactory material. Unsatisfactory material encountered below the grades shown shall be removed as directed. Refill with satisfactory material and compact to at least 95 percent of the maximum dry density, as determined by the Modified Proctor laboratory procedure. ASTM D 1557 shall be used for producing the Modified Proctor moisture-density curve, unless the soil to be compacted includes more than 30% retained on the 19 mm (3/4") sieve. In this case, the Contractor must replace the ASTM D 1557 laboratory compaction procedure with AASHTO T 180, Method D, corrected with AASHTO T 224.

During compaction, the moisture content of the soil shall be within 1.5 percent of the optimum moisture content, as determined by the Modified Proctor laboratory procedure. The thickness of compacted lifts shall not exceed 15 cm and the dry density of each compacted lift shall be tested by either sand cone (ASTM D 1556) or nuclear gage (ASTM D 2292). If the nuclear gage is used, it must first be compared to sand cone tests for each soil type to verify the accuracy of the nuclear gage measurements for moisture content, wet density, and dry density. Furthermore, every tenth nuclear gage test must be accompanied by a sand cone test and these verification data must be summarized and submitted to the Contracting Officer. Density tests shall be performed at a frequency of not less than one test for each 200 square meters and not less than two tests per compacted lift.

4.0 FIRE PROTECTION

4.1 PORTABLE FIRE EXTINGUISHERS

Portable fire extinguishers shall be provided inside all facilities and at exterior locations as required in accordance with NFPA 10. Generally, extinguishers will be of the multi-purpose dry chemical type except for occupancies requiring a special type extinguisher (e.g., carbon dioxide portable fire extinguishers for electrical rooms).

5.0 ELECTRICAL

5.1 GENERAL

Contractor shall design and construct all electrical systems for the facilities to be provided. This includes design, construction, all necessary labor, equipment, and material for a fully functional system.

5.2 DESIGN CRITERIA

5.2.1 APPLICABLE STANDARDS

s. Design shall be in the required units as stipulated herein.

t. Conflicts between criteria and/or local standards shall be brought to the attention of the Contracting Officer for resolution. In such instances, all available information shall be furnished to the Contracting Officer for approval.

u. All electrical systems and equipment shall be installed in accordance with the requirements set forth in the documents referenced herein.

v. Acceptance Testing: Contractor shall develop and submit for approval complete acceptance test procedures on all systems provided. As a minimum the testing procedures shall comply with the requirements of the National Fire Protection Association (NFPA) and the International Electrical Testing Association Inc. (NETA).

5.3 MATERIAL

5.3.1 GENERAL

Unless noted otherwise, all material used shall be in compliance with the requirements of UL standards. In the event that UL compliant materials are not available, Contractor may then select applicable British Standards (BS), IEC, CE, CSA, GS, DIN listed material (or equivalent), but the contractor must prove equivalence and must provide the government with a full copy of the relevant specification(s)/standard(s). Material and equipment installed under this contract shall be for the appropriate application and installed in accordance with manufacturers recommendations.

Equipment enclosure types shall be in compliance with the National Electrical Manufacturer's Association (NEMA) or the International Electro-Technical Committee (IEC) standards.

Major components of equipment shall have the manufacturer's name, address, type or style, voltage and current rating, and catalog number on a non-corrosive and non-heat sensitive plate, securely attached to the equipment. All equipment delivered and placed in storage, prior to installation, shall be protected from the weather, humidity and temperature variation, dirt and dust, and any other contaminants. All equipment shall be in new condition, undamaged and unused.

5.3.2 STANDARD PRODUCT

All material and equipment shall be a standard product of a manufacturer regularly engaged in the manufacture of the product and shall essentially duplicate items that have been in satisfactory use for at least two (2) years prior to bid opening.

5.3.3 DESIGN CONDITIONS

All equipment shall be rated and designed for the maximum ambient temperature and altitude of the construction site. Equipment that is altitude and temperature sensitive, such as generators, shall be derated according to the manufacturer's recommendations. Generic derating criteria for altitude and for ambient temperature may be used to approximate the required size of such equipment during the design phase, but a stipulation shall be placed on the construction plans to adjust the size according to the derating criteria specific to the manufacturer's equipment chosen before the equipment is ordered.

5.3.4 RESTRICTIONS

Aluminum conductors shall not be specified or used except as bare steel reinforced (ACSR) overhead conductors in an aerial primary distribution system. Aluminum windings shall not be used in transformers.

5.4 DESIGN REQUIREMENTS

5.4.1 ELECTRICAL DISTRIBUTION SYSTEM

The contractor shall provide generator power as described in the paragraph **Generator Power System** as a prime source of power for the facilities

The contractor shall provide a prime power distribution system to distribute power to the site's facilities and other loads as required. The distribution system shall be underground

The underground distribution system shall be in direct buried schedule 80 ductbanks, except for under roadways and heavy traffic areas, with the ducts not less than 1220mm below grade. Manholes and handholes shall be provided at changes of direction of more than 40 degrees and elsewhere as required to limit the pulling tension and sidewall pressure on the cables during installation to acceptable levels as defined by the cable manufacturer. Manholes shall be provided for ductbanks with more than 2 ducts. Handholes shall be provided wherever a manhole is not required by quantity of ducts or by cable manufacturer's installation recommendations. Underground ducts shall be not less than 100mm diameter Schedule 80 PVC for non roadway and light traffic areas and concrete encased schedule 40 for roadways and heavy traffic areas.

The contractor shall provide service entrance feeders from the distribution system to the service entrance equipment located inside of each facility and sized to the rating of the service entrance equipment. Service entrance equipment shall include a distribution panelboard sized to supply the total load of each facility. Service entrance feeder lengths shall be kept as short as possible

to minimize voltage drop. They shall be underground not less than 1220mm below grade. A spare conduit of equal size shall be provided.

All panelboards shall be circuit breaker 'bolt-on' type panels. Minimum size circuit breaker shall be rated at no less than 20-amperes. Circuit breakers shall be connected to bus bar(s) within the panelboards. Daisy chain (breaker-to-breaker) connection(s) are not acceptable. Indoor distribution panels shall be flush mounted in finished areas and surface mounted in unfinished areas. All circuit breakers shall be labeled with an identification number corresponding to the panel schedule. A 3-pole circuit breaker shall be a single unit and not made up of 3 single pole circuit breakers connected with a wire or bridge to make a 3-pole breaker. All branch circuit wiring shall be copper, minimum #4 mm^2 (#12 AWG) installed in metal conduit. Wiring shall be concealed in finished areas and surface mounted in unfinished areas. Flush mounted panels shall be provided with spare empty conduits from panel to unfinished area for future use. All panels shall be provided with a minimum of 25% spare capacity for future load growth. Power receptacles (outlets) shall be duplex type 220 V, 50 hertz, type CEE 7/7 with Earth Ground rated for 20A or better and shall be compatible with the required secondary power. All splicing and terminations of wires shall be performed in junction or device boxes. Proper wire nuts/connectors shall be used for splicing wire. No twist-wire connections with electrical tape wrapped around it shall be acceptable. All electrical installation shall be in accordance with NFPA 70 (National Electric Code). For large panels (225 Ampere and above) provide an ammeter, voltmeter and kilowatt-hour meter to monitor energy usage. Selector switches shall be provided for each meter to read all 3 phases. Receptacle locations shall be coordinated with architectural requirements.

Contractor shall design and provide circuits for all mechanical equipment and any other equipment that requires power and make the final connections.

All loads shall be coordinated to provide balanced loading. Phase imbalance at each panel shall not exceed 5%.

Voltage Drop for branch circuits shall be limited to no more than 3%; voltage drop for branch and feeder circuits combined shall be limited to no more than 5%.

All circuit breakers shall use down-stream coordination to ensure the breaker nearest a fault or overload is the first to trip.

5.4.1.1 GENERATOR POWER SYSTEM

The generator power system shall consist of one 80kW (100kVA) generator. The site's total load is defined as the site's total demand load + 25% spare capacity. The generators shall supply power at 380/220 V.

Generators shall be derated as necessary for the ambient temperature and altitude of the site.

Generator fuel storage capacity shall be based on usage at total load for a minimum of 30 days. For fuel storage requirements, see Mechanical paragraph: Generator Fuel Storage/Distribution.

5.4.2 LIGHTING

Design levels shall be per IES standards as a minimum. For convenience, the following lighting level table is listed. Note: all spaces listed below may not be within the work required within this contract.

Toilets, Showers, Latrines, washrooms	20 FC (200 Lux)
Mechanical/Electrical rooms	30 FC (300 Lux)
Corridors and Stairways	20 FC (200 Lux)
Offices (private)	50 h/5 v FC (500 h/50 v Lux)
Office areas (open)	30 h/5 v FC (300 h/50 v Lux)
Conference	30 h/5 v FC (300 h/50 v Lux)
Video Conference	50 h/30 v FC (500 h/300 v Lux)
Armories	30 h/3 v FC (100 h/30 v Lux)
Reading (in chair-casual)	30 h/5 v FC (300 h/50 v Lux)
Reading (in chair-serious)	50 h/10 v FC (500 h/100 v Lux)
Reading (at desk-casual)	30 h/3 v FC (300 h/30 v Lux)
Reading (at desk-serious)	50 h/10 v FC (500 h/100v Lux)
Egress path (incl. exterior)	10 Lux
Areas adjacent to egress path	0.5 Lux

FC = Foot Candle

h = horizontal component

v = vertical component

Indoor lighting for all areas shall consist of fluorescent surface mounted light fixtures. Exterior lighting shall be HID high pressure sodium as referenced. Moisture resistant/waterproof fluorescent light fixtures shall be provided in high humidity and wet areas such as latrines, showers and outside. Battery powered ‘emergency’ and ‘exit’ lights shall be provided within each building, as applicable, for safe egress during a power outage. All light fixtures shall be factory finished, complete and operational, to include but not be limited to, lens, globe, lamp, ballast etc. Industrial type fluorescent light fixtures shall not be used. Every room shall be provided with a minimum of one light switch. Light fixtures shall be mounted approximately 2.5-meters (8 feet) above finished floor (AFF) minimum. Fixtures may be pendant or ceiling mounted, depending on the ceiling type and height.

5.4.3 LIGHT FIXTURES

Lighting fixtures shall be a standard manufacturer’s product. Fluorescent surface mounted light

fixtures shall be power factor corrected and equipped with standard electronic ballast(s), except in medical facilities where magnetic ballast(s) shall be required. All light fixtures shall properly operate using standard lamps available locally. Fixtures shall be fully factory wired and designed for appropriate application i.e. appropriate for that location where installed.

5.4.4 EMERGENCY "EXIT" LIGHT FIXTURES

Emergency "EXIT" light fixture shall be provided in accordance with NFPA requirements. Fixtures shall be single or double sided as required by the location and for wall/ceiling mounting. Unit shall illuminate continuously and be provided with self-contained nickel cadmium battery pack, to operate on floated-battery or trickle charge circuit. Fixture shall operate satisfactorily for 90 minutes during a power outage. Unit shall have test/re-set button and failure indication lamp. Primary operating voltage shall be 220 volts. Lettering "EXIT" shall be color red and not less than 6 inches (150 mm) in height and on matte white background. Illuminations shall be with LEDs.

5.4.5 ABOVE MIRROR LIGHTS

Above mirror lights shall be provided in toilet rooms.

5.4.6 EMERGENCY LIGHTING

Battery powered emergency lights shall be provided within each building per NFPA for safe egress during power outage. Fixtures shall be provided with self-contained nickel cadmium battery pack to operate on stand-by circuit for 90-minute minimum. Unit shall have test/re-set button and failure indication lamp. Normal operating voltage shall be 220volts. Emergency lighting fixtures shall be connected to the normal lighting system.

5.4.7 LIGHT SWITCHES

Light switch shall be single pole. Minimum of one light switch shall be provided in every room. Lighting in large rooms/areas may be controlled from multiple switches. Three-way or four-way lighting shall be provided in all rooms / areas with multiple entrances.

5.4.8 RECEPTACLES

General-purpose receptacles shall be as required herein. All receptacles shall be duplex, unless otherwise specified in this section, the NEC, or other referenced standard.

Receptacles shall be placed at a maximum of 3-meter (10 feet) intervals. Areas with computer work-stations or similar equipment will have additional receptacles. Receptacles in wet/damp areas or within 1 meter (~3 feet) of sinks, lavatories, or wash-down areas shall be ground fault circuit interrupter (GFCI) type or residual current disconnect (RCD) type, with the trip setting of 10 milliamperes or less. Total number of duplex receptacles shall be limited to six (6) per 20-ampere circuit breaker.

5.4.9 CONDUCTORS

All cable and wire conductors shall be copper. Conductor jacket or insulation shall be color

coded to satisfy NEC requirements. The use of 75 or 90 degree C (minimum) terminals and insulated conductors is required. Use of higher degree C rated conductors on circuits with protective device terminals rated at a lower degree C is allowed but must be derated to the rating of the device terminals.

5.4.10 GROUNDING AND BONDING

Grounding and bonding shall comply with the requirements of NFPA 70. Underground connections shall be exothermally welded. All exposed non-current carrying metallic parts of electrical equipment in the electrical system shall be grounded. Insulated grounding conductor (separate from the electrical system neutral conductor) shall be installed in all feeder and branch circuit raceways. Grounding conductor shall be green-colored, unless the local authority requires a different color-coded conductor. Ground rods shall be 20 millimeters (0.75 inches) in diameter and 3 meters (~10 feet) long made of copper-clad steel. Final measurement of the ground resistance shall be in compliance with the requirements of the local authority but shall not exceed 25 ohms when measured more than 48 hours after rainfall.

5.4.11 ENCLOSURES

Enclosures for exterior and interior applications shall be NEMA Type 3S (IEC Classification IP54) and NEMA Type 1 (IEC Classification IP10) respectively.

5.4.12 FIRE DETECTION & ALARM SYSTEM

Smoke detectors shall be provided in all rooms and hallways. Each detector shall be capable of alarming when activated. Detectors are not shown on the drawings. All detectors shall be battery operated.

5.4.13 TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS)

Transient Voltage Surge Suppression shall be provided utilizing surge arresters to protect sensitive and critical equipment. As a minimum TVSS protection shall be provided at each panel serving electronic loads and shall be shown on the panel schedule. It is recommended that Metal Oxide Varistors (MOV) technology be used for such applications.

5.4.14 CONDUIT RACEWAY SYSTEM

Metal conduit (EMT) system shall be complete, to include but not limited to, necessary junction and pull boxes for all surface mounted conduit systems. PVC conduit, junction and pull boxes are allowed for raceways located in masonry walls. Smallest conduit size shall be no less than 20mm (0.75 inch) in diameter. All empty conduits shall be furnished with pull wire or cord or rope (depending on the size of conduit and length of run). System design and installation shall be per NFPA 70 requirements. Exterior conductors below grade shall be installed in concrete encased PVC conduit at a depth of 1220 millimeters.

5.4.15 CABLE TRAY RACEWAY SYSTEM

Cable trays shall be ladder type and provided with, but not limited to, splices, end plates, dropouts and miscellaneous hardware. System shall be complete with manufacturer's minimum standard radius and shall be free of burrs and sharp edges. Nominal width of cable tray shall be 300mm (12 inch) and rung spaced at 150mm (6 inch). Nominal depth shall be 100mm (4 inch). System design and installation shall be per NFPA 70 requirements.

5.4.16 IDENTIFICATION NAMEPLATES

Major electrical equipment, such as transformers, panelboards, and load centers, etc. shall be provided with permanently installed engraved identification nameplates.

5.4.17 SCHEDULES

All panel boards and load centers shall be provided with a directory. Directory shall be typed written in English, Dari and Pashto

Single Line Diagram

Complete single line diagrams shall be provided for all systems installed. All major items in each system shall be identified and labeled for respective ratings. Single line diagrams for each system, installed in a clear plastic frame, shall be provided.

5.5 OPERATIONS AND MAINTENANCE (O&M) FOR ELECTRICAL

w. Contractor is required to provide a 12 month supply of parts for operation and maintenance of equipment according to the manufacturer's recommendations. In addition to this, the contractors shall provide an inventory of all items, location/address stored and secured, and commissioning plans.

x. The O&M manuals must be provided prior to any training activities. Manuals shall be "tri-lingual" in Dari, Pashto and English.

y. All control panels shall have tri-lingual name plates in Dari, Pashto and English.

z. The contractor shall provide an outline of the training lesson plan (to be approved by the Government) prior to conducting training. CD recordings of training on video shall also be provided, after training is conducted.

-END OF SECTION-

SECTION 01040

SECURITY

1.0 SPECIFIC CONTRACT SECURITY ASSESSMENT

The Government has determined that there is a High Risk associated with the security environment in which this work is to be performed. This rating takes into consideration the geographic location of the work, including the Government's institutional knowledge of the recent history of this area as it relates to security, and the nature of the work to be performed under this contract. The Government is entitled to assume that the contractor possesses the degree of knowledge that is "standard" to experienced contractors in this industry and location, and that the contractor will gain other relevant information that is reasonably available about the contract to be performed. The Government is further entitled to assume that the contractor understands its abilities as they relate to the work to be performed under the contract.

2.0 GENERAL BACKGROUND

Operations in Afghanistan require Armed Contractors (ACs) and Private Security Companies (PSCs) to fulfill a variety of important security functions for the Department of Defense (DOD), Department of State (DOS), and other entities operating in the Combined Joint Operations Area – Afghanistan (CJOA-A). Included in these ACs and PSCs are traditional private security companies, the Afghan security guards, and DOD contractors who are armed for personal protection. Traditional PSCs perform convoy escort, static security, and personal security details (PSDs). Afghan security guards (ASGs) provide local static security to Forward Operating Bases (FOBs), Company Operating Bases (COPs), and other infrastructure with local Afghan companies. DOD contractors may be armed either as a function of the service they provide or their operating location. These AC/PSCs are not combatants; they execute services to protect personnel, supplies and equipment, and fixed facilities. Weapons employed by AC/PSCs are for purely defensive purposes only. This section is in accordance with the "USCENTCOM Policy and Delegation of Authority for Personal Protection and Contract Security Service Arming of DOD Civilian Personnel and Contractors for Iraq and Afghanistan", 7 November 2006.

The intent of these contracted services is to "free" joint forces to conduct military operations and other inherently governmental functions. As the CJOA-A experiences both building of combat power as well as the parallel civilian uplift effort, the reliance on contracted services to include AC/PSCs is likely to increase. AC/PSC services are necessary to secure installations and other infrastructure, conduct movement support for sustainment, train Afghan Forces to proficiency, and transport key personnel throughout the CJOA-A. The terms armed contractor, private security company, or contractor personnel, includes all personnel directly employed by the contractor at any tier of contract or subcontract. This section applies to all armed contractors providing service on DOD contracts.

3.0 GOVERNMENT REPRESENTATIVES

USACE will have a hierarchical security organization that disseminates essential security information and provides consistent and comprehensive use of security information. The USACE Area OIC/NCOIC will serve as the Area Office Security Officer and the Resident OIC/NCOIC will serve as the Security Officer at each Resident Office. When required the Area Office will request security plan review support from the Anti-Terrorism/Force Protection (AT/FP) expertise in the District Joint Operations Center (JOC). The Contractor may request this support from the Area/Resident Office OIC.

3.1 SECURITY PLAN

The Security Officers will review and approve all current and future contractor security plans prior to submittal approval by the authorized representative of the contracting officer. The Security Officer shall ensure that all contractor security plans are in accordance with the contract requirements. The security plans shall address movement of contractor labor, material, and equipment including contractor notification requirements to Government Security Officers who will in-turn inform Task Force Commanders and other Coalition Forces. The Security Officers will lead the quality assurance program to ensure contractors are executing their approved security plans. The Government will not allow the Contractor to start work without an approved security plan.

3.2 SECURITY COORDINATION

Contractor will be required to assign a Security Manager to coordinate construction site security with the Area and Resident Office Security Officer(s) who will coordinate with the Task Force or Provincial Reconstruction Team (PRT) Commanders. Afghan or Coalition Forces may be available, under certain circumstances, to assist the contractor on a case by case basis. The Government also expects the Contractor to coordinate with local Afghan Forces to the greatest extent possible. Coordination does NOT include nor imply making payments of any nature whatsoever to the local ANA/ANP or Local/Provincial Government Officials for permission or protection to construct the project. The contractor will immediately inform the Government if asked to make any such payments, and the Government will provide further direction to the contractor. Corruption will not be tolerated at any level, under any circumstances. Conducting business in this manner will be grounds for termination of the contract.

3.3 CLAIM FOR SECURITY DELAYS

Following a threat or an attack on a USACE contractor or a contractor claim for security delays, the Security Officer will validate the incident and assess the incident's impact to the contract period of performance. Within 30 days of the incident, if the contractor submits a request for an extension of time, the Government ACO will assess the incident's impact to the construction schedule and as necessary issue a contract modification for additional non-compensable time.

3.4 SECURITY RATING

Each contract/task order will be assigned a rating by the Government Security Officer (see paragraph 1.0). This rating will determine the level of approval for the security plan. Assistance

from the District's JOC AT/FP expertise may be required to assess the rating. Ratings and approval levels are below:

a. Extremely High Risk: District Commander

b. High Risk: Deputy CDR, Chief of E&C, Area OIC, or J3 OIC

c. Moderate Risk: Chief of Construction, Area OIC/NCOIC, or Area Engineer

d. Low Risk: Resident OIC/NCIOC, Resident Engineer

3.5 GOVERNMENT PROVIDED SECURITY

Any U.S. Government provided security/escort services will be in accordance with DFAR 252.225-7040 CONTRACTOR PERSONNEL AUTHORIZED TO ACCOMPANY U.S. ARMED FORCES DEPLOYED OUTSIDE THE UNITED STATES (JUN 2006).

4.0 SITE SECURITY FOR PROJECTS OUTSIDE OF ACTIVE COALITION FORCE BASES

The contractor shall develop a site security plan and program (IAW Security Plan Section) to provide 24 hr/7 days a week security for the project throughout the performance of the Contract. There will be armed guards manning project watch towers, the main entry gate, and roving patrols of the compound, adjacent hills, and observation posts at all times. Tower guards will maintain perimeter security to include thwarting any attempted theft, vandalism, or attacks. Roving guards will patrol vehicle staging areas making sure unauthorized personnel are not present, and prevent damage or sabotage of grounds and/or equipment. Roving patrols will also check nearby hills to prevent snipers or any other terrorist activity that might threaten the site. Facility security shall include access control to limit entry to unauthorized personnel, conduct vehicle and personnel bomb searches, report suspicious persons, question persons as required, and respond to calls for security support and assistance. The Contractor shall employ culturally appropriate means of searching personnel. Local governments, ANA/ANP units, and Coalition Forces should be coordinated with to support the large scale security of the site to the greatest extent possible; however, the contractor is ultimately responsible for providing security. Coordination does NOT include nor imply making payments of any nature whatsoever to the local ANA/ANP or Local/Provincial Government Officials for permission or protection to construct the project. The contractor will immediately inform the Government if asked to make any such payments, and the Government will provide further direction to the contractor. Corruption will not be tolerated at any level, under any circumstances. Conducting business in this manner will be grounds for termination of the contract. The contractor is expected to perform all required actions to protect the construction site compound from theft and vandalism and personnel from physical harm. These measures are strictly for the protection and defense of the on-site people and property; contractors are not authorized to conduct any type of offensive operations. For security of road construction, transportation of supplies, and equipment convoys, see the appropriate section below.

4.1 SITE SECURITY FOR PROJECTS ON-BASE

The Contractor shall provide general perimeter force protection security for developing the site. Security may include but is not limited to temporary fences and private security guards. Perimeter security shall prevent unauthorized site access and provide site protection to the contractor's work force and the Government personnel for the duration of the project. Many bases in Afghanistan have multiple contractors and local Afghan security forces working on them; it is the responsibility of the Contractor to ensure the 24/7 protection of the construction site from vandalism and theft. If the security situation request measures more than the general provision specified by the Contractor, the contractor shall inform the Government immediately. The Contractor has the ultimate responsibility for all security measures. These measures are strictly for the protection and defense of the on-site people and property; Contractors are not authorized to conduct offensive operations.

4.2 SECURITY FOR ROAD PROJECTS, TRANSPORTATION, & CONVOYS

Road construction projects will maintain at least two armed traffic control points (TCPs) at 300 meters in both directions of the road, or at a distance that terrain dictates. TCP guards will thoroughly inspect vehicles, entering the compound for explosives, contraband, and unauthorized personnel. TCP guards will also check for proper identification and conduct physical searches of personnel entering and leaving the site. They will report suspicious persons, question persons as required, and respond to calls for security support assistance. The TCP must have controlling barricades to slow traffic in both directions, but not to block the road completely. The Contractor shall employ culturally appropriate means of searching personnel. The TCP must have a vehicle ready for immediate evacuation or pursuit of AAF trying to access the construction site.

4.2.1 MOVEMENT OF PROJECT EQUIPMENT AND SUPPLIES

The Contractor will inform the Government Security Officer no later than 72 hours before any movement of project equipment and supplies outside of any Coalition Force bases in the CJOA-A. Both the Government and the Contractor must be aware of information security, using face-to-face meetings, courier mail, or other secure means of communication to discuss movements. All contractor convoys will have a minimum of two armed security details in the front and rear of the convoy. Convoys longer than three vehicles will also have a center armed security detail. The minimum security detail is a vehicle(s) with two armed security personnel, each with AK-47 or equivalent weapons. While the aforementioned is a minimum requirement, the Contractor shall have an armed security detail commiserate with the threat of the route. The threat of attack in Afghanistan is very real, and Contractors must be prepared for violent ambushes from Anti-Afghanistan Forces (AAF). Redundant communication equipment is highly recommended using cell phone, satellite phone, or other Contractor/Government supplied communication/tracking equipment.

4.2.2 SECURITY DETAIL

The project site will also have a security detail on either side of the on-site construction. These details must be able to protect and defend from nearby buildings, hilltops, and concealed terrain while still providing immediate on-site security to the construction equipment and personnel.

4.2.3 REQUIRED TRAINING

The Government recommends the contractor employ personnel that are trained in finding mines and improvised explosive devices along the construction route. Contractor personnel are prohibited from getting close, touching, or handling any explosive devices or unexploded ordinance found. The Contractor will report the location of any of these devices to the Government Security Officer or local Afghan Forces immediately for disposal/removal.

5.0 SECURITY PLAN

During the Preconstruction Conference, the Contractor will receive the Government's Alignment, Movement, & Security Plan (AMSP). The AMSP will have at a minimum:

a. An estimated threat assessment of the project area and major supply routes.

b. The contact information for the USACE Security Officers, engineering/construction representatives, local Coalition Forces, and local Afghan Forces near the project site.

c. General emergency procedures and critical information required for Coalition/Afghan Force security assistance.

d. The estimated number of quality assurance (QA) site visits by the Government on a weekly/monthly basis.

e. Any special security requirements directed by the Coalition Force Commanders in the area.

5.1 ESTIMATED THREAT ASSESSMENT

The contractor is expected to develop a site security plan to cover a range of security operations from low to high threat. Included in this plan will be the capability for a surge of manpower and equipment required during high threat conditions. The contractor is expected to notify all on-site personnel of increased threats and protective action to take.

5.2 SECURITY PLAN REQUIREMENTS

The security plan introduction must contain the following information at a minimum: MOI license number, AISA licensed (Yes/No), armed contractor & subcontractor company names, contract number/title, contracting agency (USACE-AED), type of work, number/type of weapons authorized, POC for company with contact details, Government Contracting Officer

and COR with contact details, number of security personnel by type (U.S., Afghan, Other), company's country of registration/origin.

5.3 PERSONNEL

The plan shall contain the names, photos, and tazkira numbers of security personnel, those personnel with access to weapons/ammo and those persons who will be handling or transporting explosives. As part of the security plan, the contractor shall continually submit the coordinates of the contractor's base camps, quarries, and current work locations. The Contractor shall submit, prior to the commencement of construction, a plan for security protection, with a list of the chain of command, or a letter of commitment from a licensed securitycontractor . Perimeter security shall prevent unauthorized site access and provide safety protection to the Contractor work force and government personnel for the duration of the project. The Contractor is solely responsible for security however local police shall be coordinated with regarding security to the greatest extent possible. Coordination does NOT include nor imply making payments of any nature whatsoever to the local ANA/ANP or Local/Provincial Government Officials for permission or protection to construct the project. The contractor will immediately inform the Government if asked to make any such payments, and the Government will provide further direction to the contractor. Corruption will not be tolerated at any level, under any circumstances. Conducting business in this way will be grounds for termination of the contract. Additionally, our new contracts are going to require that ALL security personnel are to be registered biometrically.

5.4 FORCE PROTECTION CONDITION LEVELS

The contractor will use at least four force protection condition levels (Extremely High, High, Moderate, Low) with corresponding levels and codes for on-site threat postures (uniforms, weapons, and vehicle movements). The contractor will use road movement safety restriction codes (Green, Amber, Red, or Black) for frequently traveled roads in the vicinity of project site. Force protection conditions and vehicle route status will be publicized to the site population. As a guideline, here are the Coalition Force route status codes:

a. Green – Route Open; no restrictions

b. Amber – Route Open; only mission essential travel allowed on this route; the Government Security Officer must approve all Contractor movements.

c. Red – Route Open; requires Commander's approval for travel. Forces are required to use armored vehicles; all non-essential ground site visits suspended.

d. Black – Route Closed to Coalition Forces except for emergency travel.

5.5 COORDINATION WITH LOCAL POLICE

The contractor will establish a threat assessment group with local police to determine local area threats and adjust force protection conditions as required. The contractor must use language

assistants/interpreters if there is a language difference between the armed security personnel, the contractor project manager, and other on-site personnel.

5.6 SECURITY PLAN SUBMITTAL REQUIREMENTS

Contractors will submit security plans in accordance with contract Section 01335 – Submittal Procedures for Projects.

6.0 ARMING LICENSE

Contractor personnel who are armed will be properly authorized to carry arms in Afghanistan by registering and obtaining a license to carry arms from the Afghanistan Ministry of the Interior through USFOR-A. Armed contractor personnel must be properly trained and qualified on each weapon they will be authorized to use. Exceptions to proceed without a valid MOI license may be granted in rare cases at the sole discretion of the Government. Failure to obtain this license is grounds for contract termination. All armed contractors must carry a copy of their Letter of Authorization (LOA) and their MOI license at all times. U.S. and Coalition Forces have the right to ask for this documentation at any time.

7.0 LOCAL HIRE VETTING PROGRAM

The Contractor shall maintain a local hire vetting program for all local hires required under performance of this contract, to include background checks. The Contractor will conduct interviews and review employment application information for their candidates, with results of the interview and information reviews provided to the USACE security representative for appropriate action. The Contractor will be available to accept reports of threats and intimidations, and forward these to the appropriate Government agency for resolution. The Contractor will demonstrate an awareness of cultural nuances (i.e. tribal relationships, etc.) and employ culturally sensitive measures when conducting interviews. The U.S. Government will enter all AC/PSC personnel into the nation-wide Biometrics network to verify Contractor vetting.

8.0 COMMUNICATION

The contractor will operate a 24/7 security operations center with communication capability to each guard on duty and the ability to notify all on-site personnel of increased threats and protective actions to take. *The operations center will also have the capability of 24/7 communication with the local Coalition, ANA, or ANP security forces.* The Contractor shall have communication with the District JOC at all times for rapid emergency response; the Government Security Officer will give the Contractor the JOC contact information. Communication can be via cell phone, email, satellite phones, VHF, HF, CODAN, text, or other communication technologies compatible with the Government's capabilities. The Contractor

will provide the Government with their contact information (names, numbers, frequencies, email addresses, transponder IDs, etc.) for the site encompassing all available communication means.

9.0 CONTRACTOR PROVIDED EQUIPMENT

The contractor will provide the operational security equipment including but not limited to weapons, radios, uniforms, vehicles, vehicle fuel, phones, and other equipment as proposed by the contractor to provide complete site security.

10.0 TRAINING

The contractor will develop a training plan for each aspect of the security operations to ensure all employees receive initial and quarterly training to maintain certification, proficiency, and safety. Records of the training is an inspectable item for the COR and Security Officer. The Contractor will ensure all security personnel are trained on the required COMISAF/USFOR-A Tactical Directive, ROE/RUF, escalation of force (EOF), withdrawal/clear drills, proportionality, target discrimination, positive ID, Law of War, small unit tactics training, and general convoy drills like vehicle recovery. This training will also include but not limited to weapons qualification, vehicle operations, IED, site security, traffic/entry control points, and safety. The contractor shall provide a sufficient number of trained personnel to meet the required security level for the project beginning on the date of mobilization.

11.0 KEY CONTROL

The contractor shall establish and implement methods in writing to ensure that all keys issued by the Contractor are not lost or misplaced and are not used by unauthorized persons. The contractor shall develop procedures covering key control that will be included in their quality control system (See Section 01451). The project managers will keep a master log of all keys and provide a copy to the contracting officer's representative (COR) for verification. If a key is lost or stolen, the Contractor shall pay to have all impacted locks changed/rekeyed immediately.

12.0 SAFETY BARRICADES

Barricades shall be required whenever safe public access to paved areas such as roads, parking areas, or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night. Travel to and from the project site shall be restricted to a route approved by the Government site supervisor. As the situation dictates, one security guard will be posted at each safety barricade.

13.0 RESPONSIBILITY FOR PHYSICAL SECURITY

Prior to mobilization, the Contractor shall submit his proposed means of providing project physical security to prevent unauthorized access to equipment, facilities, materials and documents, and to safeguard them against sabotage, damage, and theft. The Contractor shall be responsible for physical security of all materials, supplies, and equipment of every description, including property which may be Government-furnished or owned, for all areas occupied jointly by the Contractor and the Government, as well as for all work performed. Security may include but is not limited to fence and private security guards. The Contractor shall provide perimeter force protection security for the developing site. The plan shall address in detail the contractors proposed procedures, and organization necessary to produce and maintain effective security within the contract limits twenty-four (24) hours a day seven (7) days a week. This document shall be referred to as part of the security plan submittal.

14.0 CRITICAL INFORMATION TO REPORT

The Government is responsible for the management and oversight of DOD Contracted AC/PSCs delivering services throughout the CJOA-A. Given the impact of either contractor misbehavior or catastrophic attacks against contractors, it is critical that information regarding AC/PSC incidents is communicated quickly and accurately to the Government for purposes of management, fact-finding, and mitigation where necessary. The Government must receive the information addressed below. The Contractor will report any of these information requirements immediately to the Government site supervisor:

a. AC/PSC Escalation of Force to include the use of weapons resulting in the death or injury of an Afghan citizen, coalition, or U.S. service member, other government official, or contractor

b. AC/PSC accidents, traffic, or otherwise, resulting in the death or injury of an Afghan citizen, coalition, or U.S. service member, governmental official, or contractor.

c. Attacks against AC/PSC activities by Anti-Afghan Forces resulting in the death or injury of an Afghan citizen, coalition or US service member, governmental official, or contractor.

d. Reports of "lost convoys." These are AC/PSC escort or independent activities which have lost contact with their companies.

e. AC/PSC Escalation of Force, accidents, or other activities that result in significant damage to Afghan or USG vehicles, materials or facilities.

f. Anti-Afghan Force actions including small arms fires (SAF), RPG fire, indirect fire (IDF), improvised explosive devices (IEDs), and/or complex attacks against AC/PSC activities.

g. Contractor accidental or negligent discharge of a weapon.

15.0 REOCCURRING REPORTS.

Every month the Contractor will report the following to the designated contract Security Officer:

a. The number, type, and general description of every weapons discharge by the Contractor or any tier of subcontractor on the project.

b. The name of the Contractor's security manager and the total number of armed personnel working on the project.

c. The total number by type/caliber of all weapons employed on the project.

d. The serial numbers and license plates of all armored vehicles used for the project.

e. The type of transponder/tracking system used for any moving equipment used for the project.

f. Any changes made to security personnel (new hires, employees who quit or were let go, transfers, etc.).

16.0 CONTRACTOR SECURITY PERSONNEL REQUIREMENTS

The Contractor shall submit the names of all employees who will be working in security positions prior to their performance of any such work on this contract. All security personnel will be subject to Biometrics (retinal scan) testing by representatives of the Contracting Officer, at any time during performance of work on the contract. The names of security personnel and the Biometrics testing results will be vetted with the Afghanistan government, International Security Assistance Forces (ISAF), or U.S. Forces-Afghanistan to determine if any of the proposed security personnel are on the list of enemy combatants compiled by these sources. If the Contractor is notified by the Contracting Officer that such security personnel are on any of these lists of enemy combatants, such employees must be immediately removed from work on this contract. Repeated incidents of hiring security personnel on any of the lists of enemy combatants will be grounds for terminating the contract for default.

-END OF SECTION-

SECTION 01060

SPECIAL REQUIREMENTS

1. GENERAL

1.1 PRECONSTRUCTION CONFERENCE

1.1.1 SCHEDULE OF MEETING

At the earliest practicable time, prior to commencement of the work, the Contractor and any Subcontractors whose presence is necessary or requested, shall meet in conference with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to the details of the administration and execution of this contract. This will include but not necessarily be limited to the Contractor's Quality Control (CQC) Program, the Contractors Accident Prevention Program, submittals, correspondence, schedule, access to the work site, security requirements, interface requirements, temporary facilities and services, hazards and risks, working after normal hours or on weekends or holidays, assignment of inspectors, representations, special requirements, phasing, and other aspects of this project that warrant clarification and understanding.

1.1.2 MEETING MINUTES

It shall be the responsibility of the Contractors CQC System Manager to prepare detailed minutes of this meeting and submit those minutes to the Contracting Officer for approval within three (3) workdays. Any corrections deemed necessary by the Contracting Officer shall be incorporated and resubmitted within two (2) calendar days after receipt. Upon approval of the minutes by the Contracting Officer, the Contractor shall distribute the minutes to all parties present or concerned.

1.2 AREA USE PLAN

The Contractor shall submit to the Contracting Officer, within ten (10) calendar days after award of this contract, an Area Use Plan designating intended use of all areas within the project boundaries. This plan shall include, but not necessarily be limited to the following: the proposed location and dimensions of any area to be fenced and used by the Contractor; construction plant and building installations/the number of trailers and facilities to be used; avenues of ingress/egress to the fenced areas and details of the fence installation; drawings showing temporary electrical installations; temporary water and sewage disposal installations; material storage areas; hazardous storage areas. Any areas that may have to be graveled shall also be identified. The plan shall also include a narrative description of the building structural system, the site utility system and the office or administration facilities. The Contractor shall also indicate if the use of a supplemental or other staging area is desired. The Contractor shall not begin construction of the mobilization facilities prior to approval by the Contracting Officer of the Area Use Plan described herein.

1.3 CONTRACTOR'S MOBILIZATION AREA

The Contractor will be permitted to use an area approved by the Contracting Officer within the contract limits for operation of his construction equipment and plants, shops, warehouses, and offices. Utilities will be provided for the Contractor as described below. The Contractor is responsible for obtaining any required additional mobilization area above that designated. The construction site shall be cleared of

construction debris and other materials and the area restored to its final grade.

1.3.1 CONTRACTOR'S TEMPORARY FACILITIES

1.3.1.1 GENERAL

All facilities within the Contractor's mobilization area shall be of substantial construction suitable for the local weather conditions. Sanitary facilities shall meet the requirements of Corps of Engineers, Safety and Health Requirements Manual EM 385-1-1. Local nationals will not be granted any privileges under this contract. Government provided services are for American and Foreign national contractors only.

1.3.1.2 ADMINISTRATIVE FIELD OFFICES

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

1.3.1.3 STORAGE AREA

The Contractor shall construct a temporary 1.8 meter (6 foot) high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored green or brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless approved in writing by the Contracting Officer.

1.3.1.4 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. If radio communication is approved by Contracting Officer / installation security office, frequency selection shall be approved by Contracting Officer to prevent interference with installation operations. Such devices shall be provided by the Contractor and made available for use by Government personnel as requested.

1.3.1.5 APPEARANCE OF MOBILIZATION SITE FACILITIES AND/OR TRAILERS

Mobilization Site Facilities and/or Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers or other transportable structures which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the construction site until such work or maintenance has been performed to the satisfaction of the Contracting Officer.

1.3.1.6 MAINTENANCE OF STORAGE AREA

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse unpaved areas which are not established roadways with construction equipment or other vehicles, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of soil onto paved or established roadways; gravel gradation shall be at the Contractor's discretion.

1.3.1.7 SECURITY PROVISIONS

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own facilities and equipment in accordance with

Contract Section 01040.

1.3.1.8 SANITATION

a. Sanitary Facilities: The Contractor shall be responsible for maintaining such facilities at no expense to the Government.
b. Trash Disposal: The Contractor shall be responsible for collection and disposal of trash from the work areas and from the mobilization area. General construction debris and demolition debris shall be collected and transported by the Contractor to a location designated by the Government. Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Loose debris capable of being windblown, shall be immediately placed in sealed or covered containers to prevent it from being blown onto taxiways or runways. Any dirt or soil that is tracked onto paved or surfaced roadways shall be cleaned daily. Materials resulting from demolition activities that are salvageable shall be stored within the fenced area described above. Stored material not indoors, whether new or salvaged, shall be neatly stacked when stored.

1.3.1.9 TELEPHONE

The Contractor shall make arrangements to install and pay all costs for telephone facilities desired.

1.3.1.10 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of mobilization facilities, trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse unpaved areas shall be removed and all such areas restored to their original conditions.

1.3.2 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the Host Nation and base authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with base traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.3.2.1 USE OF EXISTING ROADS AS HAUL ROUTES

The Contractor shall be responsible for coordinating with the base authorities for use of any existing roads as haul routes. Construction, and routing of new haul roads, and/or upgrading of existing roads to carry anticipated construction traffic shall be coordinated with the Base authorities and is the sole responsibility of the Contractor.

1.3.2.2 EMPLOYEE PARKING

The Contractor’s employees may be allowed parking on the military installation. The Contractor is responsible for transporting workers (local nationals) from off post to the worksite, coordinating security identification screening, and cooperating in gate searches with the base authorities. The government

reserves the right to terminate any and all contractor parking at any time.

1.3.3 TEMPORARY PROJECT SAFETY FENCING AND BARRICADES

The Contractor shall impose all measures necessary to limit public access to hazardous areas and to ensure the restriction of workers to the immediate area of the construction and mobilization site. The Contracting Officer may require in writing that the Contractor remove from the work any employee found to be in violation of this requirement.

1.3.3.1 BARRICADES

Barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night. Travel to and from the project site shall be restricted to a route approved by the Contracting Officer.

1.3.4 HOST NATION AUTHORIZATIONS, PERMITS AND LICENSES

It shall be the Contractor's responsibility to obtain such local authorizations, permits and licenses necessary to establish his quarry operations, batching operations and haul routes (See Special Clause entitled: COMPLIANCE WITH HOST COUNTRY RULES AND CUSTOMS).

1.4 RESPONSIBILITY FOR PHYSICAL SECURITY

Prior to mobilization, the Contractor shall submit his proposed means of providing project security to meet the requirements of Contract Section 01040 and prevent unauthorized access to equipment, facilities, materials and documents, and to safeguard them against sabotage, damage, and theft. The Contractor shall be responsible for physical security of all materials, supplies, and equipment of every description, including property which may be Government-furnished or owned, for all areas occupied jointly by the Contractor and the Government, as well as for all work performed.

1.5 DUST CONTROL

The Contractor shall be required to control objectionable dust in the work areas, access roadways, and haul roads by means of controlled vehicle speeds or dust palliatives. Vehicles transporting sand, cement, gravel or other materials creating a dust problem shall be covered, as directed by the Contracting Officer, or in accordance with local Laws, codes, and regulations.

1.6 DIGGING PERMITS

1.6.1 REQUIREMENTS FOR DIGGING PERMITS

Prior to the start of any work activity that requires excavation within the current base, the Contractor shall obtain a digging permit.

1.6.2 REQUESTS FOR DIGGING PERMITS

Requests for Digging Permits shall be submitted to Contracting Officer a minimum of seven (7) days prior to the start of the work activity covered by the permit. The request for a Digging Permit shall include a narrative description of the work to be performed and a detailed map of the area of the excavation clearly marking the location of all known utilities or other obstructions. If the work activity covered by the Digging Permit request also requires a utility outage, a separate request for the outage shall be submitted in accordance with the paragraph entitled CONNECTIONS TO EXISTING UTILITIES.

1.6.3 PREPARATION OF REQUESTS FOR DIGGING PERMITS

Prior to submitting a request for a Digging Permit, the Contractor shall carefully review the area to be excavated to determine the location of existing utilities and other obstructions. The Contractor will review available drawings and will conduct a visual inspection of the site. The Contractor will utilize underground utility detecting devices such as metal and cable detectors to determine the location of existing utilities. All utility lines found shall be clearly flagged or marked and the location of the utility shall be shown on the drawing to be submitted with the request for Digging Permit.

1.6.4 EXISTING UNDERGROUND UTILITIES

The Contractor shall exercise utmost care in researching locations of existing utilities and reducing damage to existing utilities. Any utilities damaged by the Contractor shall be promptly repaired by the Contractor. The Contracting Officer will review and approve any proposed repairs. Any damage to existing utilities will be immediately reported to the Contracting Officer and the Base Commander.

1.7 CONNECTIONS TO EXISTING UTILITIES

1.7.1 GENERAL

Any outage involving disruption of electrical service beyond the site area shall be requested in writing at least ten (10) days in advance of the date requested for the commencement of the outage. The Contractor shall provide a request, detailing the type of outage needed (water, sewer, electrical, steam, etc.), the time needed to perform the work, the reason for the outage, and the known affected facilities. The Contracting Officer shall be contacted prior to the outage to confirm the time and date. If the Contractor fails to initiate work at the approved time, the Contracting Officer may cancel the approved outage and may direct the Contractor to resubmit a new request. No part of the time lost due to the Contractors failure to properly schedule an outage shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

1.7.1.1 PERFORMANCE OF WORK DURING NON-STANDARD HOURS

To minimize outage impact to the mission of the installation, all outages shall be scheduled on weekends or after the project area's regular base duty hours and/or as directed by Contracting Officer Representative (COR). The period proposed for performance of the outage shall include sufficient contingencies to preclude impact to the peak working hours during the workweek.

1.7.1.2 EXTERIOR NIGHT LIGHTING

Exterior night lighting shall be provided in conformance with EM-385-1-1 entitled Safety and Health Requirements Manual.

1.7.2 EXISTING UNDERGROUND UTILITIES

The Contractor is provided notice that existing utilities may be present in the construction area. The Contractor shall exercise the utmost care in researching locations of existing utility lines by implementing control measures to eliminate, or reduce to a level acceptable to the Contracting Officer, the chance of damaging or destroying existing utilities.

1.7.2.1 USE OF UNDERGROUND UTILITY DETECTING DEVICE

Prior to any excavation, a metal and/or cable-detecting device shall be used along the route of the excavation. All underground utilities discovered by this method will be flagged a minimum distance of one-half (1/2) meter on each side of the location.

1.7.2.2 HAND EXCAVATION

Hand excavation methods and special supervisory care shall be used between any flagged markers, in areas of known or suspected hazards, and in areas known or suspected to have multiple and/or concentrated utility lines or connections.

1.7.3 REPAIR OF DAMAGED UTILITIES

The Contractor shall be responsible to repair any utilities damaged by him. The method of repair and schedule for performance of the repair shall be coordinated with, and subject to the approval of, the Contracting Officer. The repair work and any temporary work required to keep the system operational while repairs are being completed, shall be performed at no cost to the Government.

1.8 WATER

The Contractor shall install and maintain necessary supply connections and piping for same, but only at such locations and in such manner as may be approved by the Contracting Officer. Water required for final testing, adjusting and balancing of HVAC systems will be furnished by the Government. Before final acceptance of systems, or facilities, all temporary connections and piping installed by the Contractor shall be removed at his expense in a manner satisfactory to the Contracting Officer.

1.9 ELECTRICITY (CONTRACTOR PROVIDED)

Electrical service is not available for use under this contract; therefore all electric current required by the Contractor shall be the responsibility of the Contractor, furnished at his own expense. The Contractor shall provide diesel generators to meet his demand requirements. Electricity required for final testing systems will be furnished by the Government. [The Government will provide permanent high voltage electricity to a point indicated by the Contracting Officer for use by the Contractor in the performance of final testing of systems.] The means of doing so, such as by temporary distribution systems, shall be the responsibility of the Contractor. All temporary connections for electricity shall be subject to the approval of the Contracting Officer and shall comply with Corps of Engineers manual EM 385-1-1 entitled Safety and Health Requirements Manual. All temporary lines shall be furnished, installed, connected and maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer. Before final acceptance of systems, or facilities, all temporary connections installed by the Contractor shall be removed at his expense in a manner satisfactory to the Contracting Officer.

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1.10 WORK OUTSIDE REGULAR HOURS

If the Contractor desires to carry on work outside the project area's regular base duty hours, or on holidays, including the following U.S. holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving and Christmas. The Contractor shall submit an application to the Contracting Officer. Due to reliance upon local national laborers and time off due to local observances, there may be disruptions. Potentials dates are the following local observances: National Islamic Holiday of Ashura, Ramadan (actual date varies – check with local authorities). The Contractor shall allow ample time to enable satisfactory arrangements to be made by the Government for inspecting the work in progress. At night, exterior lighting shall be provided in conformance with EM-385-1-1 entitled "Safety and Health Requirements Manual".

1.11 SCHEDULING OF WORK IN EXISTING FACILITIES

As soon as practicable, but in any event not later than thirty (30) calendar days after award of this

contract, the Contractor shall meet in conference with the Contracting Officer, or his duly authorized representatives, to discuss and develop mutual understanding relative to the scheduling of work in and access to the existing facilities where work has to be performed under this contract, so that the Contractor's proposed construction schedule is coordinated with the operating and security requirements of the installation.

1.12 SPECIAL FACILITIES AND SERVICES TO BE FURNISHED BY THE CONTRACTOR

The Contractor shall furnish the facilities and services listed in this clause for Corps of Engineers personnel and other persons as designated by the Contracting Officer. All facilities, furnishings, materials, and equipment shall be new when furnished at the site. The Contractor shall fully maintain and repair all facilities, furnishings and equipment listed below. All facilities, furnishings, materials, and equipment furnished and/or installed by the Contractor under this clause shall remain the property of the Contractor at the completion of the contract. Facility structures shall be modular or containerized, suitable for easy movement at a later date.

1.13 PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR)

1.13.1 AS-BUILT DRAWING SUBMITTALS

a. Government approval is required for As-Built drawings as below in accordance with Section 01335, SUBMITTAL PROCEDURES.
b. Drawings showing final as-built conditions of the project. The final CAD as-built drawings shall consist of **two sets** of electronic CAD drawing files in the specified format (see the AED CAD Design Requirements: CAD Design Guide), and **two half-size and two full-size paper copies** of the approved as-built drawings.

1.13.2 AS-BUILT DRAWINGS

This paragraph covers as-built drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings which are revised to be used for final as-built drawings.

1.13.2.1 GOVERNMENT FURNISHED MATERIALS

One set of electronic CAD files in the specified software and format revised to reflect all bid amendments will be provided by the Government at the preconstruction conference for projects requiring CAD file as-built drawings.

1.13.2.2 WORKING AS-BUILT AND FINAL AS-BUILT DRAWINGS

a. The Contractor shall revise 2 sets of paper drawings by red-line process to show the as-built conditions during the prosecution of the project. These working as-built marked drawings shall be kept current on a weekly basis and at least one set shall be available on the jobsite at all times. Changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. Final as-built drawings shall be prepared after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (Foundations, Utilities, Structural Steel, etc., as appropriate for the project). The working as-built marked prints and final as-built drawings will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the working and final as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built

drawings. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of updated drawings. In addition, if the Contractor fails to provide the final as-built drawings within thirty (30) calendar days after contract completion, the Contracting Officer will deduct from the final contract payment an amount representing the lesser of 1% of the total contract cost or $50,000. The working and final as-built drawings shall show, but shall not be limited to, the following information:

b. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, the as-built drawings shall show, by offset dimensions to two permanently fixed surface features, the end of each run including each change in direction. Valves, splice boxes and similar appurtenances shall be located by dimensioning along the utility run from a reference point. The average depth below the surface of each run shall also be recorded.
c. The location and dimensions of any changes within the building structure.
d. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.
e. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor; including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.
f. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.
g. Changes or modifications which result from the final inspection.
h. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.
i. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, the Contractor shall furnish a contour map of the final borrow pit/spoil area elevations.
j. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarm, fire sprinkler, and irrigation systems.

k. Modifications (change order price shall include the Contractor's cost to change working and final as-built drawings to reflect modifications) and compliance with the following procedures.

    1. Directions in the modification for posting descriptive changes shall be followed.
    2. A Modification Circle shall be placed at the location of each deletion.
    3. For new details or sections which are added to a drawing, a Modification Circle shall be placed by the detail or section title.
    4. For minor changes, a Modification Circle shall be placed by the area changed on the drawing (each location).
    5. For major changes to a drawing, a Modification Circle shall be placed by the title of the affected plan, section, or detail at each location.
    6. For changes to schedules or drawings, a Modification Circle shall be placed either by the schedule heading or by the change in the schedule.
    7. The Modification Circle size shall be 12.7 mm 1/2 inch diameter unless the area where the circle is to be placed is crowded. Smaller size circle shall be used for crowded areas.

1.13.3 DRAWING PREPARATION

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

1.13.4 COMPUTER AIDED DESIGN AND DRAFTING (CAD) DRAWINGS

a. Only personnel proficient in the preparation of CAD drawings shall be employed to modify the contract drawings or prepare additional new drawings. Additions and corrections to the contract drawings shall be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols shall be the same as the original line colors, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CAD files. The Contractor will be furnished "as-designed" drawings in AutoCAD Release 2009 or Microstation V8 format compatible with a Windows XP operating system. The electronic files will be supplied on compact disc, read-only memory (CD-ROM). The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings.

b. Prior to submittal of the first design submittal involving CAD drawings, the Contractor shall prepare one typical CAD drawing for the project and furnish, via ENG Form 4025, the electronic CAD drawing file for review and approval by the Contracting Officer. All Government comments involving changes to this single drawing shall be accomplished and resubmittal(s) made until the Government is satisfied that all CAD Standards are being followed and all subsequent drawings will also be in compliance with these Standards.

c. CAD colors shall be the "base" colors of red, green, and blue. Color code for changes shall be as follows:

    1. Deletions (red) - Deleted graphic items (lines) shall be colored red with red lettering in notes and leaders.
    2. Additions (Green) - Added items shall be drawn in green with green lettering in notes and leaders.
    3. Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes shall be in blue.

d. The Contract Drawing files shall be renamed in a manner related to the contract number (i.e., 98-C-10.DGN) as instructed in the Pre-Construction conference. Marked-up changes shall be made only to those renamed files. All changes shall be made on the layer/level as the original item. There shall be no deletions of existing lines; existing lines shall be over struck in red. Additions shall be in green with line weights the same as the drawing. Special notes shall be in blue on layer#63.

e. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 5 mm 3/16 inch high. All other contract drawings shall be marked either "As-Built" drawing denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. Original contract drawings shall be dated in the revision block.

f. After Government approval of all of the working as-built drawings for a phase of work, the Contractor shall prepare the final CAD as-built drawings for that phase of work and submit two sets of full size paper copy prints of these drawings for Government review, comparison with approved red-line marked up drawings, and approval. The Government will promptly return one set of prints annotated with any necessary corrections to the CAD file(s) if corrections are required prior to approval. Within 20 days of substantial completion of all phases of work, the Contractor shall submit the final as-built drawing package for the entire project. The submittal shall consist of one set of electronic files on compact disc, read-only memory (CD-ROM), one set of full size paper prints and one set of the approved working as-built drawings. Data on the CD-ROM shall be organized per the instructions in Section 1335 and per the diagram in Section 1335a. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any transactions or adjustments necessary to accomplish this is the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with the CAD system. Upon approval by the Government of the final as-built drawing package for the entire project, the Contractor shall provide the number of as-built copies noted in Paragraph 1.1 of this Section.

g. Paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked prints as specified shall

be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.13.5 PAYMENT

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

1.14 CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in accordance with Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD. Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company involved and shall contain the name and address of the Contractor, the project name and location, description and the quantity of the items involved, and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material.

1.15 ACCIDENT PREVENTION

The Contractor shall comply with all applicable Host Country laws and with such additional measures as the Contracting Officer may find necessary in accordance with CONTRACT CLAUSE 52.236-13 entitled ACCIDENT PREVENTION (NOV1991)-ALTERNATE 1 (APR 1984). Applicable provisions of the Corps of Engineers manual entitled Safety and Health Requirements Manual EM 385-1-1 will be applied to all work under this contract. The referenced manual may be obtained from the Contracting Officer at the jobsite or from the Afghanistan Engineer District at Kabul, Afghanistan.

1.15.1 ACCIDENT PREVENTION PROGRAM

Within fifteen (15) days after award of this contract, and at least ten (10) days prior to the accident prevention pre-work conference, four (4) copies of the Accident Prevention Plan required by the CONTRACT CLAUSE 52.236-13 entitled ACCIDENT PREVENTION (NOV 1991)- ALTERNATE I shall be submitted for review by the Contracting Officer. The Contractor shall not commence physical work at the site until the Accident Prevention Plan (APP) has been reviewed and accepted by the Contracting Officer. The APP shall meet the requirements listed in Appendix "A" of EM385-1-1. The program shall include the following: TAC Form 61 " Accident Prevention Program Hazard Analysis (Activity Hazard Analysis)" fully completed and signed by an executive officer of the company in block No. 13. The Activity Hazard Analysis is a method in which those hazards likely to cause a serious injury or fatality are analyzed for each phase of operations. Corrective action is planned in advance, which will eliminate the hazards. An analysis is required for each new phase of work. On large or complex jobs the first phase may be presented in detail with the submittal of the Accident Prevention Plan rather than presenting the complete analysis. If the plan is to be presented in phases, a proposed outline for future phases must be submitted as a part of the initial Accident Prevention Plan submittal. Accident Prevention Plans will be reviewed for timeliness and adequacy at least monthly with a signature sheet signed and dated documenting that these reviews took place. Copy of company policy statement of Accident Prevention and any other guidance as required by EM 385-1-1, Appendix A.

1.15.2 GROUND FAULT CIRCUIT INTERRUPTER (GFCI) REQUIREMENT – OVERSEAS CONSTRUCTION

The Corps of Engineers Health and Safety Manual, EM 385-1-1, section 11.C.05.a. states: "The GFCI

device shall be calibrated to trip within the threshold values of 5 ma +/- 1 ma as specified in Underwriters Laboratory (UL) Standard 943." A variance from USACE has been granted allowing 10 ma, in lieu of 5 ma, for overseas activities that use 220 Volts (V)/50 hertz (Hz) electrical power.

1.15.3 TEMPORARY POWER - ELECTRICAL DISTRIBUTION BOXES

EM 385-1-1 section 11.A.01.a. states, "All electrical wiring and equipment shall be a type listed by a nationally recognized testing laboratory for the specific application for which it is to be used." This includes temporary electrical distribution boxes. Locally manufactured electrical boxes will not be allowed. Only manufactured electrical distribution boxes that meet the European CE requirements, with 10 ma CE type GFCIs installed shall be allowed.

Contractors shall:

a. Make no modifications that might void any CE or manufacturer certification.
b. Test the installed systems to demonstrate that they operate properly and provide the 10 ma earth leakage protection.
c. Ensure GFCIs will have an integral push-to-test function. The testing shall be performed on a regular basis.
d. Check that proper grounding is checked regularly and flexible cords, connectors, and sockets inspected before each use.

1.16 HAZARDOUS MATERIALS

Should the Contractor encounter asbestos or other hazardous materials, during the construction period of this contract, he shall immediately stop all work activities in the area where the hazardous material is discovered. The Contractor shall then notify the Contracting Officer; identify the area of danger; and not proceed with work in that area until given approval from the Contracting Officer to continue work activities. Hazardous material is considered to be asbestos, explosive devices, toxic waste, or material hazardous to health and safety. The Contractor shall secure the area from daily traffic until it is safe to resume normal activities.

1.17 SPARE PARTS

1.17.1 GENERAL

The requirements of this clause are in addition to any requirements for the provision of specific spare parts to be provided by the Contractor included in Technical Provisions. The Contractor shall furnish spare parts as directed by the Contracting Officer under the provisions of this clause for all equipment for which O&M data is to be provided under Clause OPERATION AND MAINTENANCE (O&M) DATA of this contract. The term "spare parts" as used herein shall include spare parts, special tools and test equipment.

1.17.2 SELECTION OF SPARE PARTS TO BE FURNISHED

The Contractor shall provide master parts lists, recommended spare parts lists and lists of special tools and test equipment as a part of the equipment O&M data required by Clause OPERATION AND MAINTENANCE (O&M) DATA. The master parts list shall include the supplier's price for each part. After review of the lists, the Contracting Officer will select spare parts and furnish written direction to the Contractor indicating quantities and types of spare parts to be furnished by the Contractor. Written directions for spare parts orders may be provided on an incremental basis as reviews of O&M data submitted by the Contractor are completed but will not necessarily be issued in the sequence in which the Contractor submitted the equipment O&M data.

1.17.3 PROCUREMENT AND DELIVERY OF SPARE PARTS

The Contractor shall procure and be responsible for delivery, receipt, handling, placing in storage, inventory, and turnover to the Contracting Officer all spare parts selected by the Contracting Officer. In addition to the recommended spare parts list required in paragraph SELECTION OF SPARE PARTS TO BE FURNISHED above, the Contractor is responsible to have one (1) year supply of manufacturer's recommended spare parts on site ready to turn over to the Contracting Officer at the time of acceptance of the facility.

1.17.3.1 SHIPMENT AND DELIVERY

The Contractor shall be responsible for the shipment and delivery of spare parts to the location on or near the site in Afghanistan as selected by the Contracting Officer. The Contractor shall provide all manpower and equipment required to receive and place into designated storage areas all spare parts purchased under this clause. The Contractor shall give the Contracting Officer thirty (30) calendar days notice of arrival at the site of the first shipment.

1.17.3.2 TURNOVER OF SPARE PARTS

The Contractor shall notify the Contracting Officer seventy-two (72) hours prior to delivery of spare parts to the designated storage area. The Contractor and the Contracting Officer will perform a joint inventory of the spare parts and the spare parts will be turned over to the Contracting Officer. Spare parts purchased under this clause shall not be used by the Contractor.

1.17.3.3 PARTS AND PACKAGE IDENTIFICATION

Prior to shipment from point of purchase, each spare part shall be tagged or otherwise marked or labeled. Such labeling may be placed or affixed to the container, box or packaging in which spare parts are located when it is not feasible to place or affix such labeling directly on each spare part. Tags or labels shall include, but not necessarily be limited to; part number, description, parent equipment name and number location, project and/or other data as directed by the Contracting Officer.

1.17.3.4 PRESERVATION AND PACKAGING INSTRUCTION

a. Items ordered under this contract shall be preserved and packed for a minimum of three (3) years shelf life storage. All items shall be individually packaged except when the manufacturer specifies that the items are to be used in sets. Appropriate identification labels must be affixed to the items protective box or package. After the spare parts are packaged, the manufacturer shall weigh the spare parts and packaging and place the weight and size of the packaged container on the label with other information as outlined herein. Each item, not normally identified with manufacturer's name and part number, shall have an appropriate label affixed to it with manufacturer's name and part number.
b. Machined spare parts shall be lubricated or coated in order to withstand extensive periods of storage in a highly corrosive atmosphere.
c. Large items (greater than 22.7 kg (50 lbs.), or larger than 0.03 CM (one cubic foot) shall be packaged in waterproof wooden boxes and properly braced. Cushioning shall be used to prevent damage to the item and to the packaging material.
d. Solid state components, such as diodes, transistors, integrated circuits or equipment consisting of such parts that can be damaged as a result of static electricity and other stray electro-magnetic fields shall be packaged in heat-sealed, aluminum foil, laminated, flexible packages.
e. All other spare parts shall be packaged in heat sealed plastic bags or wrap. Delicate and more fragile items such as test equipment shall be cushioned or wrapped with transparent bubble wrap material prior to being inserted into the plastic package.

1.17.4 WARRANTY

All spare parts provided by the Contractor under this clause are subject to the general warranty clauses of this contract.

1.17.5 PAYMENTS FOR SPARE PARTS

Payments for spare parts ordered under the paragraph entitled "Selection of Spare Parts To Be Furnished" will be made under the work item of the Work Breakdown Sheet entitled "Spare Parts". Payments for spare parts specifically required elsewhere in this contract shall be considered as part of those equipment costs and shall be included in other payment items as appropriate. Payments for spare parts ordered under this clause shall be based on the invoice price (FOB supplier) plus certified invoice price of surface shipment to the site in Afghanistan. The invoice price (FOB supplier) shall include the separately listed cost for preservation and packaging by the manufacturer as specified herein. The Contractor shall provide invoices and any additional backup, which may be required to demonstrate that the invoices presented represent the cost of spare parts, preservation and packaging, and cost of surface shipment to the site. Payment for handling, delivery, inventory, turnover, customs, overhead or profit shall not be paid or allowed under this Contract Provision, and shall be included in the cost for installation of this equipment under the other appropriate payment items of this contract. Price increases over prices furnished under paragraph SELECTION OF SPARE PARTS TO BE FURNISHED shall be fully substantiated. Payment for spare parts will be made after the spare parts have been accepted at the site by the Contracting Officer. If the total payments under the work item entitled "Spare Parts" does not reduce the balance of this work item to zero, the remaining balance will be deducted from the final contract amount. If orders exceed the work item entitled "Spare Parts", a modification for equitable adjustment will be issued in accordance with Contract Clause 52.243-4 entitled CHANGES. Payments for spare parts ordered under this clause shall constitute full payment for all cost of the spare parts and associated cost of preservation and packaging, and cost of surface shipment to the site. Other ancillary costs shall be included by the Contractor under the other appropriate work items of this contract and no additional cost except as provided herein will be allowed.

1.18 OPERATION AND MAINTENANCE (O&M) DATA

1.18.1 GENERAL

The requirements contained herein are in addition to all shop drawings submission requirements stated in other sections of the specifications. The Contractor shall include the provisions for all items required under this clause in all purchase orders and sub-contract agreements. Submittals required hereinafter will not relieve the Contractor of any responsibilities under the Warranty of Construction Provisions of this contract or under the various Guarantee Clauses of the Technical Provisions.

1.18.2 SUBMITTALS

The Contractor shall submit all items requiring submission of O&M data under this and other sections of these specifications in accordance with Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD of the specifications.

1.18.3 OPERATION AND MAINTENANCE (O&M) DATA

The Contractor shall furnish operation and maintenance manuals for all facilities constructed under this contract. The manuals shall be loose leaf, indexed and shall consist of manufacturer's brochures, manufacturer's operation and maintenance manuals, service and repair manuals, catalogs, service bulletins, instruction charts, diagrams, other information as necessary to support the operation and maintenance of the end items of equipment, assemblies and systems. Each type of facility (housing, barracks, mosque, etc.) shall be covered by a separate manual (or manuals) consisting of all data

pertaining to the equipment and/or systems within that facility. Identical equipment within a single major system shall require only one submittal of data. The Contractor shall furnish all O&M manuals to the Contracting Officer not less than thirty (30) calendar days prior to contract completion. If the Contractor fails to furnish all O&M manuals to the Contracting Officer as specified herein, the Contracting Officer will deduct from the final contract payment an amount representing the lesser of 1% of the total contract cost or $50,000. Required number of submittals (number of sets) shall be as specified in Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD.

1.18.4 RECOMMENDED SPARE PARTS LIST

The Contractor shall furnish a recommended spare parts list containing equipment manufacturers' recommendations for five (5) years; two (2) years and one (1) year spare parts stock levels in Afghanistan. Current unit price and effective date, lead time, shelf life for each individual part, and total cost of all recommended parts shall be furnished.

1.18.5 SUPPLEMENTAL SUBMITTALS OF DATA

After initial submittal of O&M manuals and until final acceptance of all equipment, the Contractor shall prepare and deliver to the Contracting Officer supplemental technical data as previously described for all changes, modifications, revisions and substitutions to equipment and components. For equipment or systems introduced into the contract under change order, or modified by change order, supplemental data shall be furnished within forty-five (45) calendar days after issuance of the change order. The supplemental data furnished shall be properly prepared and identified for insertion into the O&M manuals.

1.18.6 FRAMED INSTRUCTIONS FOR SYSTEMS

Approved wiring and control diagrams showing the complete layout of the entire system, including equipment, piping, valves and control sequence, framed under glass or in approved laminated plastic, shall be posted, where applicable, in all mechanical equipment rooms. In addition, detailed operating instructions explaining safe starting and stopping procedures for all systems shall be prepared in typed form along with the inspections required to insure normal safe operations. The instructions shall be framed as specified above for the wiring and control diagrams and posted beside the diagram. Proposed diagrams, instructions, and other sheets shall be submitted for approval prior to posting. Operating instructions shall be posted before acceptance testing of the systems and verified during acceptance testing.

1.18.7 ADDITIONAL SUBMITTALS/RE-SUBMITTALS

The Contracting Officer reserves the right to determine whether the above specified information, as furnished by the Contractor, is adequate and complete and to require such additional submittals by the Contractor as necessary to insure that adequate information has been furnished to provide the satisfactory operation and maintenance of the various items of equipment and to fulfill the intent of the specifications. Additional submittals or resubmittals supplementing incorrect or incomplete data shall be made within thirty (30) calendar days after receiving notice by the Contracting Officer. All costs arising from these resubmissions shall be borne by the Contractor.

1.19 INSTRUCTIONS AND TRAINING FOR OPERATION AND MAINTENANCE

1.19.1 GENERAL

The Contractor shall be responsible for the instruction and training of operating and maintenance personnel as specified below and in the Technical Provisions of the specifications. Unless otherwise indicated in the Technical Provisions, operating and maintenance instructions shall be given for a minimum period as follows:

Title	Duration of Training
Mechanical Systems	10 Days
Electrical Systems	10 Days

1.19.2 OPERATION AND MAINTENANCE TRAINING

The Contractor shall provide competent instructors for training of personnel designated by the Contracting Officer to operate mechanical and electrical building systems and equipment, perform the required preventive maintenance to minimize breakdown, and to perform necessary repairs when malfunction or breakdown of equipment occurs. Such training shall consist of classroom and on-the-equipment training for the period specified, which shall be completed prior to acceptance of a system or equipment, as applicable. The instructor(s) shall have no other duties during the period of training. Classroom instruction shall not exceed fifty percent (50%) of the total training time, with the balance devoted to on-the-equipment demonstration and familiarization. Emphasis will be given to both electrical and mechanical features, in accordance with approved training plans.

1.19.3 ARRANGEMENTS

The training shall be for not less than the periods of time specified, five (5) days per week, and eight (8) hours per day, subject to review and approval by the Contracting Officer. Each individual training session shall be presented one time only, shall be video taped in a television system compatible with the local area, and be scheduled in a manner acceptable to the Contracting Officer. At the completion of training, the videotapes shall become the property of the Government. In addition to the Contractor's requirements to video tape each training section, the Government reserves the right to record, in any manner, the subject training material, or training sessions given by the Contractor, without additional cost to the Government.

Recordings obtained will be used in future training by the Government. The operating and maintenance manual data, as specified to be furnished in these Special Clauses, shall be used as the base material for training.

1.19.4 SCHEDULING

The Contractor shall contact the Contracting Officer for the purpose of preliminary planning, scheduling, and coordination of training, to maximize effectiveness of the training program for available operating and maintenance personnel. The Contractor shall initiate and make arrangements for such contact within thirty (30) calendar days after receipt of notification of award of contract; and shall include all significant times in scheduling and completing training in his PROJECT SCHEDULE. The Contractor shall provide a draft outline of training outline in sufficient detail to provide a broad indication of the type of scope of training to be given. It shall include but not be limited to; (a) a list of subjects to be presented; (b) estimated amounts of classroom and on-the-equipment instruction for each subject; (c) a list of minimum qualifications for instructors; and (d) discussions concerning the types and amounts of visual aids, reference materials, tools and test equipment, mock-up and other training materials that will be employed during training.

1.19.5 PRELIMINARY PLAN

The Contractor shall submit seven (7) copies of an outline of his proposed training plan to the Contracting Officer for review and approval not later than 60 calendar days after award of this contract. The plan will be reviewed and coordinated with the content of the O&M manuals.

1.19.6 PLAN

The Contractor shall submit seven (7) copies of his proposed training plan to the Contracting Officer for

approval not later than ninety (90) calendar days prior to start of any training. The plan shall include the following; (a) a weekly outline showing overall form and design of training presentation; (b) a day-by-day schedule showing time intervals, the major and subordinate subjects to be covered in each, the name of the instructor(s) and qualification summary of each, and identification of related handouts; (c) summary of the number of hours of classroom and on-the-equipment training; (d) a list of reference materials to be provided by the Contractor to the trainees; and (e) a list and description of the training materials to be used, such as text, visual aids, mock-up, tools, etc. The Contractor shall be responsible for furnishing all training materials except the following: The Government will provide space, chairs, and tables for classroom training, and three (3) sets of the five (5) sets of O&M Manuals required by the Contractor per Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD of the specifications. Provision of these manuals is solely for reference purposes, and in no way relieves the Contractor from providing all instruction and materials necessary for training personnel designated by the Government. All costs for resubmission of training plans, training materials, etc., as requested by the Contracting Officer shall be borne by the Contractor. Resubmittals shall be made within twenty (20) days of notice from the Contracting Officer.

1.19.7 ATTENDANCE ROSTER/TAC FORM 356

The Contractor shall develop an attendance roster or a similar document indicating each student's attendance, prior to the start of each class, subject and/or topic. This includes both "Hands-On" and classroom training. It is strongly recommended that each student trained be required to sign this document at the beginning of each class day for each and every class, subject and/or topic taught on that day. The Contractor's failure to have student attendance verified in writing may be cause for the Government to order the Contractor to repeat schooling where evidence of attendance cannot be verified. No part of the time lost due to such repeat instruction shall be made the subject of claim for extension of time or for excess costs or damage by the Contractor. Within ten (10) working days after completion of Operation and Maintenance Training conducted in accordance with this clause and/or applicable Technical Provision section, the Contractor shall complete and submit TAC Form 356 "Operation and Maintenance Training Validation Certificate". The attendance roster shall be included as an attachment to TAC Form 356.

1.20 CONTRACTOR FURNISHED EQUIPMENT LISTS

The Contractor shall furnish a list of all items, other than integral construction type items, furnished under the contract. Items such as furniture, drapes, rugs, vehicles, office machines, appliances, etc., shall fall under this category. The Contractor's list shall describe the item; give the unit price and total quantities of each. Model and serial numbers for equipment shall be provided when applicable. The Contractor shall keep an up-to-date register of all covered items and make this information available to the Contracting Officer at all times. Prior to acceptance, the Contractor shall submit the complete register to the Contracting Officer.

1.21 TIME EXTENSIONS

1.21.1 GENERAL

This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause 52.249-10 entitled DEFAULT (FIXED-PRICE CONSTRUCTION) APR 1984. The listing below defines the anticipated monthly unusually severe weather for the contract period and is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the geographic location of the project. The schedule of anticipated unusually severe weather will constitute the baseline for determining monthly weather time evaluations. Upon award of this contract and continuing throughout the contract each month, actual unusually severe weather days will be recorded on a calendar day basis (including weekends and holidays) and compared to the monthly anticipated unusually severe weather in the schedule below. The term "actual unusually severe weather days" shall include days actually impacted by unusually severe weather. The Contractor's schedule must reflect the

anticipated unusually severe weather days on all weather dependent activities.

Kabul Province - Kabul

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	22	18	11	10	7	1	2	1	1	3	16	22	114

Logar Province - Pul-i-Alam

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	21	19	10	2	1	0	0	0	1	8	16	20	98

Parwan Province - Bagram

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	19	13	7	4	3	2	0	0	0	2	8	19	77

Kunar Province - Asadabad

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	7	8	10	8	5	3	4	6	4	2	3	5	65

Laghman Province - Mihterlam

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	7	4	2	1	1	1	1	1	1	0	1	5	25

Nangahar Province - Jalalabad

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	3	1	1	4	0	0	1	2	1	1	1	2	17

Badakhshan Province - Feyzabad

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
	16	16	1	1	0	0	0	0	0	0	3	12	49

Baghlan Province - Pol-e-Khumri

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	17	9	2	3	1	0	0	0	0	1	6	14	53

Kunduz Province - Kunduz

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	14	9	8	8	4	1	1	0	0	0	5	12	62

Balkh Province- Mazir-e-Sharif

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	12	8	1	0	0	0	0	0	0	1	3	8	33

Jowzjan Province - Sheberghan

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	13	8	7	5	1	0	0	0	0	1	5	8	48
Ghazni Province - Ghazni													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	22	20	15	8	5	1	3	0	0	6	17	20	117
Khost Province - Khost													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	15	7	2	1	1	1	4	1	2	1	4	13	52
Paktia Province - Gardez													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	22	19	13	2	1	0	0	0	0	5	17	21	100
Paktika Province - Sharana													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	21	16	3	0	0	0	0	0	0	0	6	19	65
Kandahar Province - Kandahar													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	14	7	4	6	1	0	1	1	0	1	6	12	53
Nimroz Province - Zaranj													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	13	6	1	1	0	0	0	0	0	1	4	9	35
Oruzgan Province - Tarin Kowt													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	12	3	0	0	0	0	0	0	0	0	1	6	22
Zabul Province - Qalat													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	19	11	3	0	0	0	0	0	0	1	5	12	51
Badghis Province - Qal-i-Naw													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	18	12	5	3	1	0	0	0	0	4	7	12	62
Bamiyan Province - Bamiyan													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	21	19	13	3	1	0	0	0	1	9	19	21	107
Farah Province - Farah													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

	11	5	3	3	1	0	0	0	0	1	4	12	40
Herat Province - Herat													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	15	11	6	6	1	0	0	0	0	2	9	15	65

In the event the project' is located in either Nuristanm, Panjsher, Samangan, Sari Pul, Takhar, Wardak or any other province not listed above, then the closest neighboring province should be selected, or if the project is located equidistant between two provinces, than the average of the two provinces should be used.

1.21.2 TIME EXTENSIONS

The number of actual unusually severe weather days shall be calculated chronologically from the first to the last day in each month. Unusually severe weather days must prevent work for fifty percent (50%) or more of the Contractor's workday and delay work critical to the timely completion of the project. If the number of actual unusually severe weather days exceeds the number of days anticipated in the paragraph above, the Contracting Officer will determine whether the Contractor is entitled to a time extension. The Contracting Officer will convert any qualifying delays to calendar days and issue a modification in accordance with the Contract Clause 52.249-10 entitled DEFAULT (FIXED-PRICE CONSTRUCTION) APR 1984.

1.21.3 OTHER DELAYS

Construction delays due to full or partial base closures due to incidents such as demonstrations, civil unrest and outright attacks will be examined on an individual basis for consideration of time extensions.

1.22 STANDARDIZATION

Where two or more items of the same type or class of product, system or equipment furnished in this project are required, the units shall be products of the same manufacturer and shall be interchangeable when of the same size, capacity, performance characteristics, and rating. The only exception to this requirement is where the items are interchangeable due to conformance with industry standards (valves, fittings, etc.); they need not be by the same manufacturer. This requirement applies to all manufactured items in the project that normally require repair or replacement during the life of the equipment.

1.23 COMPLIANCE WITH HOST COUNTRY RULES AND CUSTOMS

The laws of Host Country may prohibit access to certain areas of the country that are under military control. The Contractor shall furnish the Contracting Officer the names of personnel, type, and amounts of equipment, dates and length of time required at the site, and the purpose of entering the host country. It is understood that areas to which rights of entry are provided by the Host Government are to be used only for work carried out under the contract and no destruction or damages shall be caused, except through normal usage, without concurrence of the Host Government.

1.23.1 CONTRACTOR'S RESPONSIBILITIES

The following items are the sole responsibility of the Contractor to investigate, estimate as to cost, and assume the risk, as normally encountered by Contractors. The Contractor shall be responsible for determining the effect of the following on his own cost of performance of the contract and for including sufficient amount in the contract price:

a. Official language and type of accounts required to satisfy the officials of the Local Government.
b. Entry and exit visas, residence permits, and residence laws applicable to aliens. This includes any special requirements of the Host Government, including those required by local Labor Offices, which the Contractor may have to fulfill before an application for a regular block of visas will be accepted.
c. Passports, health and immunization certificates, and quarantine clearance.
d. Compliance with local labor and insurance laws, including payment of employer's share of contribution, collecting balance from employee and paying into insurance funds.
e. Strikes, demonstrations and work stoppage.
f. Collection through withholding and payment to local Government, of any Host Country income tax on employees subject to tax.
g. Arranging to perform work in the Host Country, to import personnel, to employ non-indigenous labor, to receive payments and to remove such funds from the country.
h. Operating under local laws, practices, customs and controls, and with local unions, in connection with hiring and firing, mandatory wage scales, vacation pay, severance pay, overtime, holiday pay, 7th day of rest, legal notice or pay in lieu thereof for dismissal of employees, slowdown and curtailed schedules during religious holidays and ratio of local labor employed in comparison to others.
i. Possibility of claims in local bureaus, litigation in local courts, or attachment of local bank accounts.
j. Compliance with workmen's compensation laws and contributions into funds. Provisions of necessary medical service for Contractor employees.
k. Special license required by the local Government for setting up and operating any manufacturing plant in the Host Country, e.g. concrete batching, precast concrete, concrete blocks, etc.
l. Sales within the host country of Contractor-owned materials, and equipment.
m. Special licenses for physicians, mechanics, tradesmen, drivers, etc.
n. Identification and/or registration with local police of imported personnel.
o. Stamp tax on documents, payments and payrolls.
p. Base passes for permanent staff, day laborers, motor vehicles, etc.
q. Compliance with all customs and import rules, regulations and restrictions, including, but not limited to, local purchase requirements.

1.24 EMPLOYEE ACCESS TO PROJECT SITE

1.24.1 EMPLOYEE IDENTIFICATION

The Contractor shall be responsible for furnishing to each employee and for requiring each employee engaged on the work, to display identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

1.24.1.1 PREPARATION OF IDENTIFICATION BADGES

The Contractor shall be required to prepare a written application inclusive color photographs and provide all materials and labor necessary to prepare an identification badge, laminated in plastic, containing the employee's name, badge number, color photo, height and weight, the name of the Contractor's organization and for requiring each employee engaged on the work to display this identification as directed by the Contracting Officer. The Contractor shall submit each application and draft badge through the Contracting Officer to the Base Security Office. A minimum of thirty-five workdays shall be allowed for Government review and certification of badges. The Base Security Office will certify each draft badge by signature, stamp, seal or any combination thereof. Upon certification by the Base Security Office, the badges will be returned to the Contractor for final preparation, lamination, and issuance. Badges shall not be taken out of country during periods of travel or absence. During such periods, the Contractor may be permitted to issue temporary identification badges.

1.24.1.2 EMPLOYEE BACKGROUND AND HISTORICAL INFORMATION

The Contractor shall be required to prepare and maintain personal background and historical information forms on each employee. These forms may be reviewed by the Base Security Office. The required information shall include but not necessarily be limited to the following:

a. Full name.
b. Place and date of birth.
c. Three (3) current color photographs.
d. Copy of Citizenship/Nationality identification.
e. Copy of Passport.
f. Copy of drivers license.
g. Police Background Check.
h. Work History.
i. Personal background information.
j. Copy of Work Permit and/or Visa.
k. Permanent home of record and in-country address.
l. Other information mandated by local law, the Base Security Regulations or that may be required to coordinate and process the necessary documentation with the government offices responsible for the approval.
m. Registration, insurance company, policy number and expiration date for each vehicle.

1.24.2 IDENTIFICATION OF CONTRACTOR VEHICLES

The Contractor shall be responsible for requiring each vehicle engaged in the work to display permanent vehicular identification as approved and directed by the Contracting Officer. If acceptable to the Base Security Office and approved by the Contracting Officer, the Contractor may institute a system of non-permanent temporary identification for one-time delivery and transit vehicles. Each Contractor vehicle, machine, piece of equipment, or towed trailers, shall show the Contractor's name such that it is clearly visible on both front doors of the vehicle and both sides of a towed trailer. A valid license plate shall be displayed at all times. Contractor vehicles operated on Government property shall be maintained in a good state of repair, shall be insured, and shall be registered in accordance with Afghan Law.

1.24.3 SECURITY PLAN

The Contractor shall submit to the Contracting Officer a security plan as required in Contract Section 01040.

1.25 RADIO TRANSMITTER RESTRICTIONS

To preclude accidental actuation of sensitive electronic equipment, the Contractor shall not use radio-transmitting equipment without prior approval of the Contracting Officer.

1.26 PUBLIC RELEASE OF INFORMATION

1.26.1 PROHIBITION

There shall be no public release of information or photographs concerning any aspect of the materials or services relating to this bid, contract, purchase order, or other documents resulting there from without the prior written approval of the Contracting Officer.

1.26.2 SUBCONTRACT AND PURCHASE ORDERS

The Contractor agrees to insert the substance of this clause in all purchase orders and subcontract

agreements issued under this contract.

1.28 CONSTRUCTION PROJECT SIGN

The contactor shall fabricate and display at least one sign to identify the project site as a Government of the Islamic Republic of Afghanistan sponsored project associated with the Ministry of Interior. The sign shall measure at least 1.8 x 1.2 meters as shown in Attachment. The sign shall be fixed to posts with a sufficient number of bolts to ensure that the sign will not be damaged by weather or vandalism. A minimum of three posts will be utilized. If lumber is used for support posts, the minimum dimension of the lumber vertical posts and bracing will be 10 cm x 10 cm. The post will set in field-prepared site-grade concrete. No rebar (reinforcement) and no formwork are required for concrete. At any point during construction if deemed necessary by the COR the sign shall be repaired or replaced. Exact placement at the project site shall be coordinated with the COR.

The black, green and red colors on the left side of the sign shall be the Pantone colors listed below:

Black: Pantone Process Black PC
Red: Pantone 485 PC
Green: Pantone 370 PC

Sign panels shall be fabricated from 19mm thick High Density Overlay (HDO) plywood or 2-mm thick sheet metal primed and painted (exterior paint) with lumber or metal uprights and bracing (see the “pdf” Attachment). The sign will be primed and two-coat painted. The sign shall be placed in a location that is visible to pedestrians and/or vehicles passing the project site. Sign face and graphics shall be non-reflective vinyl film prepared on a white adhesive backing or enamel-based exterior type paint. All logos shall be aligned left with typography center text. Dari translations shall be substituted with Pashtun in areas where the language is more predominant/appropriate. If the Text Group T6 (which is the Project Title taken from the Contract) does not make it clear to the public viewing the sign what the project purpose is, succinct wording shall be added to Text Group T2 to make this clear (for example, “Hospital Wastewater Treatment Facility Expansion” or “20 KM paved road” or other project summary), to be submitted and approved by the COR.

1.29 ATTACHMENTS

TAC FORM 61 - Accident Prevention Program Hazard Analysis

TAC FORM 356 - Operation and Maintenance Training Validation Certificate

Construction Project Sign Dimensions

Mounting Diagram

Ministry Logo

2. SPECIAL CONTRACT REQUIREMENTS

2.1 APPLICATION OF US CRIMINAL JURISDICTION

Reference DODI 5525.11. The contractor is directed to provide all of its personnel working under this contract, and to require all of its subcontractors to provide their personnel, with written notification that - with the exception of nationals of Afghanistan and those ordinarily resident in Afghanistan - contractor and subcontractor personnel, and the dependents of contractor and subcontractor personnel who are residing with such personnel, may be subject to US criminal jurisdiction as provided for in the Military Extraterritorial Jurisdiction Act, 18 USC 3261-3267; see Section 3267(1)(A)(iii)(I) and (2)(A)(iii). A copy of

the notice ***shall be furnished to the contracting officer upon award of the contract***, along with a certification by an authorized company representative attesting to the provision of the notification to contractor personnel.

2.2 ATTACKS FROM HOSTILE ENTITIES

This contract is firm fixed-price. Costs incurred in the performance of project execution that arise from the attacks of hostile entities, such as costs arising from damage to or destruction of contractor equipment and facilities, and damage to or destruction of the project prior to Government acceptance, are the sole responsibility of the contractor. The Government makes no guarantee to provide the contractor with security, and bears no obligation to reimburse the contractor for costs arising from the attacks of hostile entities. When appropriate, the Contracting Officer may provide the contractor with an equitable adjustment with respect to time – but not cost – in accordance with clause 52.249-10; see 52.249-10(b)(1)(i) and (2).

2.3 INSTALLATION ACCESS AND BADGING

This contract is firm fixed-price. It is the responsibility of the contractor to be knowledgeable of and to abide by any and all applicable installation access procedures and requirements, to include any and all badging procedures and requirements, that may be necessary for contractor access to the project site. Such procedures and requirements may change over the course of contract performance; it is the responsibility of the contractor to plan accordingly in order to meet its existing obligations under this contract. The US Army Corps of Engineers, Afghanistan Engineer District, neither controls nor is responsible for any such installation access procedures, requirements or changes thereto.

2.4 CUSTOMS CLEARANCE

Reference clauses 52.229-6 and 52.225-13. This contract is firm fixed-price. It is the responsibility of the contractor to be knowledgeable of and to abide by any and all applicable customs clearance procedures and requirements that may be necessary for the transportation of supplies and equipment into Afghanistan. Such procedures and requirements may change over the course of contract performance; it is the responsibility of the contractor to plan accordingly in order to meet its existing obligations under this contract. The US Army Corps of Engineers, Afghanistan Engineer District, neither controls nor is responsible for any such customs clearance procedures, requirements or changes thereto.

2.4.1 CUSTOMS PROCEDURES

Background: Every contractor/carrier importing goods into Afghanistan or exporting goods out of the country must comply with national customs regulations and procedures administered by the Afghanistan Customs Department (ACD) of the Ministry of Finance, in compliance with Afghan law. Contractors performing contracts in Afghanistan for the Department of Defense (DoD), including the U.S. Army Corps of Engineers, in support of Operation Enduring Freedom (OEF), may be entitled to certain exemptions from the payment of customs tariffs and duties on goods and materiel imported into Afghanistan for use at DoD construction projects within the country, and on export of materiel from Afghanistan after completion of a project.

Obtaining import tax exemptions and clearances for the release of construction goods and materiel through ACD is often time consuming. Early planning and realistic delivery timelines are essential to prevent avoidable project delays related to customs issues. This section provides general guidance and a list of customs procedures and documents that you may be required to fulfill or provide. Please note that this guidance is provided to alert contractors from the outset that the Afghan customs process is complex and time-consuming, and to *strongly encourage* early planning. The steps listed below are provided for informational purposes only and cannot be regarded as definitive because the ACD's procedures and requirements may change at any time.

ANY DEVIATIONS FROM THE PROCESS DESCRIBED HEREIN SHALL NOT FORM THE BASIS FOR A REQUEST FOR EQUITABLE ADJUSTMENT.

General Requirements: USACE contractors must designate an authorized employee of the company as the customs point of contact (POC), responsible for handling customs clearance issues, and must advise the USACE's Customs Coordinator by e-mail of the name and contact information for the authorized customs POC. This individual must hand-deliver all required documentation between the USACE's Customs Coordinator at Qalaa House and the US Embassy, the Afghan Ministry of Foreign Affairs, and the Customs Department of the Afghan Ministry of Finance in order to obtain required stamps and signatures.

To initiate the customs clearance process, the following steps are necessary as of the time of publication of this solicitation, but cannot be regarded as definitive:

1) Prepare a Contractor's Letter of Introduction for the Afghanistan Customs Department. The Letter of Introduction should first be emailed to the USACE Customs Coordinator at Qalaa House, Kabul Afghanistan.

2) The following hard copy *original* documents should be delivered to the USACE's Customs Coordinator at Qalaa House prior to the movement of goods into or out of Afghanistan:

   a) A completed Tax Exemption Form ("Muaffi Nama"), purchased from the Afghan Customs Department and written in the Dari language.

   b) A Bill of Lading (for cargo transiting via ship and motor carrier), Airway Bill (for cargo arriving via air) or CMR (for cargo that has only traveled overland).

   c) An Invoice in US Dollars only. If the goods were purchased elsewhere and invoiced in a different currency, the equivalent U.S. Dollar amount must be clearly shown.

   d) A Customs Clearance Request. See Section 01060b

   e) A Packing List if the complete cargo manifest is not listed on the invoice.

   f) A Certificate of Origin for cargo coming through Islam Qalat and Heart.

The USACE Customs Coordinator will check the documents to ensure that they are complete, accurate, and ready for signature.

Once all stamps and signatures are obtained on the documents listed under paragraph 2, the Afghanistan Customs Department will send them to the applicable customs clearing house and the shipment can be released for border crossing and final delivery.

Note: When a contractor imports vehicles or equipment for use by the US Government, the items can only remain in country until the contracted project is complete. At the termination of the contract, the vehicles or equipment must be exported following procedures similar to those outlined above, or the original exempted duties must be paid to the Ministry of Finance if the vehicles or equipment remain in Afghanistan.

It is the sole responsibility of the contractor to know of and abide by all Afghan customs clearance procedures and requirements applicable to the importation of supplies and equipment into Afghanistan, and to make accurate and truthful representations on all customs documents. Please recognize that Afghan customs procedures and requirements may change over the period of contract performance. The US Army Corps of Engineers, Afghanistan Engineer District, therefore provides the information in this section for general guidance purposes only, and advises you that responsibility for customs compliance, and awareness of changing customs procedures, remains your responsibility.

Any contractor or shipping agency that violates Afghan customs procedures may be subject to legal action, including but not limited to revocation of contract, forfeiture of goods and enforced collection of fines and customs fees due the Afghan Government. All contractors and suppliers that import goods tax and duty free are subject to warehouse and storage facility inspections by USACE representatives to confirm that customs manifests are accurate and that abuse of the US Government's tax-exempt status has not occurred.

2.5 TRAVEL WARNINGS

The contractor shall provide all personnel working under this contract, and shall require subcontractors to provide their personnel, with a written notification advising such personnel to be aware of US State Department Travel Warnings with respect to Afghanistan, available at http://travel.state.gov, in the event they wish to consider bringing their dependants into Afghanistan. A copy of the notice ***shall be furnished to the contracting officer upon award of the contract***, along with a certification by an authorized company representative attesting to the provision of the notification to contractor personnel. At no time, subject to the written approval of the contracting officer, may the contractor allow such dependants, or any other unauthorized individuals, to be present on the project site grounds, whether in transit or otherwise.

2.6 DRUG-FREE WORKFORCE

Documentation of the contractor's drug-free workforce program as required by clause 252.223-7004(b) ***shall be furnished to the contracting officer upon award of the contract.***

2.7 COMBATING TRAFFICKING IN PERSONS, COMMERCIAL SEX ACTS, FORCED LABOR

A copy of the employee notification statement as required by clause 52.222-50 Alt 1 ***shall be furnished to the contracting officer upon award of the contract***, along with a certification by an authorized company representative attesting to the provision of the notification to contractor personnel.

2.8 PROMPT PAYMENT OF SUBCONTRACTORS

In accordance with 52.232.5 (b)(1)(v,), the contractor shall furnish documentation with each progress payment which indicates that all sub-contractors and suppliers have been paid with funds from the most recent progress payment. In order for the progress payment request to be considered complete, the contractor shall:

- submit a listing of all subcontractors, the total amount paid to each subcontractor under the contract and the dates and methods of such payments; and
- provide copies of payrolls for each subcontractor working under this contract.

2.9 SUBCONTRACTORS CLAUSE REQUIREMENT

In accordance with 52.232.27, the contractor shall include in each subcontract, a payment clause that obligates each subcontractor to pay their subcontractors for satisfactory performance of work not later than 7 days from the date they receive payment for work under this contract.

2.10 DEFENSE BASE ACT

In accordance with FAR 52.228-3 “Workers Compensation Insurance” (Defense Base Act) the offeror is required to provide, prior to commencing work under this contract, such workers’ compensation insurance or security as the Defense Base Act (“DBA”) (42 U.S.C.1651 et seq.) requires and to continue to maintain it until performance is complete. The amount listed by the offeror on this Contract Line Item (CLIN) is the estimated DBA insurance premium (estimated payroll of the offeror and its subcontractors times the applicable rate(s)). The DBA insurance premium amount varies with payroll and the nature of services and will, therefore, be taken into account during price evaluation of offers. The actual amount paid by the government under that CLIN will be based on the amount of the Rutherford invoice, stamped “paid” and submitted by the offeror after contract award. In the event of recalculation of the premium by CNA based on actual payroll amounts, the contracting officer will adjust this CLIN by contract modification to reflect the actual premium amounts paid. Failure to fully comply with the Defense Base Act requirements may result in termination for default in accordance with FAR 52.249-10 Default (Fixed-Price Construction).

2.11 SUBMISSION OF DEFENSE BASE ACT CLAIMS

The offeror’s Safety Officer shall, in addition to any other duties required to be performed under this contract, do the following:

- Make timely Defense Base Act insurance claims on behalf of each employee who is injured or killed in the course of their employment under this contract; and
- Make monthly written reports to the Contracting Officer, Administrative Contracting Officer, and the Agency Safety and / or Occupational Health Manger, providing the name(s) of each such injured or deceased employee, the circumstances surrounding each injury or death, the dates of each injury or death, the date the insurance claim was made on behalf of each employee(s), and the current status of each claim.

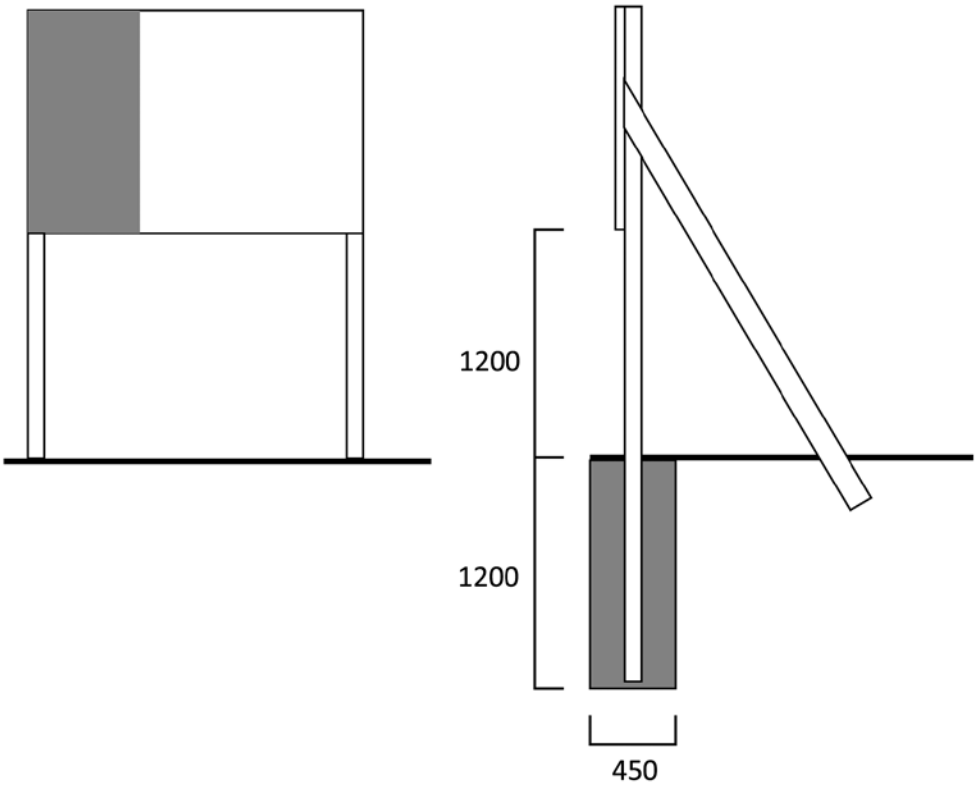
The Agency Safety and / or Occupational Health Manger POC will be provided at the pre-construction meeting.

-- END OF SECTION --

Construction Project Sign Dimensions (mm)

T1:	Text Group 1	Typeface: 150mm Large Standard Dari Font Color: White
T2:	Text Group 2	Typeface: 150mm Large Standard Dari Font Color: Black
T3:	Text Group 3	75mm Small Standard Dari Font Color: Black
T4:	Text Group 4	35mm Helvetica Bold, all capital letters Color: Light Yellow, matching GIROA logo
T5:	Text Group 5	35mm Helvetica Bold Color: Green, Pantone 370 PC
T6:	Text Group 6	45mm Helvetica Bold Color: Green, Pantone 370 PC

Mounting Diagram



Ministry of Interior

Government of the Islamic Republic of Afghanistan

ACCIDENT PREVENTION PROGRAM
HAZARD ANALYSIS

1. Contract No.	2. Project	3. Facility
4. Date	5. Major Phase	6. Estimated Start Date
7. PRINCIPAL STEPS	8. POTENTIAL HAZARDS	9. RECOMMENDED CONTROLS
10. EQUIPMENT TO BE USED	11. INSPECTION REQUIREMENTS	12. TRAINING REQUIREMENTS
13. Contractor (Signature & Date)		
14. Report discussed with contractor/superintendant on _____ _____ Area/Resident Engineer (Signature)		15. Contracting Officer (Signature & Date) or Contracting Officer Representative

TAC Form 61

C E R T I F I C A T E

OPERATION AND MAINTENANCE TRAINING VALIDATION

References: **1. Special Clause: Instructions and Training for Operations and Maintenance**
2. Technical Provision(s) _____

Equipment for which training conducted: _____

_____

_____

Description of Training:

1. Number of Classroom Hours: _____
2. Number of Hands-on Equipment Hours: _____
3. Location of Training: _____

Training Instructors: _____

Trainees: _____

_____

Contractor Certifying Official _____

Corps of Engineers Representative _____

User Acknowledgement _____

TAC Form 356
NOV 1999

Clearance Request Requirements Checklist
(Requirements as of 20 Sep 2009)

For use by all U.S. Army Corps of Engineers (USACE)/ Afghanistan Engineer District (AED) Contractors:
For questions, contact Nesar Asdaq at nesar_asdaq@yahoo.com; cell: (0093) 0700-276-349 or CustomsCoordinator Michelle R. Smith at DLL-CETAN-CAB@usace.army.mil.
Please make sure your set of documents contains the following prior to submitting to USACE/AED for Customs Clearance Process:
ALL DOCUMENTS DELIVERED TO AED-N QALAA HOUSE MUST BE ORIGINALS!

No	Item Name	Details
1	Cover Letter	To be on Company Letterhead; for more details please refer to Annex A (Sample Cover Letter Format)
2	Original *[?]* Bill of Lading/CMR/Air Waybill ***(Verified copy of original is not acceptable)***	This document should include the following information in **English Language**: A. Document Number B. Date C. Consignee: (USACE, c/o Contractor Name & Address in Afghanistan) D. Contract # and Project Name (e.g W917PM……ANA Garrison…..) E. Route and Final Destination F. Container Number (if applicable) G. Truck Number (if applicable) H. Number of Pieces I. Description of Goods: 1) (if the goods are Vehicles/Loader/Excavators …etc) info should include: a) Engine # b) Chassis # c) Model d) Color e) Country of Origin f) Type/Brand 2) For non-mobile Machines like Generators only **Serial #** and **Brand or Type** is sufficient
3	Original Invoice ***(Verified copy of original is not acceptable)***	This document should include the following information in **English Language**: A. Document Number B. Date C. Consignee: (USACE, c/o Contractor Name & Address in Afghanistan) D. Contract # and Project Name (e.g W917PM……ANA Garrison…..) E. Container Number (if applicable) F. Description of Goods: 1) (if the goods are Vehicles/Loader/Excavators …etc) info should include: a) Engine # b) Chassis # c) Model d) Color e) Country of Origin f) Type/Brand 2) For non-mobile Machines like Generators only **Serial #, Brand or Type** is sufficient G. Currency in **USD** Only **(other currencies will not be accepted)** H. Invoice to be Signed & Stamped by Supplier
4	Packing List	To specify contents of Invoice (not required if invoice lists all items)
5	Certificate of Origin *(if applicable)*	Required only if cargo arrives in Afghanistan via Herat or Islam Qalah. *[< huh?]*
6	Exemption Form (MUAFFI NAMA)	To be obtained from Ministry of Finance (MOF) Revenue Department, and completed in the Dari Language

Note: For shipments coming through Pakistan – Karachi Port, we require two copies of the full set of documents in addition to the original documents: one copy for our office record and one copy for US Consulate Karachi– Pakistan. For shipments coming through Mazar e Sharif and Herat, only one copy for our office records suffices.

Sample Format for Letter of Introduction

TO: U. S. Army Corps of Engineers, Afghanistan Engineer District (AED)

ATTN: [name of POC]

FROM: Prime Contractor *(Authorized Person)*

SUBJECT: Customs Clearance Request for U. S. Military Equipment

Request your assistance in obtaining release of the following items, as we require their immediate shipment to Afghanistan for use in support of Operation Enduring Freedom (OEF).

Company:	Full Name and Address
Sub Contractor *(if applicable)*	Full Name and Address
Contract No & Task Order No.:	W912ER……., W917PM……..
Project Description:	i.e ANA Garrison Nangarhar, ANP Border Police Kandahar….etc
Shipping Route:	i.e Austria, Karachi – Pakistan, Torkham – Kabul or Turkey, Azerbijan, Turkmenistan, Herat …etc

Bill of Lading Details	Number Date	
	1234….	MM DD YY

Container Number:	TOLU4938862, TRLU5949846, TRLU9220744, AMCU4500861 etc…
Number of Pieces:	4 Containers
Contents:	Steel Pipe, Cement, Door, Window…etc *(if Vehicles or Generators, please refer to item (2-I or 3-F of Checklist**)*
Final Destination:	Kabul or Name of respective Province Afghanistan

Invoice Details	Number Dat	e	Amount	Currency
	123	MM DD YY	100,000.00	USD

Authorized Employee of Company responsible for Customs Clearance:	Name of Company's Employee
Authorized Shipping Agent:	Name and Address of Shipping Agent *[need more room here]*

Your cooperation in facilitating the clearance of said items from Afghan Custom's authorities and onward transportation to final destination is appreciated.

**If the contractor is importing its own equipment (e.g., vehicles, generators, etc.) for use on the contracted project, this statement is added: "The mentioned Equipment and Accessories are contractor-owned and are temporarily imported to Afghanistan for the contract period of _____ to _____. At the conclusion of the contract the said items will be removed from Afthanistan, or the original duties will be paid to the Afghanistan Customs Department, Ministry of Finance by the contractor.

Regards,

Name and Title of Authorized Person
Signature
Date
Stamp of Company

SECTION 01065

AFGHAN CAPACITY DEVELOPMENT

LOWEST PRICE TECHNICALLY ACCEPTABLE (LPTA) PROCESS

1.0 AFGHAN CAPACITY DEVELOPMENT

The Government requires Offerors to promote the education and skills development of Afghan citizens, as required by Factor 5–Afghan Capacity Development in Sections 00110 and 00120. Prospective Offerors must provide an Afghan Capacity Development Manager and certify Offeror's commitment to employing a minimum set percentage of skilled Afghan workers by filling out an Afghan Capacity Development form. Upon award, the Afghan Capacity Development Manager must submit an Afghan Capacity Development Plan to the Contracting Officer. The plan must include the elements described in section 2.0 below. This Plan must be submitted to the Contracting officer within seven (7) days of Notice to Proceed (NTP).

2.0 AFGHAN CAPACITY DEVELOPMENT PLAN

The Offeror shall provide an Afghan Capacity Development Plan. This plan must explain how this project will promote the education and skills development of Afghan citizens. Specifically, as a minimum, the plan must address the elements below. The term "contractor" here includes subcontractors, if applicable.

2.1 The Afghan Capacity Development Plan must name an Afghan Capacity Development Manager (ACDM). Responsibilities for this person must be clearly stated and this person's position must be shown on the company organizational chart. The plan must clearly state that the method of evaluating the performance of this individual will be based on his or her ability to meet or exceed the target percentages of Afghan employees listed on the Afghan Capacity Development form submitted with the Offeror's proposal as part of Factor 5 of the technical evaluation criteria.

2.2 The Afghan Capacity Development Plan must describe how the contractor (and subcontractors) will promote the education and develop skills of Afghan citizens. Specifically, the plan must demonstrate how the contractor (and subcontractors) will:

a. recruit, hire, train and maintain a staff of skilled Afghan workers for construction trades including, but not limited to: equipment operators, masons, reinforcing steel workers, concrete finishers, laboratory technicians, painters, and carpenters. These skilled workers should be graduates of construction trade schools, such as the Champion Trades Training Center in Jalalabad or the Afghanistan Technical Vocational Institute in Kabul. To demonstrate intent, the Afghan Capacity Development Plan must include a list of skilled trades and the percentage of each

skilled trade that will be comprised of trained, skilled Afghan workers. The plan must also list the trade schools from which skilled Afghans will be hired, preferably from the province where the project is being built if applicable. If unable to recruit or hire from a construction trade school, the Afghan Capacity Development Manager (ACDM) must provide an explanation in the plan for why this wasn't possible. Each skilled Afghan working on the construction site must have submitted a trade school diploma if applicable to the contractor. During project execution, these diplomas must be provided to the U.S. Government upon request.

b. recruit, hire and maintain a staff of Afghan journeymen or highly skilled-technical workers, including but not limited to electricians and plumbers. These highly skilled-technical workers should be graduates of technical schools, such as the Afghanistan Technical and Vocational Institute in Kabul. To demonstrate intent, the Afghan Capacity Development Plan must include a list of these highly skilled-technical trades and the percentage of each trade that will be comprised of highly skilled-technically trained Afghan workers. The plan must also list the technical schools from which these skilled Afghans will be hired, preferably from the province where the project is being built if applicable. If unable to recruit or hire from an Afghan technical school, the Afghan Capacity Development Manager must also state where the highly skilled technical workers received their training and certifications. Each Afghan journeyman or highly skilled-technical employee working on the construction site must have submitted a technical school diploma to the contractor. During project execution, these diplomas must be provided to the U.S. Government upon request.

c. plan to coordinate and work with Afghan technical and trade schools, preferably in the province where the project is being built if applicable, to use graduates from the schools and provide opportunities for the students and graduates of the schools to get on-the-job training and experience.

2.3 The contractor must validate capacity development performance to the U.S. Government quarterly and also upon request. Validation must include, for each applicable position, total employee numbers and percentages filled by Afghan citizens. The presentation of data must be in tabular form and address both categories of employees: skilled trades, and journeymen or highly skilled-technical. The Afghan Capacity Development Plan must include an example of how this data will be reported to the U.S. Government.

2.4 Failure to comply with the Afghan Capacity Development Plan may result in termination for default in accordance with FAR 52.249-10 Default (Fixed-Price Construction).

-END OF SECTION-

SECTION 01312

QUALITY CONTROL SYSTEM (QCS)

1. GENERAL

1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. The Contractor module, user manuals, updates, and training information can be downloaded from the RMS web site: the Contractor can obtain the current address from the Government. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration

Finances

Quality Control

Submittal Monitoring

Scheduling

Import/Export of Data

1.1.1 CORRESPONDENCE AND ELECTRONIC COMMUNICATIONS

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 OTHER FACTORS

Particular attention is directed to specifications “SUBMITTAL PROCEDURES”, “CONTRACTOR QUALITY CONTROL”, "PROJECT SCHEDULE", and Contract Clause, "Payments", which have a direct relationship to the reporting to be accomplished through QCS.

Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available. It shall be the responsibility of the contractor to maintain the QCS software and install updates as they become available.

1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS. No separate payment shall be made for updating or maintaining the necessary hardware configurations necessary to run QCS:

Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor

256+ MB RAM for workstation / 512+ MB RAM for server

1 GB hard drive disk space for sole use by the QCS system

Digital Video Disk (DVD)-Compact Disk (CD) Reader-Writer (RW/ROM)

Monitor with a resolution of AT LEAST 1024x768, 16bit colors

Mouse or other pointing device

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

Connection to the Internet, minimum 56k BPS

Software

MS Windows 2000 or higher

QAS-Word Processing software: MS Word 2000 or newer

Internet browser supporting HTML 4.0 or higher

Electronic mail (E-mail) MAPI compatible

Virus protection software regularly upgraded with all issued manufacturer's updates

1.4 RELATED INFORMATION

1.4.1 QCS USER GUIDE

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

1.4.2 CONTRACTOR QUALITY CONTROL (CQC) TRAINING

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class. The government will provide QCS training if requested by the contractor.

1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail or via CD-ROM. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. Data updates to the Government shall be submitted via either E-mail or electronic media with printed/file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer. The QCS database typically shall include current data on the following items:

1.6.1 ADMINISTRATION

1.6.1.1 CONTRACTOR INFORMATION

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

1.6.1.2 SUBCONTRACTOR INFORMATION

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

1.6.1.3 CORRESPONDENCE

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

1.6.1.4 EQUIPMENT

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 MANAGEMENT REPORTING

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.2 FINANCES

1.6.2.1 PAY ACTIVITY DATA

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 PAYMENT REQUESTS

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. A signed

paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

1.6.3 QUALITY CONTROL (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report.

1.6.3.1 DAILY CONTRACTOR QUALITY CONTROL (CQC) REPORTS.

QCS includes the means to produce the Daily CQC Report. The Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by specification 01451 “CONTRACTOR QUALITY CONTROL”.

1.6.3.2 DEFICIENCY TRACKING.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

1.6.3.3 THREE-PHASE CONTROL MEETINGS

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.4 ACCIDENT/SAFETY TRACKING.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports.

1.6.3.5 FEATURES OF WORK

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.6 QC REQUIREMENTS

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

1.6.4 SUBMITTAL MANAGEMENT

The Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 SCHEDULE

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Specification Section Project Schedule. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF). The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 REQUESTS FOR INFORMATION (RFI)

The Contractor shall use the two-way RFI system contained in QCS for tracking all RFI's generated during the contract. Hard copies of all RFI's shall be provided to the government, and will govern in the event of a discrepancy between electronic and printed mediums.

1.6.7 IMPORT/EXPORT OF DATA

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function.

1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

-- END OF SECTION --

SECTION 01321

NETWORK ANALYSIS SCHEDULE

PART 1 GENERAL

1.1 DESCRIPTION
The network analysis schedule (NAS) shall consist of a cost loaded Critical Path Method (CPM) schedule and associated reports. The scheduling of all design, procurement and construction shall be the responsibility of the Contractor. All design, procurement and construction activities will be integrated in a single schedule. The schedule will start at NTP Acknowledged and end at Contract Completion. The schedule may extend beyond Contract Completion, for activities such as demobilization, with the approval of the Contracting Officer. The contractual period of performance will be shown as a hammock under Contract Milestones.
The approved NAS constitutes the baseline schedule and represents the contractor's plan for executing the project. The schedule will be updated monthly to show current status. The monthly updates will be used to measure work progress, aid in the evaluation of requests for time extensions, and to provide the basis of all progress payments. All progress payment amounts will equal the earned values calculated in the monthly NAS updates.

For consistency, when scheduling software terminology is used in this specification, the terms in Oracle's Primavera scheduling programs are used. Primavera Project Planner, P#, Primavera P6, and Primavera Contractor are registered trademarks or service marks of Oracle. Adobe and Acrobat are registered trademarks of Adobe Systems Incorporated.

1.2 SUBMITTALS
Government approval is required for submittals with a "G" designation. Submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following will be submitted with Transmittal Form (ENG Form 4025) in accordance with Section 01335 SUBMITTAL PROCEDURES FOR DESIGN-BUILD PROJECT:
Preconstruction Submittals
- Scheduler Qualifications; G RE
- Project Execution Plan, G RE
- Activity Code Dictionary; G RE
- Baseline Network Analysis Schedule; G RE

With Pay Requests
- Monthly Network Analysis Schedule Updates; G RE

Closeout Submittals
- As-Built Schedule; G RE

1.3 SCHEDULE ACCEPTANCE

Review comments made by the Government on the Contractor's schedules will not relieve the Contractor from compliance with the requirements of the Contract Documents. The Contractor is responsible for scheduling, sequencing, and prosecuting the Work to comply with the requirements of the Contract Documents. The Government will review the schedule for compliance with the contract (including contractual milestones and scope), cost loading and cost distribution, schedule organization and activity coding, logic, durations, and general conformance with established scheduling concepts and acceptable industry standards.

1.3.1 Schedule Acceptance Prior to Start of Work
The Baseline NAS described in paragraph 1.7.2 Baseline Network Analysis Schedule must be accepted by the Government before the Contractor will be allowed to start construction of permanent facilities, including demolition, site preparation and facility layout.

1.3.2 Acceptance

a. After the Baseline NAS is accepted by the Contracting Officer, it will be used by the Contractor for planning, organizing, and directing the work, reporting progress, and to support pay requests. The schedule will be updated monthly by the Contractor to reflect the current status of the work and will be submitted with the progress pay request. Processing pay requests is conditional upon receipt and acceptance of the Baseline NAS and accurate updated schedules accompanying the pay requests. Only DBA insurance will be paid prior to acceptance of the Baseline NAS.
b. The Baseline NAS and subsequent schedule updates will be considered to be the Contractor's certification that the submitted schedule meets all of the requirements of the Contract Documents, represents the Contractor work plan, accurately reflects the work that has been accomplished, and the sequence in which it was performed.

1.4 SOFTWARE
The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. The program selected by the contractor shall be used for the duration of the project. The contractor shall provide electronic files saved in the proper backup format for all schedule submittals. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manual methods used to produce any required information shall require approval by the Contracting Officer.

1.5 QUALIFICATIONS
The Contractor shall assign a Scheduler based in Afghanistan who will be responsible for the development, preparation, and maintenance of an accurate, computerized Network Analysis Schedule. The Scheduler shall perform on-site coordination, attend project meetings, prepare reports and perform updates as required to support the project. The Scheduler shall have previously developed, created and maintained computerized schedules for at least two projects similar in size and complexity to this contract. A resume outlining the qualifications of the Scheduler shall be submitted for

acceptance to the Contracting Officer. If at a later date, the Contracting Officer considers the Contractor's Scheduler to be incompetent or objectionable, the Contractor will propose a new Scheduler who meets the qualification requirements. Payments will not be processed until an acceptable Scheduler is assigned.

1.6 SCHEDULE FORMAT

1.6.1 Structure

The NAS shall consist of a cost loaded CPM network displayed as time scaled bar charts supported by specified tabular and graphical reports. Sample standard reports are included in Appendix 01321a. The NAS will show the order and interdependence of activities and the sequence in which the work is planned to be accomplished. The basic concept of the network will be followed to show how the start and/or finish of a given activity is dependent on the execution of preceding activities and how it restrains the succeeding activities. Activity durations shall not be resource driven; activities shall not have date constraints, and shall start and finish according to network logic. Diagrams shall be organized with a four or five level work breakdown structure, sorted by Early Start and Early Finish Dates and will show a continuous flow from left to right. With the exception of the NTP Acknowledged and Contract Completion milestones, every activity must have predecessor and successor ties and every finish must have a successor. Activities with only start-to-start successor relationships will not be allowed. Activities in an accepted schedule may not be renamed or renumbered. Critical activities will be shown in red. Critical activities are defined as having zero or less days of Total Float. Near critical activities will be defined as having Total Float in the range of 1 to 14 calendar days. Barcharts will be submitted formatted for 11X17 sheets.
The following information will be shown for each activity:

a. Activity ID
b. Activity Description
c. Original Duration in Work Days
d. Remaining duration (schedule update reports only)
e. Early Start Date
f. Early Finish Date
g. Total Float
h. Budgeted Cost
i. Baseline Start Variance (schedule update reports only)
j. Baseline Finish Variance (schedule update reports only)

1.6.2 Activity Properties and Level of Detail

Numbering shall be assigned so that, in general, predecessor activity numbers are smaller numerically than the successor activity numbers. Skip numbering shall be used on the network to allow insertion of additional activities for contract modifications and logic changes. All activities in RMS are sorted by activity ID.
Government Activities. All government activities shall be clearly identified in the schedule. Government activities include, but are not limited to; Government approved submittal reviews, Government conducted inspections/tests, environmental permit approvals by State regulators, utility outages, Notice(s) to Proceed (including Notices to

Proceed for each Fast-Track Phase as indicated in other sections of this specification and as directed by the Contracting Officer) and delivery of Government Furnished Material/Equipment. Show activities indicating Government furnished materials and equipment utilizing delivery dates indicated in "FAR 52.245-2, Government Property (Fixed-Price Contracts)". Government activities will be driven by a 7-day calendar, i.e. one with no non-work days.
Construction Quality Management (CQM) Activities. All activities will have a Definable Feature of Work (FOW) as identified in the Contractor's Quality Control Plan. The FOW will be entered in the FOW activity code as defined in the SDEF specification.

1.6.2.1 Activity Bands
The schedule will use the following (phases=PHAS) as the first level of organization:

a. Milestones. This band contains the contract milestones. If the contractor includes other project milestones, contract milestones and project milestones will be shown as separate bands below MILESTONES.
b. Pre-Construction. Included in this band are pre-construction meetings and submittals. Pre-construction submittals will be shown as a separate band under PRE-CONSTRUCTION.
c. Design. This band contains activities related to site investigation, surveys and design including, but not limited to Design Notice to Proceed, Contractor's design by design phase, application for and receipt of required permits, Contractor's constructability reviews, submittal of design packages to Government, Government's design review periods, specified design meetings, transition periods prior to Construction Notice to Proceed, (including Notice to Proceed for each Fast-Track Phased Design as indicated in Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD PROJECT and as directed by the Contracting Officer). The Government review period shall be from the time the design is received by the Government to the time it is sent back to the Contractor, in calendar days. Design activities will be linked to their associated Submittal, Procurement, and/or Construction activities. If the Government's review of any submittal requires resubmission or does not clear the design for construction, a new series of Design Activities will be inserted into the schedule. The predecessor for the new design preparation activity will be the original approval activity and the successor will be the beginning of the next design phase.
d. Procurement. This band contains tasks related to the procurement of installed material or equipment including but not limited to material submittal preparation, submittal and approval, fabrication, delivery, delivery of spare parts, extra stock, special tools, O&M manuals, notification of Government Furnished Material/Equipment delivery requirement. As a minimum, separate procurement activities will be provided for every specification section. Submittal approval activities shall be logically tied to associated procurement, delivery, and/or construction activities. If the contractor requires payment upon delivery for materials or equipment, i.e. “stored materials”, a one day activity must succeed the delivery activity. The activity description should be “Stored Materials: name of materials or equipment”. The activity will carry the documented cost of the materials or equipment and will be statused as actual only after review and approval of the supporting documentation by the COR. Payment for stored materials is subject to

COR approval and must be requested in writing prior to submittal of the baseline schedule. If the Government's action on any submittal is "Disapproved" or "Revise and Resubmit", a new series of Submittal Activities will be inserted into the schedule. Predecessor for the new submittal preparation activity will be the original approval activity and the successor will be the fabrication/deliver activity for the equipment or material.

e. Construction. This band will have as many subordinate bands as are required to provide a logical organization of construction work. These bands will contain all construction activities including but not limited to mobilization, demobilization; installation of temporary facilities tradesman; testing and inspection of installed work; start-up and testing of equipment; commissioning of building and related systems; scheduling of specified manufacturer's representatives. No construction activity shall have a duration greater than 20 working days. Construction activities will be driven by calendars that reflect all scheduled non-work days, i.e. Fridays, official Afghan holidays and severe weather days as listed in section 01060 of the contract.
f. Contract Closeout. This band will have two or more subordinate bands to provide a logical organization of the closeout work. These bands will contain all closeout activities including but not limited to Punch Out Inspection, Pre-Final Inspection, Final Acceptance Inspection, final clean-up. as-builts, O&M manuals and training.

1.6.2.2 Project Milestones

The NAS will include milestones for the start of the project; any contract required interim start and completion dates, contract completion date and other significant milestones. Only Contract Milestones will be recognized by the Government.

a. NTP Acknowledged: The schedule shall start no earlier than the NTP Acknowledged Date. NTP Acknowledged will be shown as a start milestone with a start-no-earlier-than constraint date equal to the date shown in RMS.
b. Contract Complete: The last activity in the schedule will be the Contract Complete milestone. This milestone will have finish-no-later-than constraint date equal to the Contract Required Completion date in RMS.

1.6.2.3 Mandatory Activities

The following activities, and the procurement activities described in 1.6.2.1d, when applicable, shall be listed as separate activities:

a. Submission, review and approval of the demining plan and required demining activities through receipt of the certificate.
b. Submission and approval of the accident prevention plan.
c. Submission and approval of the security plan.
d. Submission and approval of the contractor quality control plan
e. Submission and approval of the design quality control plan
f. Submission and approval of the area use plan.
g. Mobilization
h. Demobilization
i. Submission, review and acceptance of design packages and all related activities required to support design.
j. Submission and approval of mechanical/electrical layout drawings.

k. Submission and approval of O & M manuals.
l. Submission and approval of as-built drawings.
m. Submission and approval of 1354 data and installed equipment lists.
n. Submission and approval of testing and air balance (TAB).
o. Submission of TAB specialist design review report. Submission and approval of fire protection specialist.
p. Submission and approval of testing and balancing of HVAC plus commissioning plans and data.
q. Air and water balance dates.
r. HVAC commissioning dates.
s. Controls testing plan.
t. Controls testing.
u. Performance Verification testing.
v. Other systems testing, if required.
w. Pre-final inspection.
x. Correction of punch list from pre-final inspection.
y. Final inspection.

1.6.2.4 Activity Number (ID) and Description

a. Activity Numbers: Activity numbers will consist of up to 10 alphanumeric characters beginning with a letter and ending with a number. Only letters and numbers will be used. Activities must be numbered in ascending order from start to finish of the project.
b. Activity ID Codes: The Contractor shall submit the alphanumeric coding scheme for Activity Numbering that shall be used throughout the project. Activity ID Codes may be used to create a work breakdown structure (WBS). Four Activity ID fields are allowed in P3; user defined fields may be used in P6. Other scheduling software shall be used in a similar manner. The coding dictionary shall include the value and description of each code. Once accepted, the coding scheme will be used for the duration of the project. PHAS and AREA are the top two levels of codes.
c. Activity Description: Each activity shall have a narrative description consisting of a Location (e.g.; Building 1, 3rd floor, northeast quadrant, basement – abbreviate as necessary), Verb (e.g.; form, pour, excavate), and Object (e.g.; slab, footing, under floor plumbing).

1.6.2.5 Activity Code Dictionary and Values

The Contractor shall use the activity coding structure defined in USACE Regulation ER 1-1-11 Standard Data Exchange Format (SDEF) Appendix 01321a. The use of this exact structure is mandatory, even if some fields are not used. The SDEF fields may be used only for the purpose for which they are intended. The characters remaining after the SDEF codes are limited to eight in Primavera P3. These activity codes may be used to replace or supplement the Activity ID Codes. The codes will have values assigned that will allow the scheduling program to sort, select, group and organize the activities in the schedule.

Activity codes are used to:

1. Group and summarize project activities in a hierarchical structure, in the same way as a work breakdown structure (WBS), to facilitate updating and analysis of the schedule.
2. Group and summarize activities and related costs by CLIN and Bid Item
3. Select and sort activities to create ad hoc views and reports

1.6.2.6 Cost Loading

a. Cost Loading Activities:
   - Payment for design work will be made after a design submittal is approved. The cost of the design submittal will be applied to a one day “Design Approved” task after the AED approval activity.
   - Payment for mobilization and demobilization shall be paid according to the approved CLIN amount for these items. Unless specified otherwise in the contract, then the amount shall be split 60 percent for mobilization and 40 percent for demobilization and each of these costs applied to these separate cost loaded activities.
   - The cost of installed materials and equipment will be included in the appropriate construction activities except where the COR agrees in advance to payment for stored materials.
   - If payment is allowed by the COR for stored materials, the cost of the stored materials will be applied to a one day “Stored Materials Accepted” activity after the delivery activity.
   - Unless assigned a CLIN, indirect costs such as management, supervision, security, overhead, G&A and profit will be included in each activity budget. The total of all cost loaded activities shall equal the value of the contract.
   - Cost shall be rounded to zero decimal places if the contract and CLIN costs are in whole dollars. Cost shall be assigned to activities as a resource as described in the QCS requirements for SDEF file transfer.
   - Hammocks (summary bars) will not be cost loaded.
   - CLINs and resources will not be entered for activities with no budget.
b. Cost Loading Milestones: Milestone activities may not be cost loaded. A one day task should be used in instead of a cost loaded milestone such as Design Approved or Stored Materials Accepted.
c. Contract Line Item Number (CLIN): As described in Cost Loading, cost shall be assigned to every task type activity. Every activity shall also be assigned to a CLIN. All cost and earned value reports will be grouped by Project and CLIN with sub groups as appropriate. Group totals will be shown for Project and CLIN.

1.6.2.7 Calendars

Three calendars will be used in preparing the schedule:

1. 7 day week, no weekends or holidays, and no weather (7 Day Calendar)
   This calendar is used for any activity whose duration is measured in consecutive calendar days. These activities are mainly in the design and procurement phases. Examples are AED design review, fabricate & deliver.

2. 6 day week, with non work weekend days, and public holidays, no weather (Standard Calendar)
   This calendar is used for construction activities which are not affected by severe weather conditions. Examples are all interior work and above ground structural work which is not temperature sensitive such as structural steel erection. Some activities may require interior heating in cold weather for example, painting and plastering.
3. 6 day week with public holidays and severe weather days as listed in Section 01060 Special Clauses (Weather Calendar)
   This calendar is used for construction activities which cannot or will not be performed in severe weather conditions (such precipitation, high or low temperature, wind), such as earthwork, excavation, compaction, concrete work, exterior plastering.

If the site is shut down for any reason, for example severe weather or adverse security conditions, the shut down periods will be shown as non-work days on Calendars 2 and 3. Site shutdowns will be documented in the EWP (paragraph 1.7.3b).

Although the use of additional calendars is not recommended, the contractor may submit other calendars for AED approval.

Afghan Public Holidays
All calendars except Calendar 1 must show official Afghan holidays as non-work days. The dates for 2010 are listed below. The dates of Muslim holidays regress 11 days every year. This rule may be used to estimate the holiday dates for future years.

2010

1.	Feb.15	Liberation Day
2.	Feb.26	The Prophet's Birthday*
3.	Mar.21	Nauruz (Afghan New Year)
4.	Apr.18	Liberation Day
5.	Apr.28	Victory Day
6.	May 1	Labor Day
7.	Aug.19	Independence Day
8.	Aug.10	Start of Ramadan - approximate*
9.	Sep.10	Eid al Fitr (End of Ramadan)*
10.	Sep.11	Eid al Fitr Holiday*
11.	Sep.12	Eid al Fitr Holiday*
12.	Nov.16	Eid al Adha (Feast of the Sacrifice)*
13.	Nov.17	Eid al Adha Holiday*
14.	Nov.18	Eid al Adha Holiday*
15.	Nov.19	Eid al Adha Holiday*
16.	Dec.17	Ashura*

Notes:

Holidays marked ** are observed according to the Muslim calendar. Dates are tentative. The calendar should be adjusted as required to reflect official announcements for each calendar year within the project schedule.
The month of Ramadan is not included in the construction calendar as non-working time. It should be borne in mind, however, that during this month productivity and availability of manpower tend to be lower than normal. This should be taken into consideration when scheduling work during this period.

1.6.2.8 Schedule Software Settings and Restrictions
Activity Constraints: Date constraints other than those required by the contract will not be allowed unless accepted by the Contracting Officer. The contractor will identify any constraints proposed and provide an explanation for the purpose of the constraint in the Narrative Report.
Lags: Lags will not be used in place of activities in the logic. For example concrete curing time must be shown as an activity, not as a lag between the activities Pour Concrete and Remove Formwork. Negative lags must not be used. The contractor will identify all lags and provide an explanation for the purpose of the lag in the Narrative Report.
Actual Dates: Actual start and finish dates shall not be automatically updated by default mechanisms that may be included in the scheduling software. Actual Start and Actual Finish dates on the CPM schedule must match the dates in the Daily QC Report. These reports will be the basis for updating actual dates in the schedule.
Percent Complete: The reported percent complete of an activity will be based on the quantity of acceptable work in place.
Actual Hours: The schedule will be updated with actual labor hours as reported in the Daily QC Reports.

Software Settings for Other Scheduling Software: Settings will be used so as to comply with the requirements of the specification and may only be changed with the contracting officer’s approval.

Software Settings for Primavera P3: Use the P3 defaults for settings which are not otherwise specified. Settings may only be changed with the contracting officer’s approval.
Project Overview:

- Set decimal places to zero if all CLIN values are in whole dollars
- Set Project Start to NTP Acknowledged Date
- Set Project Must Finish By to Contract Required Completion date

Schedule/Level Calculation Options:

- Automatic scheduling and leveling – off
- When scheduling activities apply – retained logic
- Calculate start-to-start lag from – early start
- Schedule durations – contiguous
- Show open ends as - noncritical
- Calculate total float as – finish float

Autocost Rules:

- Uncheck Link Remaining Duration and Schedule Percent Complete
- Check Freeze Resource Units per time period

Summarization:

- Default calendar is 1 (7-day calendar)
- Weighting factor for calculating percent complete is by cost

Critical Activities: Critical activities are activities which have zero or negative total float. The critical path is as calculated by the software longest path.

Format:

Bars: Activities will be shown as bars with no start and end points. Relationship lines will not be shown unless required for a specific report. Activity descriptions will be shown to the right of the bar. Target bars will be shown as a thin black bar above the current schedule. Progress will be shown based on percent complete.

Timescale: The timescale will show calendar dates with the minimum unit being weeks.

Vertical Sight Lines: The major and minor vertical sight lines will generally be months and weeks, respectively. For short term reports such as the 3-week look ahead, the increments will be week and day.

Fonts: The default font will be Arial 10.

Dates: The date format will be ddMMMyy. For example, 12JAN10.

Activity type: The default activity type is "Task".

Activity Number Increment: The initial activity number increment will be 10 to allow inserting activities in sequential order.

Store Period Performance: Upon completion of each monthly update, period performance must be stored in order to preserve historical cost distribution.

Software Settings for Primavera P6: Use the P6 defaults for settings unless otherwise stated for P3 above. Settings may only be changed with the contracting officer's approval.

Out-of-Sequence Progress: Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be not be allowed. The Contractor shall make logic corrections to reflect the as-built construction sequence.

1.6.2.9 File Name

Each schedule submitted must have a unique name. The schedule ID will consist of four alpha-numeric characters.

- The first character is assigned by the contractor to uniquely identify a USACE contract. It may be a letter from A to Z. The numbers 0 to 9 may be used if the contractor needs to identify more than 26 USACE contracts.
- The second character is B (for Baseline or C for Current update).

- For a baseline schedule the third character is the baseline number and the fourth character is the submittal number. For example, the second submittal of the initial baseline would be 12.
- For a current update the third and fourth characters are the update sequence number from 01 to 99.
- Example baseline schedule ID: AB12 for contract A, initial baseline, second submittal
- Example current update: AC12 for contract A, current update No.12

1.6.3 Required Reports

The following reports will included with the specified schedule submittals. A PDF of each report will be included on the CD submitted by the Contractor. Barchart reports will be saved as layouts. Tabular and graphical reports will be saved as report specifications. All redundant layouts, report specifications and filter specification will be deleted from the project before it is transmitted.

Baseline Schedule

a. Project Schedule Report. This is a barchart showing all activities organized by WBS and sorted by early start and early finish.
b. Cost Report. This is a barchart showing budget totals by CLIN.
c. Critical Path Report. This is a barchart showing activities on the longest path. The report layout will be the same as the Project Schedule Report.

Update Schedule

These reports will be submitted with the monthly pay request.

a. Project Schedule Report. This is a barchart showing all activities organized by WBS and sorted by early start and early finish. This report will display the baseline and current update on separate bars.
b. 3 Week Look Ahead. This is a barchart showing activities in continuing or scheduled to start or finish in the three week period after the data date.
c. Earned Value Report. This is a barchart listing all activities which have an earned value. The report will be organized by CLIN and WBS, sorted by early start and early finish.
d. Critical Path Report. This is a barchart showing activities on the longest path. The report layout will be the same as the Project Schedule Report.
e. Other Reports – Reports necessary to monitor and evaluate the project shall be provided by the contractor as requested by the COR.

1.7 SUBMISSION AND ACCEPTANCE

1.7.1 Preliminary Meeting

Before the contractor begins preparation of the initial Baseline Network Analysis Schedule, the Contracting Officer, the Contractor and the AED scheduling consultant shall participate in a preliminary meeting to discuss the proposed schedule and the requirements of this section.

1.7.2 Baseline Network Analysis Schedule

Once review comments are resolved and the Contracting Officer has accepted the Baseline Network Analysis Schedule, the contractor shall furnish the following within 5 calendar days:

a. Two copies of the reports listed in the paragraph entitled "Required Reports".
b. Two copies of the Cost Loading S-Curve and Histogram indicating the cost loading based upon both early and late dates.
c. Two sets of CDs containing an electronic file of the project schedule along with a PDF print copy and required reports shall be provided for the initial submission and every periodic project update. A permanent label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Baseline, Update, Recovery, Change, etc.), full contract number, Project Name used to identify project in scheduling software, contract name & location, data status date, diskette number with total number of diskettes in set, software name and version used to run the schedule, and the name and telephone number of person responsible for the schedule.
d. The schedule reports shall include a footer which shows the contractor name, contract number, contract title, project ID and data date. A sample footer will be provided at the preliminary meeting.

1.7.3PROJECT EXECUTION PLAN

a. Initial Work Plan

The purpose of the Initial Work Plan (IWP) is to ensure that the contractor understands the scope of work and demonstrates that the project has been properly planned to be executed within the period of performance. The IWP is prepared and submitted with the baseline schedule. It supplements and explains the baseline schedule.

The IWP must conform to the following outline:

- Introduction
  - Scope of work
  - Period of performance
  - Location
  - Climate and topography
- Management Plan
  - Non-manual (management and supervision) staffing
  - Mobilization and demobilization
  - Security: on-site and transportation
  - Logistics
- Engineering and Design
  - Performed by whom and where
  - Design submittals
  - Constraints on procurement
  - Constraints on construction
  - Partial releases for construction, if required

- Procurement
  - Materials submittals
  - Long lead or critical materials and equipment: sources and lead times
  - Constraints on design and construction
- Subcontracting
  - Subcontracting plan
  - Subcontractor resources
- Construction
  - General sequence of construction
  - Schedule allowances for Ramadan, holidays and weather
    (defer work to favorable weather; methods for cold weather concrete, etc.)
  - Critical constraints on construction
  - Labor and equipment constraints
  - Construction methods: for example machine excavation vs. hand excavation, pre-fabricated steel vs. on-site fabrication, in-situ vs. precast concrete
  - Productivity calculations used for the work durations for all major trades
  - Materials testing and quality control

b. Execution Work Plan

The Execution Work Plan (EWP) is an update of the IWP incorporating any issues which could affect performance of the work. The EWP must be revised if there is a significant change in scope or site conditions, or if there is a delay in the schedule. As part of the contract closeout, the EWP will be revised to document how the work was executed.

1.74 Monthly Network Analysis Updates

The Contractor and Government representatives will meet monthly to review and agree on the status of each activity after which the contractor shall update the project schedule with the agreed on percentages for each activity progressed during the update period. The purpose of the meeting is to determine progress payment amounts for each activity, allow all parties to evaluate project status at the data date, provide a complete and accurate update of procurement and construction progress, create an historical record of the project and forecast contract completion based upon current status. The contractor is responsible to gather all supporting documentation, present the update data for the schedule and record the meeting minutes. All progress payment amounts will be derived from and tied to the cost-loaded schedule activities. Submit at monthly intervals a report of the actual construction progress by updating the required reports and the time scaled bar charts. Meeting to update the schedule and the submission of an error free, acceptable updated schedule to the Government is a condition precedent to the processing of the Contractor's pay request. As a minimum, the following actions will be accomplished during the meeting:

a. Identify activities started and completed during the previous period and enter the Actual Start and Actual Finish dates. It will be understood that Actual Start is defined as the date that work begins on an activity with the intent to pursue the work represented by the activity to substantial completion, and Actual Finish is

defined as the date that the activity's work is substantially complete to the point that its successor activity(s) may begin. Actual dates must agree with the daily reports.

b. Show estimated duration (in workdays) to complete each activity started but not completed (remaining duration). Forecast finish dates may not be on the data date.
c. Show forecast start dates. Forecast start dates may not be on the data date.
d. Update the percent of work complete for activities which are in progress or have been completed.
e. Reflect changes in the network diagram. All changes (i.e., remaining duration changes, logic changes, new logic, conformed change orders, new activities, changes due to Conformed Modifications, changes in work sequence, entry of as-built relationship logic, etc.) shall be recorded and a note added to the activity log field. The log shall include as a minimum, the date and reason for the change, and description of the change. All changes to the schedule shall be clearly identified and explained in the monthly narrative report.
f. A complete update of the project schedule containing all approved progress, revisions, and adjustments shall be submitted by the10th of each month to allow adequate time for review and for the contractor to perform any necessary revisions prior to submittal of the updated schedule with the monthly pay request. The progress reported on the updated schedule shall be consistent with and in support of the information reported on the pay request. Processing of the monthly pay request shall be dependent upon the accompanying receipt of an acceptable progress schedule.
g. The Narrative Report will include:
    - Progress made in each area of the project
    - Changes in the following: activities, original durations, logic interdependencies, milestones, planned sequence of operations, critical path, and resource and loading
    - Pending items and their status including permits, change orders, and time extensions
    - Status of Contract Completion Date and interim milestones
    - Current and anticipated delays (describe cause of the delay and corrective action(s))
    - Discussion of the critical path
    - Description of current and future schedule problem areas
    - Forecast of expected progress in each area of the project for upcoming reporting period or the following 30 calendar days. Each entry in the narrative report will cite the respective Activity ID and Activity Description.
h. Submit two copies of the reports listed in the paragraph entitled "Required Tabular Reports".
i. Submit two hard copies of the network diagrams and two sets of data disks.
j. Submit two copies of the Update Meeting minutes.

1.7.5 Recovery Plan

In the event the contractor falls 20 or more work days behind schedule then the contractor will be required to submit a recovery plan (schedule and a detailed narrative) describing the steps that will be taken to recover the lost time and return the critical path of the project to at least zero days total float. The contractor shall submit the recovery plan within 7 calendar days of submitting a periodic schedule update that indicates the contractor is 20 or more work days behind schedule. The detailed narrative shall be an update of the Execution Work Plan and will provide a full explanation of the recovery schedule.

1.7.6 QCS INTERFACE

Data from Primavera P3 and P6 can, and should be, transferred to QCS using SDEF. Eliminating manual entry of this data into QCS will reduce errors, ensure that data in QCS is keyed to the correct schedule activities and eliminate the cost of data entry. Refer to ER-11-1-1 and the Exchanging Data chapter in the QCS User Manual.

1.7.7 AS-BUILT SCHEDULE

As a condition for the release of retention and making final payment, the Contractor shall submit an "As-Built Schedule", which is the last schedule update. The As-Built Schedule shall reflect the exact manner in which the project was actually constructed (including actual start and finish dates, activities, sequences, and logic) and shall be certified by the Contractor's Project Manager and Construction Scheduler as being a true reflection of the way the project was actually constructed. If more than one person filled the position(s) during the course of the project, each person will provide certification for the period of time they were responsible.

1.8 CONTRACT MODIFICATION

When a contract modification is required, the contractor shall submit proposed revisions to the network with a fragnet and a cost proposal for each proposed change. A narrative and all supporting documentation shall be included with the fragnet and cost proposal. All modifications shall be incorporated into the network analysis system as separately identifiable activities broken down and inserted appropriately on the first update following issuance of a directive to proceed with the change. Submit two copies of the Total Float Report, Log Report and a copy of the proposed Time Impact Analysis on disk, with the cost proposal no later than 14 days after the incident (if a delay issue) or after receiving written direction to proceed. Unless the Contracting Officer requests otherwise, only conformed contract modification fragnets will be added into the subsequent monthly updates. All revisions to the baseline schedule that are necessary to further refine the schedule so that the changed work activities can be logically tied to the schedule shall be made. Financial data shall not be incorporated into the schedule until the Contracting Officer signs the contract modification.

1.8.1 Time Impact Analysis:

The Time Impact Analysis method shall be used by the Contracting Officer and the Contractor in determining if a time extension or reduction to the contract milestone date(s) is justified. The Contractor shall provide a Time Impact Analysis to the

Contracting Officer for any proposed contract change or as support for a Value Engineering Proposal, Variance Request, Claim or Request for Equitable Adjustment by the Contractor. The Time Impact Analysis schedule must be submitted on disk and a printed /plotted hardcopy. A narrative and all supporting documentation shall be included with the fragnet and cost proposal.

a. The Contractor shall submit a Time Impact Analysis illustrating the influence of each change or delay on the Contract Completion Date or milestones. Unless the Contracting Officer requests an interim update to the schedule, the current monthly updated schedule accepted by the Government shall be used to display the impacts of the change. Unless requested by the Contracting Officer, no other non-conformed changes will be incorporated into the schedule being used to justify the change impact.
b. Each Time Impact Analysis shall include a Fragmentary Network (fragnet) demonstrating how the contractor proposes to incorporate the impact into the project schedule. A fragnet is defined as the sequence of new activities and/or activity revisions, logic relationships and resource changes that are proposed to be added to the existing schedule to demonstrate the influence of impacts to the schedule. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. The Contractor shall provide a hardcopy printout of the fragnet activities and relationships being added and also insert the fragnet into the most current, accepted Monthly Network Analysis Update, run the schedule calculations and submit the impacted schedule with the proposal, claim, etc. Include a narrative report describing the effects of new activities and relationships to interim and contract completion dates, with each Time Impact Analysis. Submit tie extension requests with a Time Impact Analysis and three hardcopies of the fragnet, impacted schedule (with fragnet loaded), Total Float Report, Narrative Report and Log Report.
c. Following the Contractor's receipt of a contract modification on a Standard Form 30 signed by the Government; all changes in the fragnet used to determine impacts, shall be incorporated into the schedule. Changes will occur during the next monthly schedule update meeting.

1.8.2 No Reservation-Of-Rights

All direct costs, indirect costs, and time extensions will be negotiated and made full, equitable and final at the time of modification issuance.

1.9 CHANGES TO THE NETWORK ANALYSIS SCHEDULE

If changes in the method of operating and scheduling are desired, the Contracting Officer shall be notified in writing stating the reasons for the change. If the Contracting Officer considers these changes to be of a valid nature, the Contractor may be required to revise and submit for acceptance, without additional costs to the Government, the network diagrams and required reports. A change may be considered of a major nature if the estimated time required or actually used for an activity or the network logic has varied from the original plan to a degree that there is a reasonable doubt as to the effect on the contract completion date(s). Changes that affect activities with adequate float time shall be considered a major change when their cumulative effect would extend the contract completion date.

1.10 FLOAT

Use of float suppression techniques, such as; preferential sequencing (arranging critical path through activities more susceptible to Government caused delay), unjustifiable relationship lags, zero total or free float constraints, extended activity times, or imposing constraint dates other than as required by the contract, shall be cause for rejection of the project schedule or its updates. The use of Resource Leveling (or similar software features) used for the purpose of artificially adjusting activity durations to consume float and influence the critical path is expressly prohibited.

1.10.1 Definition of Float

Free Float is the time the start of an activity can be delayed without delaying the start of a successor activity. Total Float is the time finish of activity can be delayed without delaying the project completion date. Project Float is the length of time between the Contractor's Forecast Early Completion and the Contract Required Completion.

1.10.2 Ownership of Float

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 the project, any positive 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 Required Completion Date.

1.10.3 Negative Float

Negative float will not be a basis for requesting time extensions. Any extension of time will be addressed in accordance with the paragraphs entitled "CONTRACT MODIFICATION". Scheduled completion date(s) that extend beyond the contract or phase completion date(s) may be used in computations for assessment of payment withholdings. The use of this computation is not to be construed as a means of acceleration.

1.11 3-WEEK LOOK AHEAD SCHEDULE

The 3-Week Look Ahead Schedule provides a focus on the day-to-day planning and execution of near term work. This schedule is filtered from the NAS and shows activities which fall in the period extending from one week before the data date to three weeks after the data date. This schedule will use the standard barchart format described under Current Schedule Update. Two bars will be shown to allow comparison of the current week update with the previous week’s schedule. The report will, formatted for printing

on 8 ½ by 11 sheets. A pdf of the 3-week schedule shall be emailed to the Contracting Officer at least 3 work hours prior to the start of the weekly coordination meeting.

1.12 WEEKLY COORDINATION MEETING

A coordination meeting will be held each week to discuss the near term work as shown on the 3-Week Look Ahead schedule. The contractor will present an overview of the previous week's work, the current week's work, and the work planned for the following two weeks. Items which should be discussed are changes in the 3-week schedule. Issues which affect execution of the work such as coordination, procurement, labor and equipment. The Contractor will take meeting minutes. All meeting minute entries will be keyed to the schedule activity numbers) being addressed. Within one day of the meeting, the Contractor will provide a draft copy of the meeting minutes to the Contracting Officer for review and comment. Final copies of the minutes containing the comments provided by the Contracting Officer will be issued within 3 days of the meeting.

1.13 CORRESPONDENCE AND TEST REPORTS

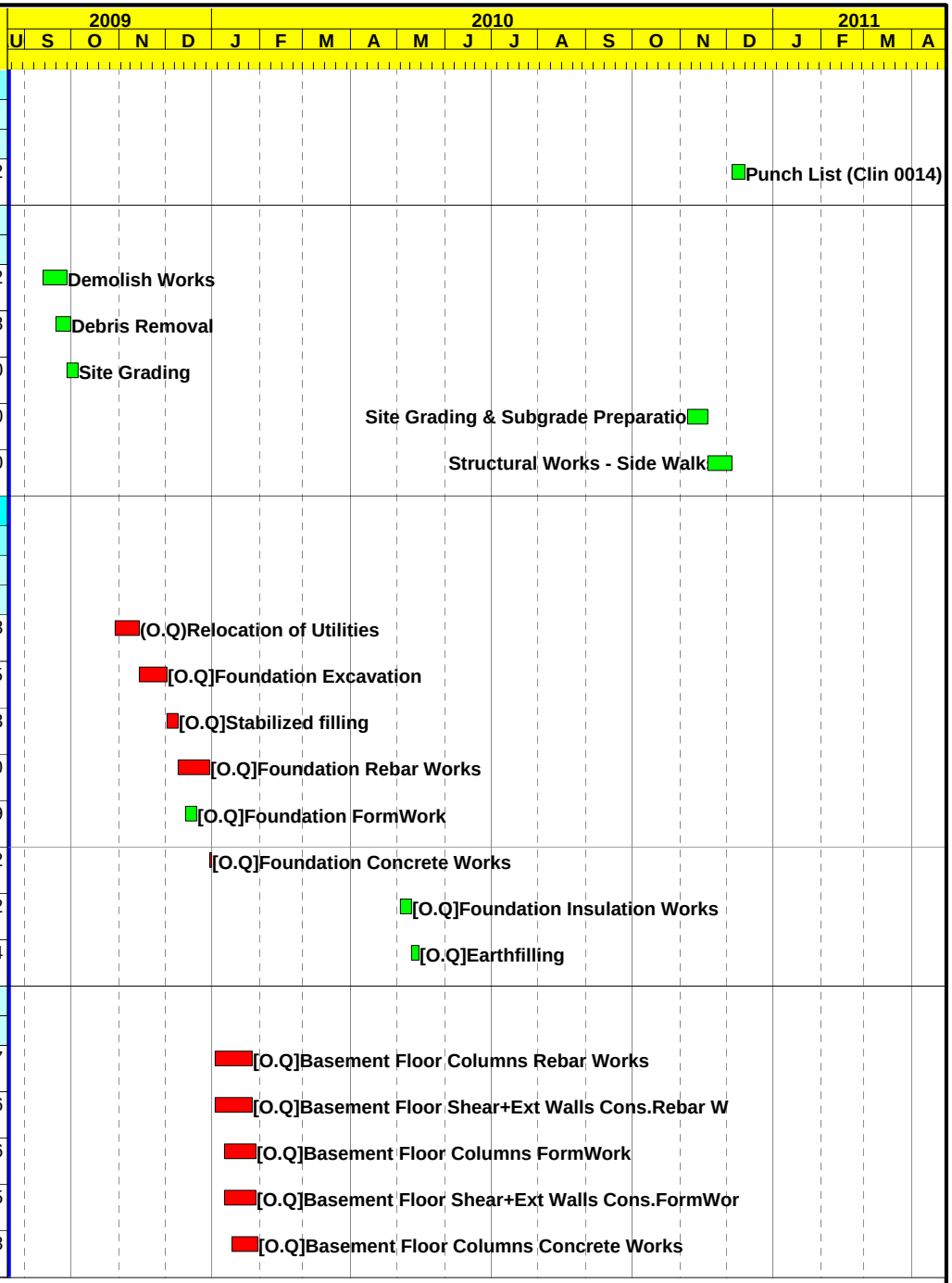
All correspondence (e.g., letters, Requests for Information (RFIs), e-mails, meeting minute items, Production and QC Daily Reports, material delivery tickets, photographs, etc.) and test reports (e.g., concrete, soil compaction, weld, pressure, etc.) shall reference the Schedule Activity Number(s) that are being addressed.

-- End of Section --

SECTION 01321a

APPENDIX TO 01321

Activity ID	Activity Description	Orig Dur	Start	Finish	Total Float	Budgeted Cost
Punchlists & Inspections						
009160	Punch List (Clin 0014)	8	05DEC10	12DEC10	103	1,362
005710	Demolish Works	15	13SEP09	27SEP09	9	17,062
005720	Debris Removal	10	21SEP09	30SEP09	9	12,188
005730	Site Grading	7	29SEP09	05OCT09	9	19,500
009140	Site Grading & Subgrade Preparation	14	06NOV10	19NOV10	95	8,170
009150	Structural Works - Side Walks	15	20NOV10	04DEC10	95	17,700
Buildings						
UOQ Building						
Foundations						
Basement						
000605	(O.Q)Relocation of Utilities	15	30OCT09	13NOV09	0	31,438
000610	[O.Q]Foundation Excavation	15	14NOV09	02DEC09	0	101,665
000620	[O.Q]Stabilized filling	7	03DEC09	09DEC09	0	23,423
000740	[O.Q]Foundation Rebar Works	20	10DEC09	29DEC09	0	120,650
000750	[O.Q]Foundation FormWork	7	15DEC09	21DEC09	8	46,079
000760	[O.Q]Foundation Concrete Works	1	30DEC09	30DEC09	0	58,922
000770	[O.Q]Foundation Insulation Works	7	04MAY10	10MAY10	3	92,592
000630	[O.Q]Earthfilling	5	11MAY10	15MAY10	29	15,234
Superstructure						
Basement						
000780	[O.Q]Basement Floor Columns Rebar Works	20	03JAN10	26JAN10	0	42,087
000810	[O.Q]Basement Floor Shear+Ext Walls Cons.Rebar W	20	03JAN10	26JAN10	0	56,116
000790	[O.Q]Basement Floor Columns FormWork	18	09JAN10	29JAN10	0	56,116
000820	[O.Q]Basement Floor Shear+Ext Walls Cons.FormWor	18	09JAN10	29JAN10	0	70,145
000800	[O.Q]Basement Floor Columns Concrete Works	15	14JAN10	30JAN10	0	28,058



Start Date	21AUG09
Finish Date	23APR11
Data Date	21AUG09
Run Date	23FEB10 16:53

Current
Progress Bar
Critical Activity

NB13

XYZ Company

Sheet 11 of 39

W917-PM-09-C-0999
Sample Project for Section 01321

Baseline Schedule

Date	Revision	Checked	Approved

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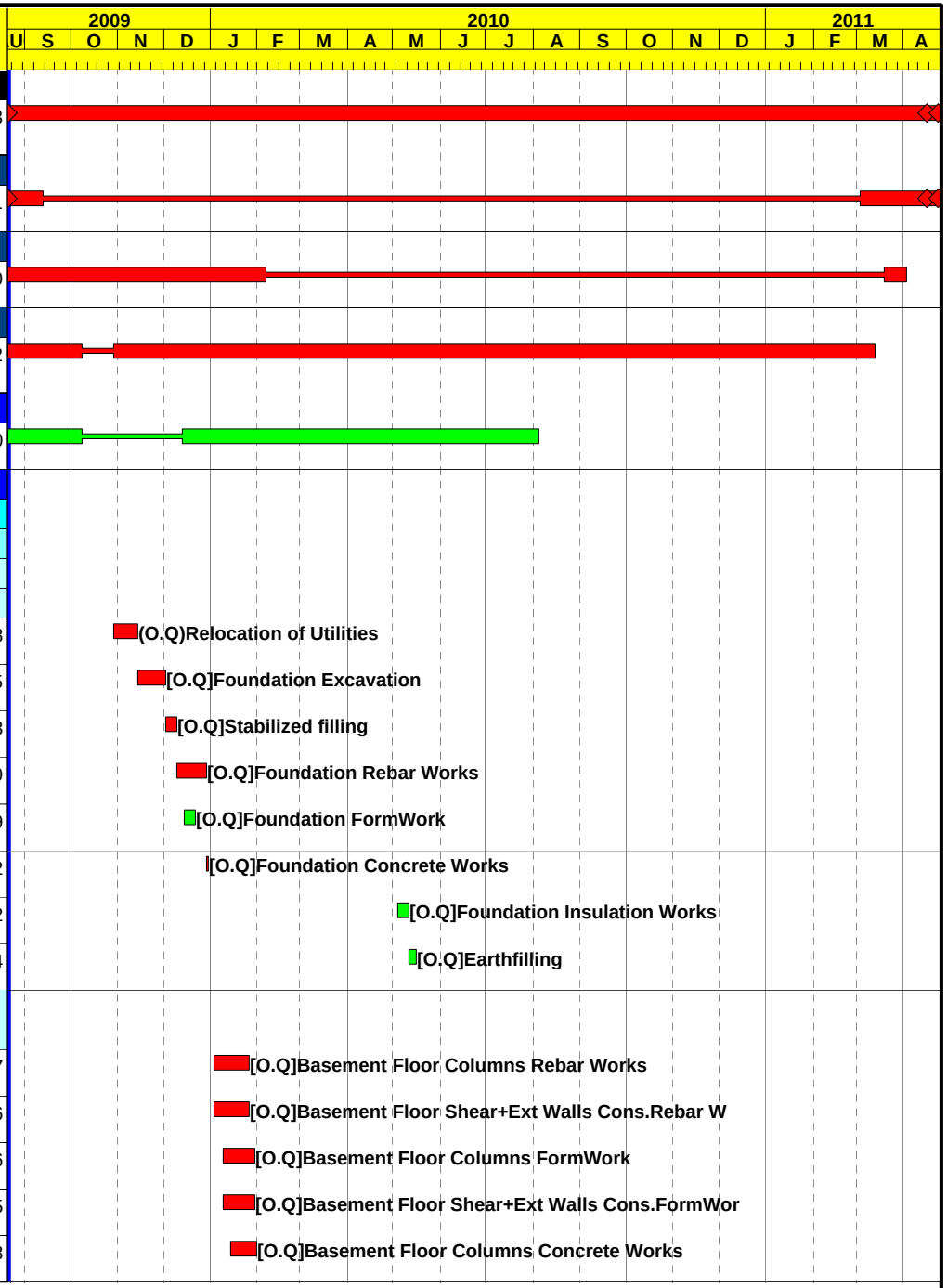
Activity ID	Activity Description	Orig Dur	Start	Finish	Total Float	Budgeted Cost
W917-PM-09-C-0999						
Total		611	21AUG09	23APR11	0	26,926,173
+ Mobilization/Demobilization						
		611	21AUG09	23APR11	0	650,001
+ Design Costs						
		590	21AUG09	02APR11	0	907,500
Unaccompanied Officer's Quarters						
Subtotal		570	21AUG09	13MAR11	0	10,587,992
+ Procurement						
		349	21AUG09	04AUG10	186	0
Construction						
Buildings						
UOQ Building						
Foundations						
Basement						
000605	(O.Q)Relocation of Utilities	15	30OCT09	13NOV09	0	31,438
000610	[O.Q]Foundation Excavation	15	14NOV09	02DEC09	0	101,665
000620	[O.Q]Stabilized filling	7	03DEC09	09DEC09	0	23,423
000740	[O.Q]Foundation Rebar Works	20	10DEC09	29DEC09	0	120,650
000750	[O.Q]Foundation FormWork	7	15DEC09	21DEC09	8	46,079
000760	[O.Q]Foundation Concrete Works	1	30DEC09	30DEC09	0	58,922
000770	[O.Q]Foundation Insulation Works	7	04MAY10	10MAY10	3	92,592
000630	[O.Q]Earthfilling	5	11MAY10	15MAY10	29	15,234
Superstructure						
Basement						
000780	[O.Q]Basement Floor Columns Rebar Works	20	03JAN10	26JAN10	0	42,087
000810	[O.Q]Basement Floor Shear+Ext Walls	20	03JAN10	26JAN10	0	56,116
000790	[O.Q]Basement Floor Columns FormWork	18	09JAN10	29JAN10	0	56,116
000820	[O.Q]Basement Floor Shear+Ext Walls	18	09JAN10	29JAN10	0	70,145
000800	[O.Q]Basement Floor Columns Concrete	15	14JAN10	30JAN10	0	28,058



Start Date	21AUG09
Finish Date	23APR11
Data Date	21AUG09
Run Date	23FEB10 17:11

Current
Progress Bar
Critical Activity

NB13

XYZ Company

Sheet 1 of 39

W917-PM-09-C-0999
Sample Project for Section 01321

Cost Report by CLIN

Date	Revision	Checked	Approved

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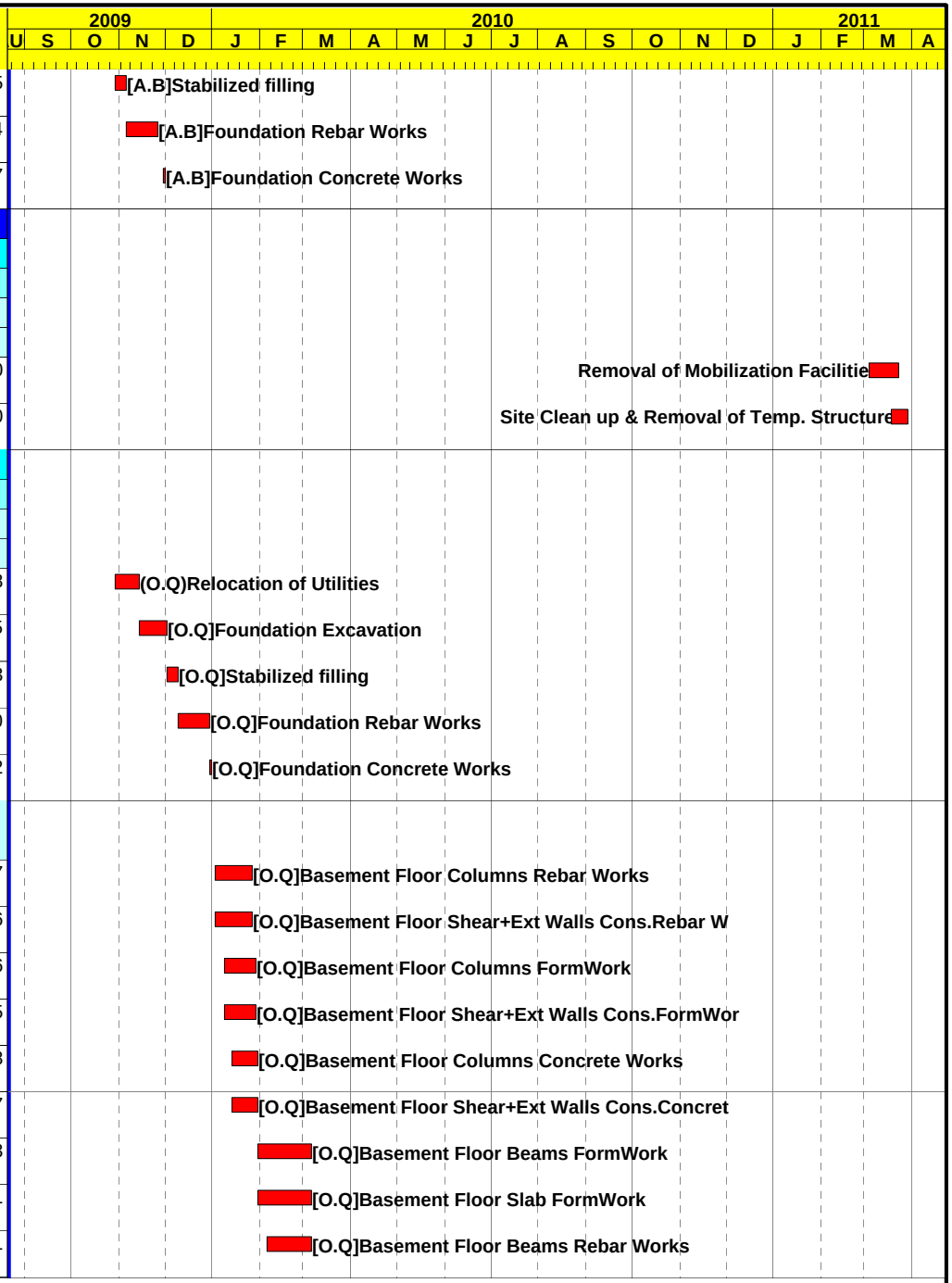
Activity ID	Activity Description	Orig Dur	Start	Finish	Total Float	Budgeted Cost
002720	[A.B]Stabilized filling	7	30OCT09	05NOV09	0	33,195
002840	[A.B]Foundation Rebar Works	20	06NOV09	25NOV09	0	126,914
002860	[A.B]Foundation Concrete Works	1	30NOV09	30NOV09	0	50,457
Construction						
Mob/Demob						
Demobilization						
000280	Removal of Mobilization Facilities	20	04MAR11	23MAR11	0	48,000
000290	Site Clean up & Removal of Temp. Structures	10	19MAR11	28MAR11	0	18,500
Buildings						
UOQ Building						
Foundations						
Basement						
000605	(O.Q)Relocation of Utilities	15	30OCT09	13NOV09	0	31,438
000610	[O.Q]Foundation Excavation	15	14NOV09	02DEC09	0	101,665
000620	[O.Q]Stabilized filling	7	03DEC09	09DEC09	0	23,423
000740	[O.Q]Foundation Rebar Works	20	10DEC09	29DEC09	0	120,650
000760	[O.Q]Foundation Concrete Works	1	30DEC09	30DEC09	0	58,922
Superstructure						
Basement						
000780	[O.Q]Basement Floor Columns Rebar Works	20	03JAN10	26JAN10	0	42,087
000810	[O.Q]Basement Floor Shear+Ext Walls Cons.Rebar W	20	03JAN10	26JAN10	0	56,116
000790	[O.Q]Basement Floor Columns FormWork	18	09JAN10	29JAN10	0	56,116
000820	[O.Q]Basement Floor Shear+Ext Walls Cons.FormWor	18	09JAN10	29JAN10	0	70,145
000800	[O.Q]Basement Floor Columns Concrete Works	15	14JAN10	30JAN10	0	28,058
000830	[O.Q]Basement Floor Shear+Ext Walls Cons.Concret	15	14JAN10	30JAN10	0	42,087
000840	[O.Q]Basement Floor Beams FormWork	30	31JAN10	05MAR10	0	44,893
000870	[O.Q]Basement Floor Slab FormWork	30	31JAN10	05MAR10	0	72,951
000850	[O.Q]Basement Floor Beams Rebar Works	26	06FEB10	06MAR10	0	39,281



Start Date	21AUG09
Finish Date	23APR11
Data Date	21AUG09
Run Date	23FEB10 17:15

Current
Progress Bar
Critical Activity

NB13

XYZ Company

Sheet 2 of 8

W917-PM-09-C-0999
Sample Project for Section 01321

Critical Path Report

Date	Revision	Checked	Approved

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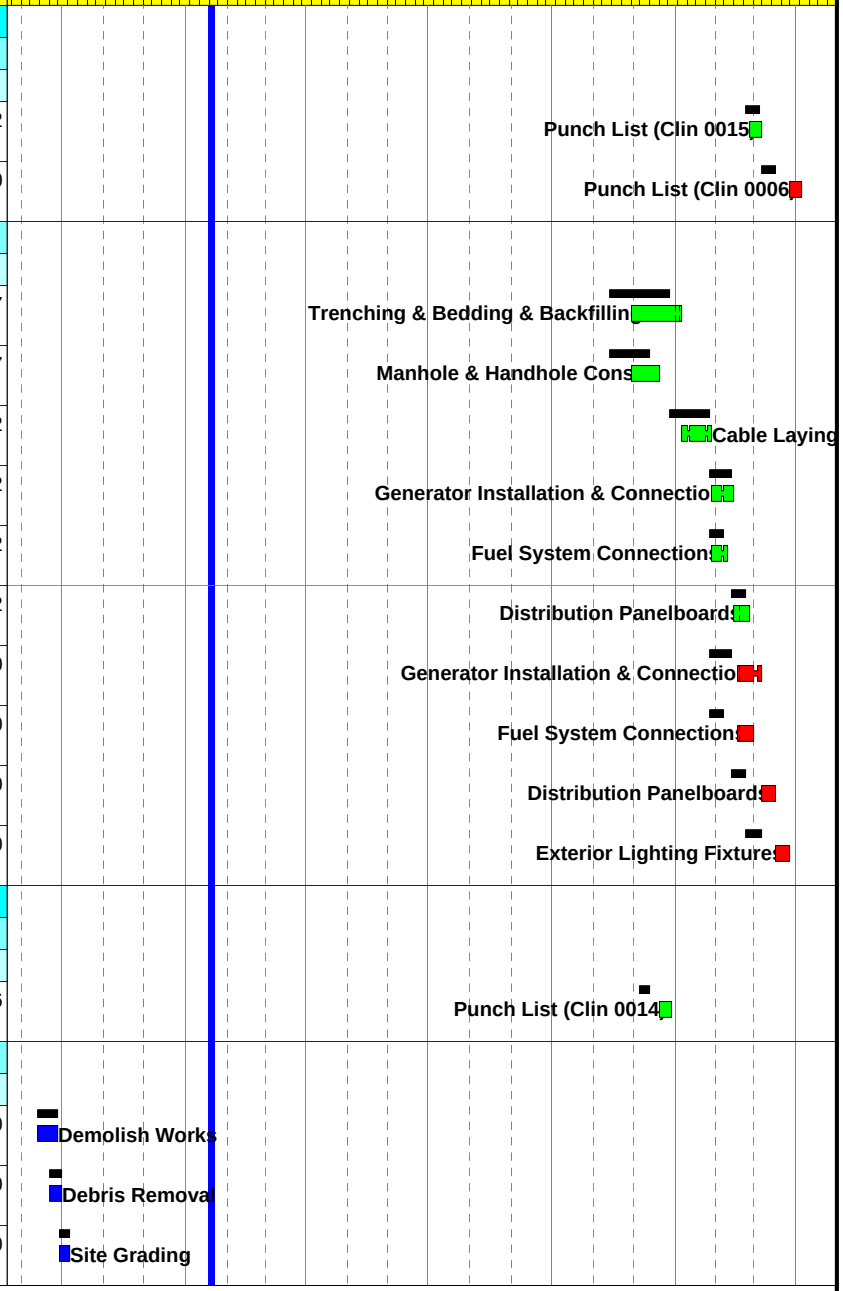
Activity ID	Activity Description	Orig Dur	Rem Dur	Start	Finish	% Comp	Total Float	BL Var Start	BL Var Finish
Power									
Punchlists & Inspections									
009270	Punch List (Clin 0015)	10	10	25FEB11	06MAR11	0	20	-2	-2
005210	Punch List (Clin 0006)	10	10	27MAR11	05APR11	0	-10	-20	-20
005140	Trenching & Bedding & Backfilling	35	35	30NOV10	05JAN11	0	8	-17	-7
005200	Manhole & Handhole Cons.	20	20	30NOV10	19DEC10	0	23	-17	-7
005150	Cable Laying	20	20	06JAN11	28JAN11	0	8	-7	-2
009240	Generator Installation & Connection	15	15	29JAN11	13FEB11	0	18	-2	-2
009260	Fuel System Connections	10	10	29JAN11	08FEB11	0	23	-2	-2
009250	Distribution Panelboards	10	10	14FEB11	24FEB11	0	18	-2	-2
005160	Generator Installation & Connection	15	15	17FEB11	06MAR11	0	-10	-20	-20
005170	Fuel System Connections	10	10	17FEB11	27FEB11	0	-5	-20	-20
005180	Distribution Panelboards	10	10	07MAR11	16MAR11	0	-10	-20	-20
005190	Exterior Lighting Fixtures	10	10	17MAR11	26MAR11	0	-10	-20	-20
Punchlists & Inspections									
009160	Punch List (Clin 0014)	8	8	21DEC10	28DEC10	0	87	-16	-16
005710	Demolish Works	15	0	13SEP09A	27SEP09A	100		0	0
005720	Debris Removal	10	0	21SEP09A	30SEP09A	100		0	0
005730	Site Grading	7	0	29SEP09A	05OCT09A	100		0	0



Start Date	21AUG09
Finish Date	01JUN11
Data Date	20JAN10
Run Date	23FEB10 17:27

Baseline
Current
Progress Bar
Critical Activity

NC02

Sheet 12 of 46

XYZ Company

W917PM-09-C-0999

Project Schedule

Date	Revision	Checked	Approved

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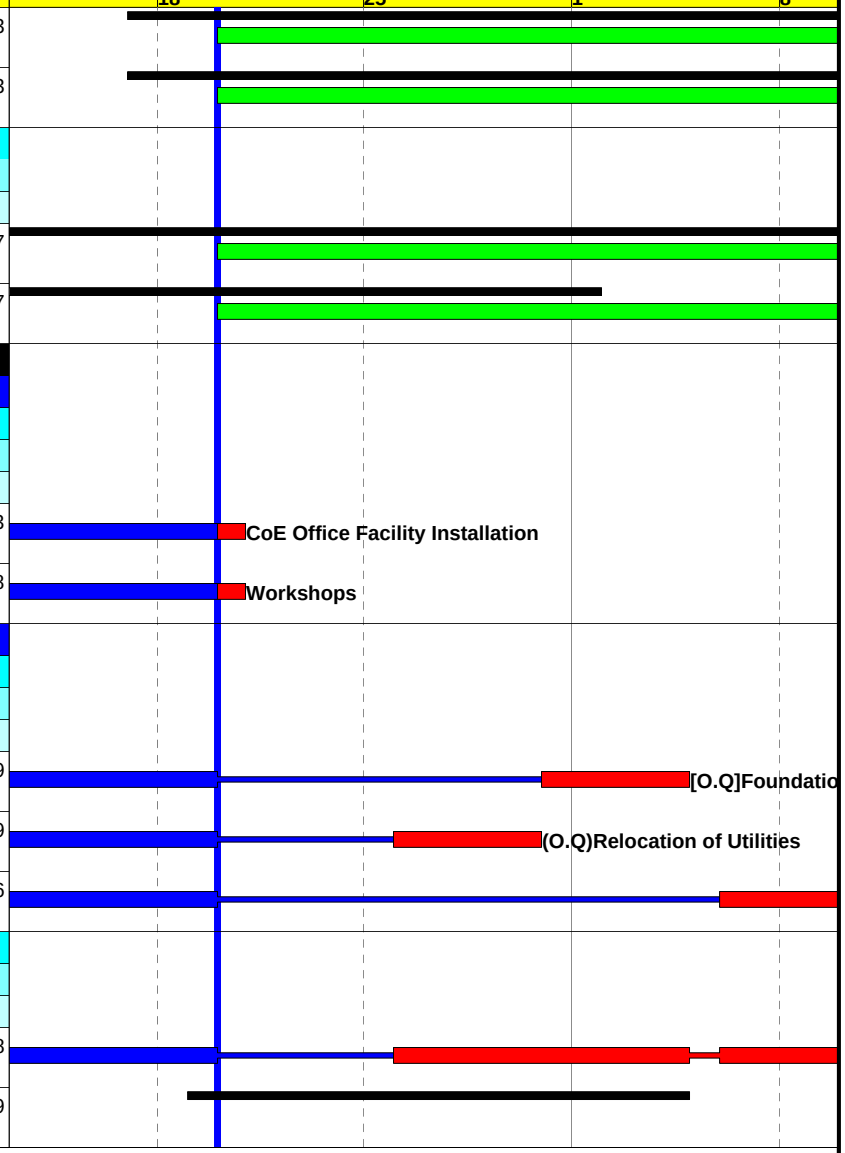
Activity ID	Activity Description	Orig Dur	Rem Dur	Start	Finish	% Comp	Total Float	BL Var Start	BL Var Finish
007895	[V.M]Vinyl & Carpeting Material Procurement and	90	90	20JAN10	19APR10	0	321	-3	-3
007885	[V.M]Ceramic & Terrazo Material Procurement and	60	60	20JAN10	20MAR10	0	336	-3	-3
004910	Building Inf.Sys. Material Transmittals Submissi	45	45	20JAN10	05MAR10	0	8	-17	-17
005810	IDS Transmittals Submission	30	30	20JAN10	18FEB10	0	148	-17	-17
Construction									
Mob/Demob									
Mobilization									
000250	CoE Office Facility Installation	10	1	26NOV09A	20JAN10	85	-42	-92	-133
000270	Workshops	7	1	29NOV09A	20JAN10	90	-39	-92	-138
Buildings									
UOQ Building									
Foundations									
Basement									
000610	[O.Q]Foundation Excavation	15	5	14NOV09A	04FEB10	50	-39	0	-59
000605	(O.Q)Relocation of Utilities	15	5	30NOV09A	30JAN10	60	-39	-27	-69
000620	[O.Q]Stabilized filling	7	4	10JAN10A	09FEB10	40	-39	-36	-56
Admin-SS Building									
Superstructure									
Basement									
002920	[A.B]Basement Floor Shear+Ext Walls Cons.FormWor	18	15	08JAN10A	10FEB10	50	-35	-26	-38
002960	[A.B]Basement Floor Beams Concrete Works	15	15	10FEB10	25FEB10	0	-17	-19	-19



Start Date	21AUG09
Finish Date	01JUN11
Data Date	20JAN10
Run Date	23FEB10 17:41

Baseline
Current
Progress Bar
Critical Activity

NC02

Sheet 4 of 4

XYZ Company

W917PM-09-C-0999

3-Week Look Ahead Report

Date	Revision	Checked	Approved

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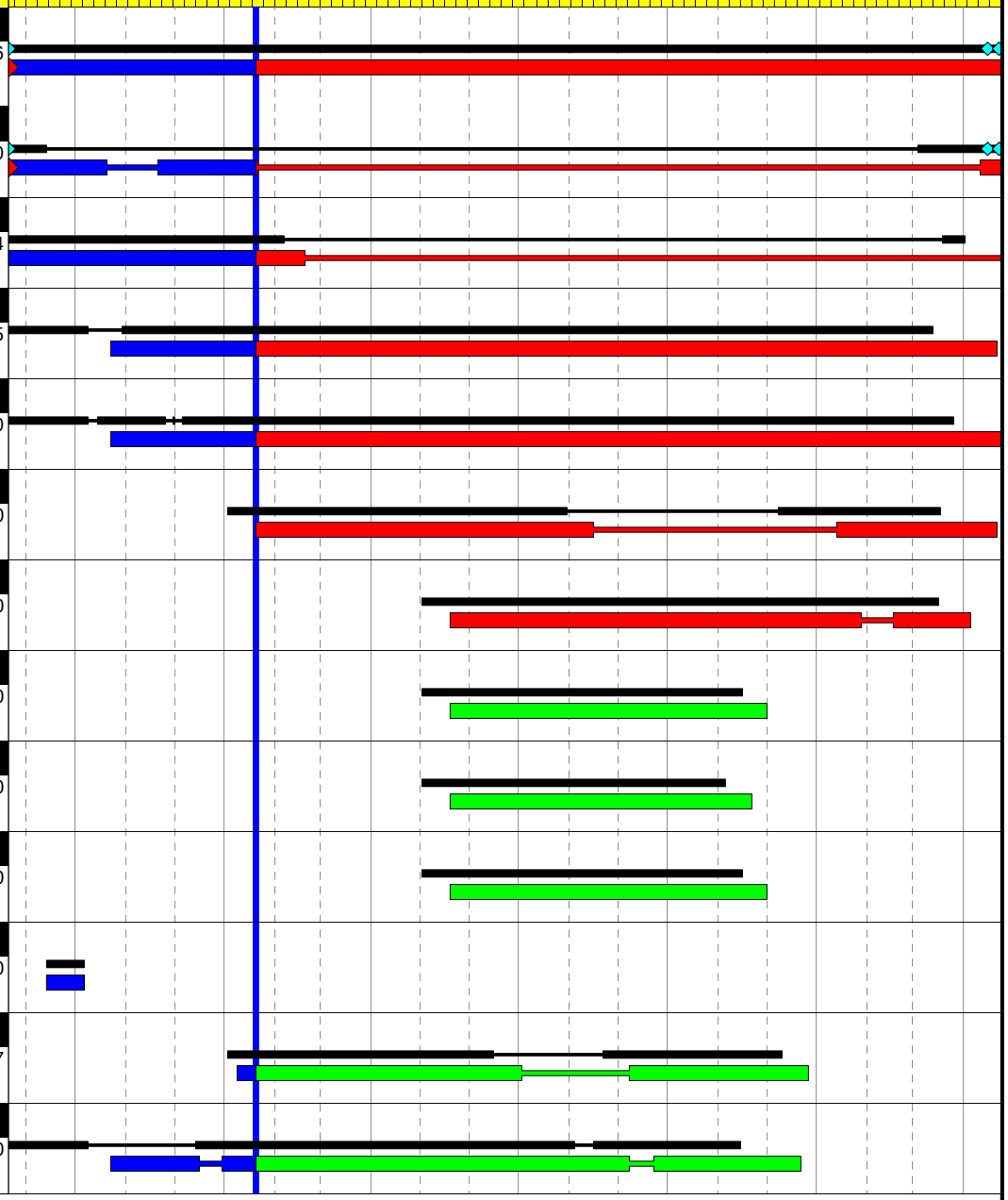
Activity ID	Activity Description	Budgeted Cost	% Comp	Earned value cost (BCWP)
NC02 W917PM-09-C-0999				
Total		26,926,172	8	2,204,696
+ 0001 Mobilization/Demobilization				
		650,000	87	564,480
+ 0002 Design Costs				
		907,500	88	797,834
+ 0003 Unaccompanied Officer's Quarters				
		10,587,992	1	117,125
+ 0004 Administrative Support Facilities				
		9,598,809	7	649,550
+ 0005 Building Information Systems				
		774,308	0	0
+ 0006 Electrical Distribution Systems				
		1,506,103	0	0
+ 0007 Water Distribution System				
		80,885	0	0
+ 0008 Sewer Collection System				
		82,279	0	0
+ 0009 Storm Drainage System				
		53,538	0	0
+ 0010 Site Improvements and Demolition				
		48,750	100	48,750
+ 0011 Information Distribution Systems				
		176,765	15	26,957
+ 0012 Dining Facility-OPTION				
		874,962	0	0



Start Date	21AUG09
Finish Date	01JUN11
Data Date	20JAN10
Run Date	23FEB10 17:55

Baseline
Current
Progress Bar
Critical Activity

NC02 Sheet 1 of 2

XYZ Company

W917PM-09-C-0999

Earned Value Report

Date	Revision	Checked	Approved

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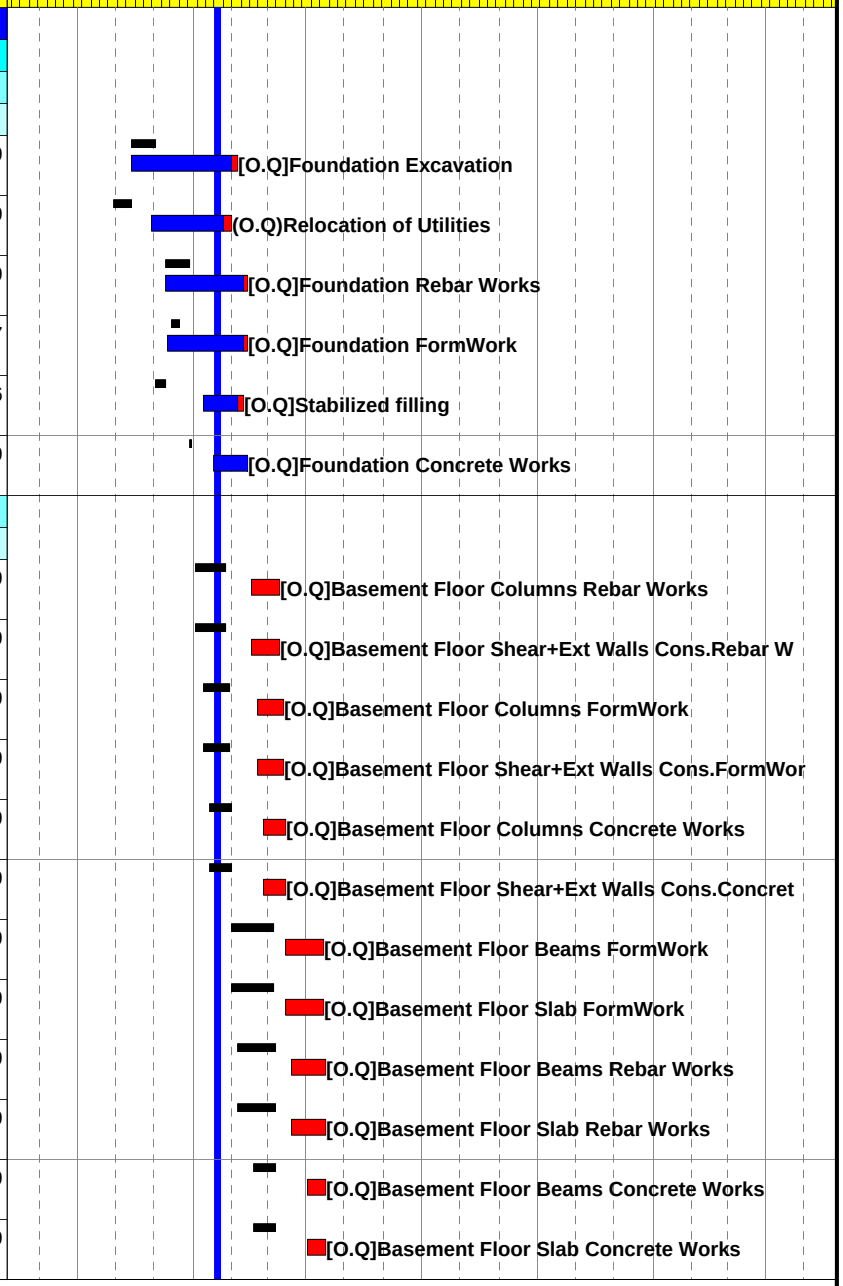
Activity ID	Activity Description	Orig Dur	Rem Dur	Start	Finish	% Comp	Total Float	BL Var Start	BL Var Finish
Buildings									
UOQ Building									
Foundations									
Basement									
000610	[O.Q]Foundation Excavation	15	5	14NOV09A	04FEB10	50	-39	0	-59
000605	(O.Q)Relocation of Utilities	15	5	30NOV09A	30JAN10	60	-39	-27	-69
000740	[O.Q]Foundation Rebar Works	20	3	10DEC09A	12FEB10	20	-39	0	-39
000750	[O.Q]Foundation FormWork	7	3	12DEC09A	12FEB10	20	-39	3	-47
000620	[O.Q]Stabilized filling	7	4	10JAN10A	09FEB10	40	-39	-36	-56
000760	[O.Q]Foundation Concrete Works	1	1	17JAN10A	13FEB10	8	-39	-15	-39
Superstructure									
Basement									
000780	[O.Q]Basement Floor Columns Rebar Works	20	20	16FEB10	10MAR10	0	-39	-39	-39
000810	[O.Q]Basement Floor Shear+Ext Walls Cons.Rebar W	20	20	16FEB10	10MAR10	0	-39	-39	-39
000790	[O.Q]Basement Floor Columns FormWork	18	18	22FEB10	13MAR10	0	-39	-39	-39
000820	[O.Q]Basement Floor Shear+Ext Walls Cons.FormWor	18	18	22FEB10	13MAR10	0	-39	-39	-39
000800	[O.Q]Basement Floor Columns Concrete Works	15	15	26FEB10	14MAR10	0	-39	-39	-39
000830	[O.Q]Basement Floor Shear+Ext Walls Cons.Concret	15	15	26FEB10	14MAR10	0	-39	-39	-39
000840	[O.Q]Basement Floor Beams FormWork	30	30	15MAR10	14APR10	0	-39	-39	-39
000870	[O.Q]Basement Floor Slab FormWork	30	30	15MAR10	14APR10	0	-39	-39	-39
000850	[O.Q]Basement Floor Beams Rebar Works	26	26	20MAR10	15APR10	0	-39	-39	-39
000880	[O.Q]Basement Floor Slab Rebar Works	26	26	20MAR10	15APR10	0	-39	-39	-39
000860	[O.Q]Basement Floor Beams Concrete Works	15	15	02APR10	16APR10	0	-39	-39	-39
000890	[O.Q]Basement Floor Slab Concrete Works	15	15	02APR10	16APR10	0	-39	-39	-39



Start Date	21AUG09
Finish Date	01JUN11
Data Date	20JAN10
Run Date	23FEB10 17:46

Baseline
Current
Progress Bar
Critical Activity

NC02

Sheet 2 of 5

XYZ Company

W917PM-09-C-0999

Critical Path Report

Date	Revision	Checked	Approved

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CEMP-CE Regulation No. 1-1-11	Department of the Army U.S. Army Corps of Engineers Washington, DC 20314-1000	ER 1-1-11 15 Jun 95
	Administration PROGRESS, SCHEDULES, AND NETWORK ANALYSIS SYSTEMS	
	Distribution Restriction Statement Approved for public release; distribution is unlimited.	

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, D.C. 20314-1000

ER 1-1-11

CEMP-CE
CECW-OC

Regulation
ER 1-1-11

15 June 1995

Administration

PROGRESS, SCHEDULES, AND NETWORK ANALYSIS SYSTEMS

1. Purpose. This regulation states the policy on the use of any of the various schedule management methods. The basic regulation provides general policy relative to the use of the various systems (bar charts, network analysis etc.) as well as administration of contract provisions. If this ER conflicts with the Federal Acquisition Regulations or any of its supplements, they shall govern over the ER.

2. Applicability. This regulation is applicable to all USACE commands.

3. References.

a. FAR 52.236-15.

b. DOD FAR Supplement 236.273

c. EP 415-1-4

d. CEGS 01310

4. Policy. Obtaining quality construction on time and within budget is a primary goal of the U.S. Army Corps of Engineers. In order to manage the time specified for the accomplishment of a project, a schedule is required on construction contracts by references 3.a. & 3.b. The contractor is responsible for scheduling the work and progress so that the contract completion date is met. The Administrative Contracting Officers (ACO) monitors the contractor's schedule to assure compliance. If a schedule is not provided, the Contracting Officer may withold progress payments per paragraph (a) of reference 3.a. If actual progress fails to meet the schedule, the Contracting Officer shall take appropriate actions to assure compliance with the progress of the work. Therefore, the schedule is vital to effective construction management by the contractor and the Government. Reference 3.d. allows the District Technical Staff to choose the type of contract schedule during the design phase. Bar charts can be used to manage simple jobs. When by its nature a construction project or other effort is complex with many interrelated activities, a network schedule may be the most effective tool for analyzing progress, projecting completion, and

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This regulation supersedes ER 1-1-11, dated 15 March 1990.

calculating payment commensurate with actual progress. The determination of applicability of network scheduling is the responsibility of the Contracting Officer. When determined to be applicable, network schedules must be carefully specified, updated regularly, and used effectively. Standard data exchange format shall be used to monitor a contractor's schedule when the contractor and the Government operate on different programs.

5. Description of the System. A network schedule requires first a logic diagram graphically depicting the sequence and interdependence of the work. It can be drawn in either the precedence or arrow diagram format, but it must accurately represent the intended work sequence and indicate actual constraints. Details of diagramming techniques are contained in Reference 3.c. Network Analysis System Guide. Once the logic diagram is made, an analysis is required which calculates early and late start and finish dates for the activities as well as the spare time or float available to accomplish the activity. Resource data such as cost and responsibility may be entered for activities also. Once calculated, these results can be ordered in different arrangements or sorts and compiled into specific reports for management purposes. Actual progress must be entered once work commences. Based on this progress, revised start and finish dates, and progress payment can be calculated.

6. Use of the System.

a. Network Analysis System (NAS), being a management control tool, may be applied to many aspects of the work by the Corps of Engineers. It can be employed profitably in the management of in-house operations such as engineering and design, and life cycle project management. A comprehensive life cycle analysis of a major civil works project should include, but not be limited to, activities for preparation of design memos and environmental impact statements, real estate planning and acquisition, preparation of plans and specifications, reservoir clearing, advertising and/or negotiation for construction, relocation and recreation contracts. Annual funding forecasts can be derived from early and late finish sorts of the analysis if costs have been assigned to each activity. Analysis can be used to set construction time prior to advertisement or select alternative contracting methods when user requirements preclude the use of sealed bidding.

b. Construction schedules after contract award should be contractor prepared in order to involve the contractor in the actual planning. Updates of actual progress should also have contractor participation as well as Government concurrence since

the resultant analysis will project early or late contract accomplishment and progress payment due. Changes to the work and occurrences which impact progress must be entered in the schedule logic in order to keep the schedule up to date, to reflect actual job progress, to determine where the contractor must accelerate to regain the schedule when behind due to his/her own actions, and to determine the impact and effect of Government actions on the contractor in order to provide equitable adjustments to the contract time as required.

7. Contract Administration.

a. When the Contracting Officer has determined that NAS will be specified for use on a construction contract, the provision of the specifications must be carefully edited for the specific job. Reference 3.d. CEGS 01310, contains numerous notes indicating where such editing can be done. This editing is not only permissible, but is also mandatory.

b. The contractor should submit his/her NAS within the time required by the specifications. The schedule must be verified as being logical and the completion dates attainable. Failure to enforce this requirement is highly detrimental to project management. Partial payments cannot be processed until an acceptable NAS schedule has been submitted. The Contracting Officer may not allow work to start nor make partial payments until an acceptable schedule (interim or final) is received and approved. Once approved, the schedule must be maintained up to date with regard to job progress and changes. Failure to maintain job progress is fatal to effective schedule management.

c. Reference 3.d. is a guide specification for a contractor prepared NAS. This provision serves as an example of the authorization of reference 3b. Specific contract requirements will dictate how this provision is edited.

d. Appendix A contains the Standard Data Exchange Format specification. This format should be specified and used to transfer contract schedule data between different contractor and Government NAS programs.

8. Implementation. NAS can be a valuable tool in both Corps life cycle project management and contract administration. NAS schedule data can be used to project contract completion, schedule Government actions, incorporate changes and occurrences during execution of the contract, analyze their effect on the contract completion, and arrive at equitable adjustments. The following actions should be implemented to assure effective management by use of NAS where it is selected and specified:

a. Assure that appropriate Government personnel at all levels are adequately trained in the use of NAS. Basic training is available through the HQUSACE Construction Training Program.

b. Carefully edit CEGS 01310 to fit job requirements. When necessary, transfer of data should be accomplished by inclusion of a technical provision for standard data exchange format when the contractor and the Government use different programs. The Government should not dictate a proprietary system.

c. After receipt, promptly and carefully review the submission of the NAS. A conference type review with the contractor is effective. Verify the schedule logic, contract conformance, and approve or disapprove the schedule promptly.

d. Enforce all contract clauses and provisions for submission, updating, reporting, and payments, and insist upon the ACO's approval of all input data prior to updating. Failure to maintain an accurately updated schedule will undermine all attempts to manage the schedule properly.

e. Include submittals, approvals, etc in the schedule.

f. At the time notice-to-proceed is given for a change order, promptly incorporate the logic changes in the network. Analysis of the effect of changes on the schedule will provide the basis for equitable time extensions of the contract.

g. When work is delayed by causes beyond the contractor's control, the contractor is obligated to notify the ACO within 10 days of the beginning of the delay. The ACO is then obligated to ascertain the facts, establish the extent of the delay, and extend the contract time when justified. These determinations can be made only if the schedule is accurately updated.

h. Avoid specifying proprietary computer programs. Contractors should be encouraged to prepare their own analysis in lieu of hiring consultants to plan and update their schedules.

FOR THE COMMANDER:

James D. Craig

1 Appendix
APP A - Standard Data Exchange Format specification

JAMES D. CRAIG
Colonel, Corps of Engineers
Chief of Staff

STANDARD DATA EXCHANGE FORMAT SPECIFICATION

PART 1- GENERAL

1. Application of This Provision: The Standard Data Exchange Format (SDEF) provides a non-proprietary protocol to exchange project planning and progress data between scheduling systems.

2. File Type and Format: The data file shall consist of a 132 character, freed format, "ASCII" file. Text shall be left-justified and numbers shall be right-justified in each field. Data records must conform, exactly, to the sequence, column position, maximum length, mandatory values, and field definitions described below to comply with the SDEF. Unless specifically stated, all numbers shall be whole numbers. Fields containing numbers shall not be zero filled. All data columns shall be separated by a single blank column. The file shall not contain blank lines.

3. Usage Notes: Where appropriate, notes regarding proper usage of systems to support the SDEF have been included in brackets ([ ]). These notes are included to assist users in creating SDEF-compatible files, given the variety of software systems that support the SDEF.

4. Recommended Systems: Several systems have been tested to determine the accuracy of importing and exporting SDEF files. For information on the current list of recommended systems, please contact Mr. Stan Green at HQUSACE, (202) 761-0206. Although the currently listed system have been tested other systems may also be acceptable provided those systems correctly import and export SDEF files.

5. SDEF Checker Program: A program that checks whether a file meets the SDEF is available free of charge. A copy of this program may be obtained by written request to: U.S. Army Corps of Engineers, ATTN: Mr. Bill East (CECER-FFA), P.O. Box 9005, Champaign, IL 61826-90005. A description of the SDEF Checker is also available on the Internet and CivilNet.

PART 2- SDEF SPECIFICATION

6. SDEF Organization: The SDEF shall consist of the following records provided in the exact sequence shown below:

Paragraph Reference	Record Description	Remarks
6.a	Volume Record	Mandatory First Line of File
6.b	Project Record	Mandatory Second Line of File
6.c	Calendar Record(s)	Mandatory One Record Minimum
6.d	Holiday Record(s)	Mandatory if Holidays Used
6.e	Activity Record(s)	Mandatory Records
6.f	Precedence Record(s)	Mandatory for Precedence
6.g	Unit Cost Record(s)	Mandatory for Unit Costs
6.h	Progress Record(s)	Mandatory Records
6.i	File End Record	Mandatory Last Line of Disk/File

6.a. Volume Record: The Volume Record shall be used to control the transfer of data that may not fit on a single disk. The first line in every file used to store SDEF data shall be the Volume Record. The Volume Record shall sequentially identify the number of the data transfer disk(s). The Volume Record shall have the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1 - 4	4	VOLM	Fixed	Filled
DISK NUMBER	6 - 7	2	√	Number	Right Justified

6.a.(l) The RECORD IDENTIFIER is the first four characters of this record. The required value for this field shall be "VOLM". The VOLM record must appear on the first line of the SDEF data file.

6.a.(2) The DISK NUMBER field shall identify the number of the data disk used to store the data exchange information. If all data may be contained on a single disk, this field shall contain the value of "l". If more disks are required, then the second disk shall contain the value "2", the third disk shall be designated with a "3", and so on. Identifcation of the last data disk is accomplished in the Reject End Record.

6.b. Project Record: The Project Identifier Record shall contain general project information. Because more than one SDEF file may be required for data transfer between large projects, the PROJ record shall be the second line of the first SDEF file transferred. The PROJ record shall contain information in the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1- 4	4	PROJ	Fixed	Filled
DATA DATE	6- 12	7	√	ddmmmyy	Filled
PROJECT IDENTIFIER	14-17	4	√	Alpha.	Left Justified
PROJECT NAME	19-66	48	√	Alpha.	Left Justified
CONTRACTOR NAME	68-103	36	√	Alpha.	Left Justified
ARROW OR PRECEDENCE	105-105	1	A,P	Fixed	Filled
CONTRACT NUMBER	107-112	6	√	Alpha.	Left Justified
PROJECT START	114-120	7	√	ddmmmyy	Filled
PROJECT END	122-128	7	√	ddmmmyy	Filled

6.b.(1) The RECORD IDENTIFIER is the first four characters of this record. The required value for this field shall be "PROJ". This record shall contain the general project information and indicates which scheduling method shall be used.

6.b.(2) The DATA DATE is the date of the schedule calculation. The abbreviation "ddmmmyy" refers to a date format that shall translate a date into two numbers for the day, three letters for the month, and two numbers for the year. For example, March 1, 1999 shall be translated into 01Mar99. This same convention for date formats shall be used throughout the entire data format. To ensure that dates are translated consistently, the following abbreviations shall be used for the three character month code:

Abbreviation	Month
JAN	January
FEB	February
MAR	March
APR	April
MAY	May
JUN	June
JUL	July
AUG	August
SEP	September
OCT	October
NOV	November
DEC	December

6.b.(3) The PROJECT IDENTIFIER is a maximum four character abbreviation for the schedule. These four characters shall be used to uniquely identify the project and specific update as agreed upon by Contractor and Contracting Officer. When utilizing scheduling software these four characters shall be used to select the project. Software manufacturers shall provide information to users to ensure that data importing programs do not automatically overwrite other schedules with the same PROJECT IDENTIFIER.

6.b.(4) The PROJECT NAME field shall contain the name and location of the project edited to fit the space provided. The data appearing here shall appear on scheduling software reports. The abbreviation "Alpha." refers to an "Alphanumeric" field value and shall be used throughout the remainder of this specification.

6.b.(5) The CONTRACTOR NAME field shall contain the Construction Contractor's name, edited to fit the space provided.

6.b.(6) The ARROW OR PRECEDENCE field shall indicate which method shall be used for calculation of the schedule. The value "A" shall signify the Arrow Diagramming Method. The value "P" shall signify the Precedence Diagramming Method. The ACTIVITY ID field of the Activity Record shall be interpreted differently depending on the value of this field. The Precedence Record shall be required if the value of this field is "P". [Usage note: software systems may not support both arrow and precedence diagramming. It is recommended that the selection of the type of network be based on the capabilities of the software used by project partners.]

6.b.(7) The CONTRACT NUMBER field shall contain the contract number for the project. For example, the construction contract number DACA85-89-C-0001 shall be entered into this field as "890001".

6.b.(8) The PROJECT START field shall contain the date that the Contractor acknowledges the Notice to Proceed (NTP). [Usage note: Software systems may use a project start date to constrain the first activity of a network. To ensure consistent scheduling calculations across products, it is recommended that the first activity in the schedule contain an EARLY START constraint and a software system's PROJECT START date only be used to report on the project's start date.]

6.b.(9) The PROJECT END field shall contain the date that the Contractor plans to complete the work as approved by the Contracting Officer. [Usage note: software systems may use a project end date to constrain the last activity of a network. To ensure consistent scheduling calculations across products, it is recommended that the last activity in the schedule contain an EARLY START constraint and a software system's PROJECT END date only be used to report on the project's end date.]

6.c. Calendar Record: The Calendar Record(s) shall follow the Project Identifier Record in the first disk of data transferred. A minimum of one Calendar Record shall be required for all data exchange activity files. The format for the Calendar Record shall be as follows:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1 - 4	4	CLDR	Fixed	Filled
CALENDAR CODE	6 - 6	1	√	Alpha.	Filled
WORKDAYS	8 - 14	7	SMTWTFS	Fixed	Filled
CALENDAR DESCRIPTION	16-45	30	√	Alpha.	Left Justified

6.c.(1) The RECORD IDENTIFIER shall always begin with "CLDR" to identify it as a Calendar Record. Each Calendar Record used shall have this identification in the first four columns. [Usage note: Systems contain a variety of calendar options. It is recommended that the least common denominator of calendar features between the systems be used as the basis for creating the SDEF file for a given project.]

6.c.(2) The CALENDAR CODE shall be used in the activity records to signify that this calendar is associated with the activity. [Usage note: Some systems do not allow for alphanumeric CALENDAR CODES, but only allow positive integers from 1 to 9. It is recommended that only positive integers be used for the CALENDAR CODE field to support the widest variety of scheduling systems.]

6.c.(3) The WORKDAYS field shall contain the work-week pattern selected with "Y", for Yes, and "N", for No. The first character shall be Sunday and the last character Saturday. An example of a typical five (5) day work-week would be NYYYYYN. A seven (7) day work-week would be YYYYYYY.

6.c.(4) The CALENDAR DESCRIPTION shall be used to briefly describe the calendar used.

6.d. Holiday Record: The Holiday Record(s) shall follow the Calendar Record(s) in the first disk of data transferred. There may be calendars without any holidays designated or several Holiday Records for each Calendar Record(s). The format for the Holiday Record shall be as follows:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1 - 4	4	HOLI	Fixed	Filled
CALENDAR CODE	6 - 6	1	√	Alpha.	Filled
HOLIDAY DATE	8 - 14	7	√	ddmmmyy	Filled
HOLIDAY DATE	16-22	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	24-30	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	32-38	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	40-46	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	48-54	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	56-62	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	64-70	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	72-78	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	80-86	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	88-94	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	96-102	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	104-110	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	112-118	7	-	ddmmmyy	May be Filled
HOLIDAY DATE	120-126	7	-	ddmmmyy	May be Filled

6.d.(1) The RECORD IDENTIFIER shall always begin with "HOLI". Each Holiday Record used shall have this identification in the first four columns.

6.d.(2) The CALENDAR CODE indicates which work-week calendar the holidays shall be applied to. More than one HOLI record may be used for a given CALENDAR CODE.

6.d.(3) The HOLIDAY DATE shall contain the date of each individual non-work day.

6.e. Activity Records: Activity Records shall follow any Holiday Record(s). If there are no Holiday Record(s), then the Activity Records shall follow the Calendar Record(s). There shall be one Activity Record for every activity in the network. Each activity shall have one record in the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1-4	4	ACTV	Fixed	Filled
ACTIVITY ID	6-15	10	√	Integer	See Comment Below
ACTIVITY DESCR.	17-46	30	√	Alpha.	Left Justified
ACTIVITY DURATION	48-50	3	√	Integer	Right Justified
CONSTRAINT DATE	52-58	7		ddmmmyy	May be Filled
CONSTRAINT TYPE	60-61	2		ES or LF	May be Filled
CALENDAR CODE	63-63	1	√	Alpha.	Filled
HAMMOCK CODE	65-65	1	Y, blank	Fixed	May be Filled
WORKERS PER DAY	67-69	3		Integer	Right Justified
RESPONSIBILITY CODE	71-74	4		Alpha.	Left Justified
WORK AREA CODE	76-79	4		Alpha.	Left Justified
MOD OR CLAIM NO.	81-86	6		Alpha.	Left Justified
BID ITEM	88-93	6		Alpha.	Left Justified
PHASE OF WORK	95-96	2		Alpha.	Left Justified
CATEGORY OF WORK	98-98	1		Alpha.	May be Filled
FEATURE OF WORK	100-128	30		Alpha.	Left Justified

6.e.(1) The RECORD IDENTIFIER for each activity description record must begin with the four character "ACTV" code. This field shall be used for both the Arrow Diagram Method (ADM) and Precedence Diagram Method (PDM),

6.e.(2) The ACTIVITY ID consists of coding that shall differ, depending on whether the ADM or PDM method was selected in the Project Record. If the ADM method was selected then the field shall be interpreted as two right-justified fields of five (5) integers each. If the PDM method was selected the field shall be interpreted as one (1) right-justified field of ten (10) integers each. The maximum activity number allowed under this arrangement is 99999 for ADM and 9999999999 for the PDM method. [Usage note: Many systems allow alphanumeric ACTIVITY IDs. While the SDEF does not strictly, allow the use of alphanumeric values, users may agree to use the ACTIVITY ID field to exchange alphanumeric data. It is recommended that the ACTIVITY ID be restricted to integers when one or more of the systems being used for scheduling allows only integer ACTIVITY ID values.]

6.e.(3) The ACTIVITY DESCRIPTION shall be a maximum of 30 characters. Descriptions must be limited to the space provided.

6.e.(4) The ACTIVITY DURATION contains the estimated original duration for the activity on the schedule. The duration shall be based upon the work-week designated by the activity's related calendar.

6.e.(5) The CONSTRAINT DATE field shall be used to identify a date that the scheduling system may use to modify float calculations. If there is a date in this field, then there must be a valid entry in the CONSTRAINT TYPE field.

6.e.(6) The CONSTRAINT TYPE field shall be used to identify the way that the scheduling system shall use the CONSTRAINT DATE to modify schedule float calculations. If there is a value in this field, then there must be a valid entry in the CONSTRAINT DATE field. The valid values for the CONSTRAINT TYPE are as follows:

Code	Definition
ES	The CONSTRAINT DATE shall replace an activity's early start date, if the early start date is prior to the CONSTRAINT DATE.
LF	The CONSTRAINT DATE shall replace an activity's late finish date, if the late finish date is after the CONSTRAINT DATE.

[Usage note: Systems provide a wide variety of constraint types that may not be supported by other systems. It is recommended that constraint types be restricted to the values above regardless of the capabilities of the various systems being used for scheduling.]

6.e.(7) The CALENDAR CODE relates this activity to an appropriate work-week calendar. The ACTIVITY DURATION must be based on the valid work-week referenced by this CALENDAR CODE field.

6.e.(8) The HAMMOCK CODE indicates that a particular activity does not have its own independent duration, but takes its start dates from the start date of the preceding activity (or node) and takes its finish dates from the finish dates of its succeeding activity (or node). If the value of the HAMMOCK CODE field is "Y", then the activity is a hammmock activity.

6.e.(9) The WORKERS PER DAY shall contain the average number of workers expected to work on the activity each day the activity is in progress. If this code is required by project scheduling specifications, values for this data will be right justified. Activities without workers per day shall have a value of "0".

6.e.(10) The RESPONSIBILITY CODE shall identify the subcontractors or major trade involved with completing the work for the activity. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(11) The WORK AREA CODE shall identify the location of the activity within the project. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(12) The MOD OR CLAIM NUMBER shall uniquely identify activities that are added or changed on a construction contract modification, or activities that justify any claimed time extensions. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(13) The BID ITEM shall identify the bid item number associated with each activity. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(14) The PHASE OF WORK shall identify the timing of a specific activity within the entire project. If this code is required by project scheduling specifications, value for this data will be left justified.

6.e.(15) The CATEGORY OF WORK shall identify the general type of work performed by every activity. If this code is required by project scheduling specifications, value for this data will be placed in the field.

6.e.(16) The FEATURE OF WORK shall identify a very broad designation of the general type of work that is being accomplished by the activity. If this code is required by project scheduling specifications, value for this data will be left justified. [Usage note: Many systems require that FEATURE OF WORK values be placed in several activity code fields. It is recommended that users review SDEF documentation to determine the correct way to use a given software system to produce the FEATURE OF WORK code.]

6.f. Precedence Record: The Precedence Record(s) shall follow the Activity Records if a Precedence Diagram Method schedule (PDM) is identified in the ARROW OR PRECEDENCE field of the Project Record. The Precedence Record has the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1 - 4	4	PRED	Fixed	Filled
ACTIVITY ID	6-15	10	√	Integer	See Comment Below
PRECEDING ACTIVITY	17 -26	10	√	Integer	See Comment Below
PREDECESSOR TYPE	28-28	1	√	S, F, C	Filled
LAG DURATION	30-33	4	√	Integer	Right Justified

6.f.(1) The RECORD IDENTIFIER shall begin with the four characters "PRED" in the first four columns of the record.

6.f.(2) The ACTIVITY ID identifies the activity whose predecessor shall be specified in this record.

6.f.(3) The PRECEDING ACTIVITY number is the number of an activity that precedes the activity noted in the ACTIVITY ID field.

6.f.(4) The PREDECESSOR TYPE field indicates the type of relation that exists between the chosen pair of activities. Valid PREDECESSOR TYPE fields areas follows:

Code	Definition
S	Start-to-Start relation
F	Finish-to-Finish relation
C	Finish-to-Start relation

[Usage note: Some systems provide additional predecessor types that may not be supported by all other systems. It is recommended that predecessor types be restricted to the values above regardless of the capabilities of the various systems being used for scheduling.]

6.f.(5) The LAG DURATION field contains the number of days delay between the preceding and current activity. [Usage note: Some systems allow negative values for the LAG DURATION. Because these values are not supported by all other systems, it is recommended that values be restricted to zero and positive integers.]

6.g. Unit Cost Record: The Unit Cost Record shall follow all Precedence Records. If the schedule utilizes the Arrow Diagram Method, then the Unit Cost Record shall follow any Activity records. There shall be one Unit Cost Record for every activity that is not a lump sum activity. [Usage note: (1) It is recommended that users who wish to exchange unit cost data contact SDEF vendor representatives to determine the ability of the software system to import/export unit cost information. (2) If the software being used by each member of the project team supports unit cost data then users may wish to conduct a trial run of the SDEF data exchange with a two or three-activity network to ensure that unit cost data transfers as expected. If problems are found please consult vendor representatives for resolution prior to exchange of full project schedules. (3) Unit cost record data does not, in most systems, result in the correct values being placed in the ACTIVITY COST and COST TO DATE fields of the Progress (PROG) Record. Users must, at this time, manually transfer the data from the Unit Cost Record to the Progress Record.

The fields for this record shall take the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1 - 4	4	UNIT	Fixed	Filled
ACTIVITY ID	6-15	10	√	Integer	See Comment Below
TOTAL QTY	17-29	13	√	Format 8.4	Right Justified
COST PER UNIT	31-43	13	√	Format 8.4	Right Justified
QTY TO DATE	45-57	13	√	Format 8.4	Right Justified
UNIT OF MEASURE	59-61	3	√	Alpha.	Left Justified

6.g.(1) The RECORD IDENTIFIER shall be identified with the four characters 'UNIT" placed in the first four columns of the record.

6.g.(2) The ACTIVITY ID for each activity shall match the format described in the activity record. Each activity may have only one Unit Cost Record.

6.g.(3) The TOTAL QTY is the total amount of material to be used in this activity. This number consists of eight digits, one decimal point and four more digits. An example of a number in this format is "11111111.1111". If decimal places are not needed this field shall still contain a ".0000" in columns 25-29. [Usage note: Many systems support a different format for this value that does not include as many decimal places. It is recommended that users determine their requirements for significant digits based on the lowest common denominator of the software systems being used for a given project.]

6.g.(4) The COST PER UNIT is the cost, in dollars and cents, for each unit to be used in this activity. This number consists of eight digits, one decimal point, and four more digits. An example of a number in this format is "11111111.1111". If decimal places are not needed this field shall still contain a ".0000" in columns 39-43. [Usage note: Many systems support a different format for this value that does not include as many decimal places. It is recommended that users determine their requirements for significant digits based on the lowest common denominator of the software systems being used for a given project.]

6.g.(5) The QTY TO DATE is the quantity of material installed in this activity up to the data date. This number consists of eight digits, one decimal point, and four more digits. An example of a number in this format is "11111111.1111". If decimal places are not needed this field shall still contain a ".0000" in columns 53-57. [Usage note: Many systems support a different format for this value that does not include as many decimal places. It is recommended that users determine their requirements for significant digits based on the lowest common denominator of the software systems being used for a given project.]

6.g.(6) The UNIT OF MEASURE is an abbreviation that may be used to describe the units being measured for this activity. Valid values for this field are any meaningful English or metric unit, except "LS" for Lump Sum. Lump Sum activities are not to have Unit Cost Records.

6.h. Progress Record: Progress Record(s) shall follow all Unit Cost Record(s). If there are no Unit Cost Record(s), then the Progress Record(s) shall follow all Precedence Records. If the schedule utilizes the Arrow Diagram Method, then the Progress Record shall follow any Activity Records. One Progress Record is required for every activity in the Activity Record. The fields for this Record shall be provided in the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1-4	4	PROG	Fixed	Filled
ACTIVITY ID	6-5	10	√	Integer	See Comment Below
ACTUAL START DATE	17-23	7	√	ddmmmyy	Filled if Started
ACTUAL FINISH DATE	25-31	7	√	ddmmmyy	Filled if Finished
REMAINING DURATION	33-35	3	√	Integer	Right Justified
ACTIVITY COST	37-48	12	√	Format 9.2	Right Justified
COST TO DATE	50-61	12	√	Format 9.2	Right Justitied
STORED MATERIAL	63-74	12	√	Format 9.2	Right Justified
EARLY START DATE	76-82	7	√	ddmmmyy	Filled if Not Started
EARLY FINISH DATE	84-90	7	√	ddmmmyy	Filled if Not Finished
LATE START DATE	92-98	7	√	ddmmmyy	Filled if Not Started
LATE FINISH DATE	100-1067		√	ddmmmyy	Filled if Not Finished
FLOAT SIGN	108-1081		+, -	Fixed	Filled if Not Finished
TOTAL FLOAT	110-1123		√	Integer	R. Just. if Not Finished

6.h.(1) The RECORD IDENTIFIER shall begin with the four characters "PROG" in the first four columns of the record.

6.h.(2) The ACTIVITY ID for each activity for which progress has been posted shall match the format described in the Activity Record.

6.h.(3) An ACTUAL START DATE is required for all in-progress activities. The ACTUAL START DATE shall be the same as, or later than, the PROJECT START date contained in the Project Record. The ACTUAL START DATE shall also be the same as, or prior to, the DATA DATE contained in the Project Record. If there is an ACTUAL START DATE for an activity that there must also be a REMAINING DURATION, and the values for the EARLY START DATE and LATE START DATE are blank. [Usage note: Some systems allow default values for ACTUAL START DATE if the date is not entered by the user. Because the failure to include a start date for activities may result in different schedule calculations, it is recommended that the ACTUAL START DATE be required for all activities in progress.]

6.h.(4) An ACTUAL FINISH DATE is required for all completed activities. If the REMAINING DURATION of an activity is zero, then there must be an ACTUAL FINISH DATE. If there is an ACTUAL FINISH DATE, then values for the EARLY START DATE, LATE START DATE, EARLY FINISH DATE, LATE FINISH DATE, FLOAT SIGN, and TOTAL FLOAT shall be blank. [Usage note: Some systems allow default values for ACTUAL FINISH DATE if the date is not entered by the user. Because the failure to include a finish date for activities may result in different schedule calculations, it is recommended that the ACTUAL FINISH DATE be required for all activities in progress.]

6.h.(5)AREMAININ G DURATION is required for all activities. Activities that have not started shall have a remaining duration equal to their original duration. Activities completed based on time, shall have a zero (0) REMAINING DURATION. [Usage note: Systems have a variety of "short-cut" methods to determine the REMAINING DURATION value. It is recommended that users actually consider the time required to complete the remaining work on a given task, rather than allow a system to calculate the remaining duration based on the amount of work that has already been accomplished.]

6.h.(6) The ACTIVITY COST contains the estimated earned value of the work to be accomplished in the activity. An example of a number in this format is "1111111 11.11". If decimal places are not needed this field shall still contain a ".00" in the last three columns of this field. [Usage note: Users should inquire of software vendors if the user needs to add a zero in the data field to produce the default value "0.00".]

6.h.(7) The COST TO DATE contains the earned value for the activity. If there is an ACTUAL START DATE, then there must also be some value for COST TO DATE. An example of a number in this format is "111111111.11". If decimal places are not needed, this field shall still contain a ".00" in the last three columns of this field. The COST TO DATE is not tied to REMAINING DURATION. For example, if the REMAINING DURATION is "0", the COST TO DATE may only be 95% of the ACTIVITY COST. This difference may be used to reflect 5% retainage for punch list items. [Usage note: Systems implement cost information in different ways. It is recommended that users carefully review SDEF documentation and test results to determine how to ensure that SDEF data is exported correctly.]

6.h.(8) The STORED MATERIAL field contains the value of the material that the Contractor has paid for and is on site or in secure storage areas that is a portion of the COST TO DATE. An example of a number in this format is "111111111.11". If decimal places are not needed, this field shall still contain a ".00" in the last three columns of this field. [Usage note: Systems implement the stored materials field in a variety of ways. Many systems do not enforce STORED MATERIAL + COST TO DATE < ACTIVITY COST. To avoid potential confusion between systems, it is recommended that new activities be added to a schedule to reflect the cost of large equipment procurement rather than use the STORED MATERIALS field.]

6.h.(9) The EARLY START DATE indicates the earliest date possible that an activity can start as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL START DATE, then this field shall be blank.

6.h.(10) The EARLY FINISH DATE indicates the earliest date possible that an activity can finish as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL FINISH DATE, then this field shall be blank.

6.h.(11) The LATE START DATE indicates the latest date that an activity can begin as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL START DATE, then this field shall be blank.

6.h.(12) The LATE FINISH DATE indicates the latest date that an activity can finish as calculated by a CPM scheduling system or other Contracting Officer approved planning method. If the progress record for an activity contains an ACTUAL FINISH DATE, then this field shall be blank.

6.h.(13) The FLOAT SIGN indicates whether the float time calculated using a CPM scheduling system or other Contracting Officer approved planning method, is positive or negative in nature. If the progress record for an activity contains an ACTUAL FINISH DATE, then this field shall be blank. In the case of zero float this field shall be blank.

6.h.(14) The TOTAL FLOAT indicates the total float time. In the Precedence Diagram Method (PDM), the total float is the difference between the early and late start or finish dates. In the Arrow Diagram Method (ADM), the total float is equal to the late event time at the end of the activity, minus the sum of the early event time at the start of the activity plus the duration of the activity.

6.i. Project End Record: The Project End Record shall be used to identify that the data file is completed. If the ASCII End of File character is encountered, then data import programs shall use that character to infer that the data continues on the next disk. The user shall then be prompted for the next disk number, based on the VOLM record data. The Project End Record shall be the last record of the entire data file, and shall have the following format:

Description	Column Position	Max. Len.	Req. Value	Type	Notes
RECORD IDENTIFIER	1-3	3	END	Fixed	Filled

6.i.(1) The RECORD IDENTIFIER for the Project End Record shall be "END". Data contained in the data exchange file that occurs after this record shall not be used.

SDEF Activity Codes

Code	Max Length	Description	Remarks
WRKP	3	Workers per day	Number
RESP	4	Responsibility	GOVT = AED, PRIM = Prime Contractor, any 4 characters for subcontractors
AREA	4	Area	WBS Level 2
MODF	6	MOD or Claim #	
BIDI	6	Bid Item	CLIN or sub-CLIN to conform with cost breakdown in Contract Section 00010
PHAS	2	Phase	WBS Level 1
CATW	1	Category of work	
FOW	30	Feature of work	FOW1 & FOW2 & FOW3 in Primavera P3
USER DEFINED (total of 8 characters are available in P3):			
LVL3	2	WBS Level 3	Mandatory
LVL4	1	WBS Level 4	Mandatory.
			End of mandatory activity codes
LVL5	1	WBS Level 5	
CLIN	2	CLIN	May be used to summarize costs by CLIN if BIDI is sub-CLINs. Last 2 characters of CLIN.

NOTES:

Schedules must be organized with a WBS created in the activity code dictionary, not the software WBS. Generally, four levels are sufficient for effective schedule organization. Additional codes may be created if required.

WBS Level	Activity Code
1	PHAS
2	AREA
3	LVL3
4	LVL4

Standard Activity Codes - WBS

PHAS	AREA	LVL3	LVL4	LVL5
01 Milestones				
	0101 Contract Milestones			
	0102 Project Milestones			
02 Pre-construction				
	0201 Pre-construction Meetings			
	0202 Pre-construction Submittals			
	0203 DBA Insurance			
03 Design				
	0301 10% Design Submittal			
	0302 35% Design Submittal			
	0303 65% Design Submittal			
	0304 99% Design Submittal			
	0305 100% Design Submittal			
04 Procurement				
	0401 Civil/Structural			
	0402 Architectural			
	0403 Electrical			
	0404 Mechanical			
	0405 Plumbing			
05 Construction				
	0501 Mob/Demob			
		01 Mobilizaton		
		02 Demobilizaton		
	0502 Sitework			
		03 Site Preparation		
		04 Site Drainage System		
		05 Force Protection		
			1 Perimeter Wall	
			2 ECP #1	
			3 ECP #2	
			4 Guardshack #1	
			5 Guardshack #2	
			6 Guard Tower # 1	
			7 Guard Tower # 2	
			8 Guard Tower # 3	
			9 Guard Tower # 4	
			A Guard Tower # 5	
	0503 Utilities			
		0A Water		
			B Water Treatment	
			C Water Distribution	
		0B Sewer		
			D Sewage Collection	
			E Sewage Treatment	
		0C Power		
			F Power Generation	
				A Generator #1
				B Generator #2
			G Power Distribution	
	0504 Buildings	0D Building 1		
			H Foundations	0 Basement
			I Superstructure & Close-in	1 1st Floor
			J Architectural - Exterior	2 2nd Floor
			K Architectural - Interior	3 3rd Floor
			L Electrical	4 Roof
			M Mechanical	
			N Plumbing	
			O Fire Protection System	
			P Communications	
			Q Inspections, Punchlists	
	0505 Other Construction			
06 Contract Close-out				
	0601 Close-out Inspections			
	0602 As-Built Drawings			
	0603 O&M Manuals & Training			
	0604 Demobilization			

NOTE:
Activity codes in bold italic are required codes. All other codes are suitable for a typical building project but may be changed to suit the scope of work.

SECTION 01335

SUBMITTAL PROCEDURES FOR SITE ADAPT PROJECTS

GENERAL

1.1 REFERENCE

The publication listed below forms a part of this specification to the extent referenced. The publication is referenced to in the text by basic designation only.

CONSTRUCTION SPECIFICATIONS INSTITUTE

Manual of Practice	Construction Specifications Institute http://www.csinet.org/s_csi/index.asp 601 Madison Street Alexandria, Virginia 22314-1791

NATIONAL INSTITUTE OF BUILDING SCIENCES (NIBS)

Unified Master Reference List (UMRL)	National Institute of Building Sciences 1090 Vermont Avenue, NW, Suite 700 Washington, DC 20005-4905 Email: nibs@nibs.org FAX: (202) 289-1092 Tele: (202) 289-7800

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows.

1.2.1 DESIGN SUBMITTALS

Contractor furnished design submittals are the various design documents which primarily consist of field investigations, calculations, design analysis, drawings and specifications.

In addition, for each design submittal, the contractor shall submit all non-administrative modifications issued for the contract as part of the Design Submittal package to enable AED to validate that these modifications have been incorporated into this design submittal.

Design submittals should only address Contract requirements not shown on plans and any specifications already furnished to the Contractor as part of this contract. Plans and specifications furnished to the Contractor shall NOT be included as part of any Design Submittal. The Contractor shall complete all work as shown in these furnished drawings

without deviation, unless site conditions mandate changes (larger building foundations per geotechnical investigations, etc.).

The Contractor shall clearly label and date all design submittals to reflect the current design stage and date of submission to the Government to avoid confusion between current and previous submittals. The Contractor shall not begin construction work until the Government has reviewed and approved the work presented in each Design Submittal, including complete resolution of all DrChecks comments, and the Contracting Officer has cleared work for construction. Clearance for construction shall not be construed as meaning Government approval. Unless otherwise indicated, the risk for the design is the sole responsibility of the Contractor.

As a minimum, design submittals shall be submitted at the following intervals:

Preliminary design reports – 10%

Site-Adapt General Design review - 65%

Final Site-Adapt Design review - 90%

Cleared For Construction review - 100%

1.2.1.1 PRELIMINARY DESIGN REPORTS – (10%)

The review of this submittal is primarily to ensure that the Contractor has at a minimum developed the test well and completed the sub-surface investigation. **This work shall be completed not less than 60 days from Notice To Proceed (NTP). Failure to do so at the satisfaction of the Government shall constitute grounds for withholding of all progress payments.**

a. Geotechnical Report, indicating appropriate information for various site characteristics, soil parameters as determined by certified lab tests, allowable soil bearing capacities, correlation with foundation design parameters, and any changes in foundation design of structures furnished in the Contract; estimated settlement for building foundation loads; and all other project feature changes due to the Geotechnical Report conclusions.

b. Well design at each project site location to include a determination of water demand, water availability evaluation, and water quality analysis produced from a test well. Water demand evaluation shall be determined based on the requirements of the 01010 SOW and 01015 Technical Requirements. Water availability evaluation shall include data concerning study of existing water wells in the vicinity, study of hydrological data, and study of geological data. Well hydraulics data shall also be included from the test well or if available from vicinity wells. Water quality analysis shall include physical, chemical, and bacteriological analyses of water from either a test well or an existing well within the same aquifer of the proposed well.

c. Drawing for the well design shall include, at a minimum, material and dimensions of well pipe and casing, type and dimensions of screen, type and range of sizes of gravel surrounding screen and at bottom of well shaft, type of grouting for well seal, well pad, location and connection detail for hand pump if required by the 1010. Also required would be a detail of the wellhead with all associated valves, flowmeters, and chlorination system.

d. Percolation test locations and results, and complete leachfield design (if required by Section 01010 of the SOW), which indicate the site will accommodate such a system for the given project requirements, and alternatives proposed if, and only if, the site characteristics will not support such a system.

1.2.1.2 SITE-ADAPT GENERAL DESIGN (65%)

This Design Submittal presents all information necessary to "Site Adapt" the fully designed and detailed buildings and other project features. It is crucial that the submittal is complete and includes all components noted below and any other pertinent information not listed which the Contractor requires to enable construction to begin as soon as possible. As a minimum, for each Contract project location the submittal shall contain:

a. Results of the site topographic survey which shall include highlighting of significant features (wadis, adjacent properties and structures, roads, etc.) to provide a detailed, overall understanding of the project site and surrounding area; demolition plan for existing site features; complete grading and drainage plan with existing grades, proposed grades, and building finished floor elevations based on Contract technical requirements;

b. Any necessary adaptations of the Concept Plan and detailed design drawings furnished with this Contract that might be required due to actual site constraints, to include: water supply/storage location and distribution layout plan; wastewater collection or treatment location and tie-in to all required buildings; electrical generation and distribution plan; connection of existing roads with ECP location(s); and any other changes required due to adjacent property or existing topography. As noted in Paragraph 1.2.1, this would also include proposed changes to the detailed drawings if, and only if, site conditions mandate revisions.

c. Septic Tank drawings and details (if required by Section 01010 of the SOW or not provided as part of this contract), showing tank depth and sizing based on expected sanitary load, and all connecting piping, with dimensions.

d. Complete design analysis, plans and specifications for any contract feature(s) not already provided in the Contract that the Contractor would like Partial Clearance for Construction on once the Design Submittal has been approved, including project components with long ordering, fabrication and delivery times.

e. Outline of Construction Specification Sections to be used for other work yet to be submitted at the 90% Final Site-Adapt Design Review submittal, and those Specification items requiring Government Approval (GA), unless 100% Technical Specifications were provided with the Contract.

f. Preliminary drawing and details of any grease interceptors and oil-water separators required. Grease interceptors should either be gravity or hydro-mechanical types. Drawings would show sizing, depth, and all connecting piping. Design analysis shall include calculations for sizing both the interceptor/separator and connecting piping.

g. Preliminary cross sections of roads and sidewalks, showing all essential dimensions, materials, layers, and proposed fore and back slopes of adjacent drainage features.

h. All preliminary sketches of site storm drainage structures, including calculations in the design analysis for sizing and sloping of pipe runs and ditches. Provide cross sections of drainage structures such as ditches and culverts.

1.2.1.3 FINAL SITE-ADAPT DESIGN REVIEW (90%):

The review of this submittal is primarily to insure that the contract documents and design analysis are proceeding in a timely manner and that the Contract requirements and design criteria are being correctly understood and adhered to. The submittal shall consist of the following:

a. Design Analysis complete.

b. Draft Construction Specifications complete - all anticipated sections, edited to include only applicable requirements, if not provided as part of the Contract.

c. Construction Drawings complete with all 65% comments incorporated. The Contractor is expected to have completed all of his coordination checks and have the drawings in a design complete condition. The drawings shall be finalized at this time including the incorporation of any design review comments generated by all past design reviews. The drawings shall contain all the details necessary to assure a clear understanding of the work throughout construction.

1.2.1.4 “CLEARED FOR CONSTRUCTION” SUBMITTAL (100%):

The review of this submittal is to insure that the design is in accordance with directions provided the Contractor during the design process. The only effort remaining between the Final Site-Adapt Design Review Submittal and the "Cleared For Construction" Design Review Submittal is the incorporation of all Government review comments. The Contractor shall submit the following documents for this review:

a. Design Analysis, only if changes have occurred since 90% Design Submittal. The Design Analysis shall contain all explanatory material giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the Final Drawings and Specifications.

b. Construction Specifications, complete.

c. Construction Drawings, complete.

Once the design documents have been "Cleared for Construction" by the Contracting Officer, the Contractor shall clearly identify each document by annotating it as "Cleared for Construction."

1.2.2 PARTIAL DESIGN SUBMITTALS

In the interest of expediting construction, the Contracting Officer may approve partial design submittals, procurement of materials and equipment, as well as issue the Notice To Proceed (NTP) for construction of those elements of the design which have been cleared for construction. Such partial notices to proceed shall be solely at the discretion of the Contracting Officer. The Contractor must obtain the approval of the Designer of Record (DOR) and the Government's concurrence for any Contractor proposed revision to the professionally stamped and sealed design reviewed and Cleared for Construction by the Government, before proceeding with the revision. The Government reserves the right to non-concur with any revision to the design, which may impact furniture, furnishings, equipment selections or operations decisions that were made, based on the reviewed and cleared for construction design. Any revision to the design, which deviates from the contract requirements (i.e., the RFP and the accepted proposal), will require a modification, pursuant to the Changes clause, in addition to Government concurrence. The Government reserves the right to disapprove such a revision. Unless the Government initiates a change to the contract requirements, or the Government determines that the Government furnished design criteria are incorrect and must be revised, any Contractor initiated proposed change to the contract requirements, which results in additional cost, shall strictly be at the Contractor's expense. The Contractor shall track all approved revisions to the reviewed and cleared for construction design and shall incorporate them into the As-Built design documentation, in accordance with Section 01780A, CLOSEOUT SUBMITTALS, Paragraphs 1.1 and 1.2, which lists all requirements associated with submission of editable CADD format As-Builts required as part of this contract. The Designer of Record shall document its professional concurrence on the As-Builts for any revisions by affixing its stamp and seal on the drawings and specifications.

1.2.3 DEVIATIONS AND CHANGES TO THE STANDARD DESIGNS

Contractor shall construct standard building designs as indicated. Any request to deviate or change the standard building designs must be due to changed site conditions ONLY and submitted to the AED Resident Office administering the contract. Contractor shall indicate the changes and provide a narrative justification for the changes proposed.

1.2.4 USE OF DRCHECKS$_{SM}$ FOR DESIGN SUBMITTAL COMMENT AND RESPONSE

1.2.4.1 DRCHECKS$_{SM}$ WEB LINK

All AED Design Submittal review comments will be documented using the standard design review tool for the U.S. Army Corps of Engineers, a web-based application called "DrChecks$_{SM}$". The web link to DrChecks$_{SM}$ is:

https://www.projnet.org/projnet/binKornHome/index.cfm

1.2.4.2 DRCHECKS$_{SM}$ VENDOR IDENTIFICATION AND TUTORIAL

Upon notification of award, the contractor shall immediately coordinate with the Chief, Engineering Branch, AED to acquire a vendor identification and a brief tutorial on the use of

DrChecks$_{SM}$. The contractor is responsible for providing their own DrChecks$_{SM}$ Administrator within their own design staff personnel to access and accomplish actions within DrChecks$_{SM}$.

1.2.4.3 NOTIFICATION OF DRCHECKS$_{SM}$ FILE ACCESS

The Afghanistan Engineer District will complete a review at every Design Submittal stage for conformance with the technical requirements of the Contract and document all comments in DrChecks$_{SM}$. At completion of the review, a notification will be issued to the Contractor by the Contracting Officer's representative that the particular DrChecks$_{SM}$ file will be opened to the Contractor. Until this time, the Contractor is not able to view any AED comments for that particular Design Submittal.

1.2.4.4 FURTHER CONTRACTOR INFORMATION AFTER DRCHECKS$_{SM}$ REVIEWS

See Paragraph 3.7.4, Government Review, for further procedures and requirements associated with Design Submittal reviews.

1.2.5 CONSTRUCTION SUBMITTALS

1.2.5.1 CONTRACTOR FURNISHED GOVERNMENT APPROVED CONSTRUCTION SUBMITTALS (GA)

Government approved construction submittals are primarily related to plans (Contractor Quality Control, Accident Prevention, Resident Management System, Area Use, etc.), schedules (Project Schedule/Network Analysis), and certificates of compliance, reports and records/statements. They may also include proposed variations to approved design documents in accordance with the paragraph entitled "VARIATIONS".

In addition, GA construction submittals are required for the following:

a. <u>CIVIL FEATURES</u>

   TESTING RESULTS: Data will include information on the locations and depths of all viable water supply sources at the site(s) involved and a water quantity and water quality analysis for each source from the Ministry of Public Health or other certified testing firm.

b. <u>MECHANICAL FEATURES</u>

   EQUIPMENT SUBMITTALS: Manufacturer's standard catalog data, installation, Operation and Maintenance (O&M) manuals and construction details for water wells, water tanks, control valves, pipe insulation, water pumps, air handling units, condensers, variable air volume (VAV) boxes.

   TESTING RESULTS: For water tanks, water pumps (including instrumentation), water piping, sprinkler systems, and oxygen systems, submit six (6) copies of each test containing the following information in bound letter-size booklets:

1) The date the tests were performed.

2) A list of equipment used, with calibration certifications.

3) A copy of measurements taken.

4) The parameters to be verified.

5) The condition specified for the parameter.

6) The inspection results, signed, dated, and certified by the installer. The certification shall state that required procedures were accomplished, that the procedures were conducted in compliance the plans and specifications.

7) A description of adjustments performed.

Individual reports shall be provided for storage tank tests, piping tests, system performance tests, high level alarm test, and the system leak tests. Drawings shall be folded blue lines, with the title block visible.

c. ELECTRICAL FEATURES

PRODUCT DATA and SHOP DRAWINGS: generators (and its auxiliaries), load bank, transformers, substations, panels/switchboards/motor control centers, lightning protection, receptacles, circuit breakers.

DESIGN DATA: lightning protection and grounding.

TEST DATA: Lightning protection and grounding.

d. ARCHITECTURAL FEATURES

PRODUCT DATA/CATALOGUE CUTS/SHOP DRAWINGS/SCHEDULES: Specialty doors and frames (fire rated, sound rated, bullet resistant, security, overhead rolling); door hardware; windows; metal roofing (including fasteners, flashing, and accessories); building insulation; fire-rated and water-resistant gypsum board; and other specialty products (bullet resistant glazing/panels).

COLOR BOARD: Architectural finishes

PRODUCT DATA/CATALOGUE CUTS/INSTALLATION INSTRUCTIONS: Exterior Insulation and Finish System (EIFS)

SHOP DRAWINGS: Casework/Cabinetry

1.2.5.2 FOR INFORMATION ONLY CONSTRUCTION SUBMITTALS (FIO)

All submittals not requiring Designer of Record or Government approval will be for information only. These construction submittals shall be checked, stamped, signed and dated by the Contractor's Quality Control Engineer, certifying that such submittal complies with the contract requirements. All Contractor submittals shall be subject to review by the Government at any time during the course of the contract. Any Contractor submittal found to contain errors or omissions shall be resubmitted as one requiring "approval". No adjustment for time or money will be allowed for corrections required as a result of noncompliance with plans or specifications. Normally submittals For Information Only will not be returned. Approval of the Contracting Officer is not required on FIO submittals. These submittals will be used for information purposes. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications and will not prevent the Contracting Officer from requiring removal and replacement if nonconforming material is incorporated in the work.

1.2.5.3 VARIATIONS

After design submittals have been reviewed and cleared for construction by the Contracting Officer, no submittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered by the Government unless submitted in accordance with the paragraph entitled VARIATIONS.

1.2.5.4 ADDITIONAL SHOP DRAWINGS AND SUBMITTALS

In accordance with the paragraph entitled DESIGN DISCREPANCIES, the Government may request the Design-Build Contractor to provide additional shop drawing and submittal type data subsequent to completion of the design.

1.2.5.5 INCOMPLETE DESIGN

The Design-Build Contractor shall not use construction submittals as a means to supplant and/or supplement an incomplete design effort.

1.3 SUBMITTAL CERTIFICATION

The CQC organization shall be responsible for certifying that all submittals and deliverables have been reviewed in detail for completeness, are correct, and are in strict conformance with the contract drawings, specifications, and reference documents.

1.3.1 EFFECTIVE QUALITY CONTROL SYSTEM

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Contract Clause 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION - ALTERNATE I, and SECTION 01451 CONTRACTOR QUALITY CONTROL.

1.3.1.1 ORGANIZATIONAL RESPONSIBILITY

The quality control system shall cover all design, construction, subcontractor, manufacturer, vendor, and supplier operations at any tier, both onsite and offsite.

1.3.1.2 CQC SYSTEM MANAGER REVIEW AND APPROVAL

Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager. If found to be in strict conformance with the contract requirement, each item shall be stamped, signed, and dated by the CQC System Manager. Copies of the CQC organizations review comments indicating action taken shall be included within each submittal.

1.3.1.3 DETERMINATION OF COMPLIANCE

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer. The contractor shall submit all required documentation with submittals. The U.S. Army Corps of Engineer (USACE) will not accept partial submittals.

1.3.2 RESPONSIBILITY FOR ERRORS OR OMISSIONS

It is the sole responsibility of the Contractor to ensure that submittals do or do not comply with the contract documents. Government review, clearance for construction, or approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract.

1.3.2.1 GOVERNMENT REVIEW

Government review, clearance for construction, or approval of post design construction submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.

1.3.3 SUBSTITUTIONS

After design submittals have been reviewed and cleared for construction by the Contracting Officer, no re-submittal for the purpose of substituting materials or equipment will be considered unless justified as indicated in the paragraph entitled, “VARIATIONS.”

1.3.4 ADDITIONAL SUBMITTALS

In conjunction with Contract Clause 52.236-5 MATERIAL AND WORKMANSHIP, the Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work.

1.3.5 UNTIMELY AND UNACCEPTABLE SUBMITTALS

If the Contractor fails to submit submittals in a timely fashion, or repetitively submits submittals that are incomplete or not in strict conformance with the contract documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

1.3.6 STAMPS

Stamps shall be used by the Contractor on all design and post design construction submittals to certify that the submittal meets contract requirements and shall be similar to the following:

Contractor (Firm Name)
Contract Number
Contract Name

I certify that this submittal accurate, is in strict conformance with all contract requirements, has been thoroughly coordinated and cross checked against all other applicable disciplines to prevent the omission of vital information, that all conflicts have been resolved, and that repetition has been avoided and, it is complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer.

Name of CQC System Manager: _____
Signature of CQC System Manager: _____
Date: _____

1.4 ENGLISH LANGUAGE

All specifications, drawings, design analysis, design calculations, shop drawings, catalog data, materials lists, and equipment schedules submitted shall be in the English language.

1.5 UNITS OF MEASUREMENT

Design documents shall be prepared in accordance with the guidance offered in SECTION 01415 METRIC MEASUREMENTS.

The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the 11th CGPM in 1960.

1.5.1 DRAWINGS

1.5.1.1 1.5.1.1 SITE LAYOUT

All site layout data shall be dimensioned in meters or coordinates, as appropriate. All details and pipe sizes shall be dimensioned in millimeters.

EXAMPLE: Masonry openings shall be a U.S. module to suit a standard U.S. door. The dimensions of the opening shall be given in SI units. Metric dimensions for site plans shall be in meters and fraction thereof. Dimensions for all other drawings shall be in millimeters using hard

metric designations (example: 12 meters = 12 000). Hard metric is defined as utilizing standard metric products and the use of measurements in increments of fifty (50) and one hundred (100) millimeters.

1.5.1.2 GEO-REFERENCE

All site plans shall be geo-referenced using the WGS 1984 coordinate system, specifically the following: WGS 1984 UTM one 42 N. If the designer is not able to use the stated coordinate system the coordinate system used shall be correlated to the stated coordinate system. A table shall be provided within the site drawing set cross referencing the WGS84 system to that utilized. This is required to allow AED to incorporate the plans into GIS for storage, map production, and possible geospatial analysis of the different work sites.

1.5.2 DESIGN CALCULATIONS

Calculations shall be in SI units to meet the requirements of the design. Quantities on the contract drawings stated in SI units shall also be stated in SI units in the design analysis to match the drawings.

1.5.3 SPECIFICATIONS

All equipment and products shall be specified according to U.S. standards and described by appropriate units as required herein.

1.6 WITHHOLDING OF PAYMENT FOR SUBMITTALS

1.6.1 DESIGN SUBMITTALS

Payment for Design work will not be made in whole or in part until the Government has reviewed and cleared the design for construction.

1.6.2 CONSTRUCTION SUBMITTALS

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. In event under separate clause of the contract, the Contractor is allowed partial or total invoice payment for materials shipped from the Continental United States (CONUS), and/or stored at the site, the Contractor shall with his request for such payment, submit copies of approvals (ENG Form 4025) certifying that the materials that are being shipped and/or stored have been approved and are in full compliance with the contract technical specifications.

2.0 PRODUCTS

2.1 GENERAL

The following are contract deliverables which expound upon and finalize the design parameters/requirements outlined within the contract documents. They shall be prepared in such

a fashion that the Prime Contractor is responsible to the Government and not as an internal document between the Prime Contractor and its Subcontractors, Vendors, Suppliers, etc.

2.2 PROJECT NARRATIVE

The Project Narrative shall be a bound set and shall contain the contract Request For Proposal (RFP) Sections 01010 and 01015 (and any additional RFP sections that are appropriate). The RFP Section 01010 and 01015 shall be the latest version. Any subsequent changes to the RFP shall be clearly marked and highlighted with explanation for the changes. The Project Narrative shall also contain the general description of the project and a discussion of the design approach and design features for the project.

2.3 DESIGN ANALYSIS

2.3.1 SUBMITTAL

Only design analyses associated with the "Site Adapt" features of this contract shall be submitted for review. It shall be written in the English language with SI units of measure. The design analysis is a written explanation of the project design which is expanded and revised (updated) as the design progresses. The design analysis shall contain all explanatory material giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the final drawings and specifications. The design analysis contains the criteria for, and the history of, the project design, including criteria furnished by the Government, letters, codes, references, conference minutes, and pertinent research. Design calculations, computerized and manual, are included in the design analysis. Narrative descriptions of design solutions are also included. Written material may be illustrated by diagrams and sketches to convey design concepts. Catalog cuts and manufacturer's data for all equipment items, shall be submitted. Specific requirements for the design analysis, listed by submittal phase, are noted in Paragraph 1.2.1.

2.3.2 FORMAT

Format of design analysis shall closely match the standard format referenced within the RFP.

2.4 DESIGN CALCULATIONS

Only calculations associated with the "Site Adapt" features of this contract shall be submitted for review, unless site conditions mandate changes to drawings and specifications furnished with this Contract. All design calculations shall be presented such that they are easily understood, correlated with RFP requirements (Section 1010 and 1015 criteria; codes; all other applicable or pertinent criteria) and all final conclusions clearly documented and summarized. The Design Submittal must include complete information (Soil Report, percolation test results, concrete design strengths, steel material properties, electrical loads, heat gain/loss assumptions, etc.) necessary to support all design calculations in order to easily and efficiently verify the accuracy of this information and the resulting project components shown in plans and specifications.

2.4.1 SUBMITTAL

When design calculations are voluminous, they shall be bound separately from the narrative part of the design analysis. Design calculations will include a title page, table of contents, and be indexed (tabbed) to separate distinct parts of the various analysis and design actions being accomplished to support plan drawings submitted. They shall be presented in a clear, consistent and legible format in order to quickly understand the analysis and design accomplished. Presentation shall be such that a person unfamiliar with the project features and associated analysis and design can quickly understand the overall design process and procedures, review the information in conjunction with the given set of plans and specifications, and verify the suitability of all information submitted.

All design calculations shall explain the source of loading conditions with assumptions and conclusions explained. The analysis and design methods shall also be explained, including assumptions, theories and formulae. Include applicable diagrams that are clearly explained and correlated with related computations, whether computer or hand generated. The design calculations shall include a complete and comprehensive list of the criteria (and date or version of the criteria) that the design/analysis will be compared to (codes, Corps of Engineers Engineering Regulations, Engineering Manuals, etc.). Within the separable elements of design calculations, the engineer shall cite the specific code or reference paragraph or section as appropriate to indicate conformance to requirements.

At the beginning of each project component design section, present a summary of all load conditions and combinations required per applicable code or Corps of Engineers manual or regulation. Then clearly identify the particular load case governing the design and clearly show how the particular analysis, construction materials to be used, and the specific design meet the governing load combination.

Calculation sheets shall carry the names or initials of the engineer and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person.

2.4.2 COMPUTER ANALYSIS

Provide a clear summary of all computer outputs and highlight in the outputs information used in the analysis and design accomplished elsewhere in the calculations.

If a computerized analysis or design program is used (either commercial software packages or unique, designer-written computer analysis/design tools), the computations shall provide clear reference to the software program and version being used and an explanation of the validity of the particular program to the given application (where has the program been used before, what input and output does the program provide, is the program a recognized Corps of Engineers or industry standard). If the program is proprietary to the Contractor (not recognized by the Corps of Engineers or industry), the Contractor shall provide a sample hand calculation to verify the results of one set of data generated by the computer program.

State exactly the computation performed by the computer. Include applicable diagrams, adequately identified. Provide all necessary explanations of the computer printout format, symbols, and abbreviations. Use adequate and consistent notation. Provide sufficient information to permit manual checks of the results.

Each set of computer printouts shall be preceded by an index and by a description of the computation performed. If several sets of computations are submitted, they shall be accompanied by a general table of contents in addition to the individual indices.

When the computer output is large, it shall be divided into volumes at logical division points. All final computer results used in design shall be separated from the total pages of computer output that might be included in the design calculations for ease of review.

2.5 SPECIFICATIONS

Specifications for most work associated with this Contract may have been furnished to the Contractor and only portions of them (if provided) should be submitted for review with the "Site Adapt" portion of the work. If the Contractor determines that work associated with the "Site Adapt" features of this contract require additional specifications, they shall be submitted for review and approval. Specifications shall be prepared in accordance with the UFGS (Uniform Facilities Guide Specifications) format. The Contractor-prepared specifications shall include as a minimum, all applicable specification sections referenced by the UFGS. Where the does not reference a specification section for specific work to be performed by this contract, the Design-Build Contractor shall be responsible for creating the required specification in the UFGS format.

2.5.1 USE OF UNIFIED FACILITIES GUIDE SPECIFICATIONS (UFGS)

If additional specifications are deemed necessary by the Contractor, UFGS (Uniform Federal Guide Specifications) are required when U.S. products and systems are required or used. Current UFGS information may be obtained at the following location: http://www.wbdg.org/ccb/browse_org.php?o=70.

Specifications for UFGS are in SpecsIntact format. SpecsIntact is government sponsored software used to edit specifications for government contracts. The software is available at the following link: http://specsintact.ksc.nasa.gov/index.asp.

2.5.2 QUALITY CONTROL AND TESTING

Any additional specifications deemed necessary by the Contractor shall include required quality control and further indicate all testing to be conducted by the Contractor, its subcontractors, vendors and/or suppliers.

2.5.3 AMBIGUITIES AND INDEFINITE SPECIFICATIONS

Ambiguities, indefinite specification requirements (e.g., highest quality, workmanlike manner, as necessary, where appropriate, as directed etc) and language open to interpretation is unacceptable.

2.5.4 INDUSTRY STANDARDS

2.5.4.1 U.S. INDUSTRY STANDARDS

The Specifications shall be based on internationally accepted U.S. industry Standards. Customarily accepted publications may be found in the UNIFIED MASTER REFERENCE LIST

(UMRL) which may be located at the following URL: http://www.hnd.usace.army.mil/techinfo/UFGS/UFGSref.htm.

To access the UMRL select the "Unified Facilities Guide Specifications" tab and scroll down to Unified Master Reference List (UMRL) (PDF version).

Examples of U.S. standards are: National Fire Protection Association (NFPA), International Building Code (IBC), American Concrete Institute (ACI), American Water Works Association (AWWA), ADAAG (ADA Accessibility Guidelines) for Buildings and Facilities, etc. Standards referenced shall be by specific issue; the revision letter, date or other specific identification shall be included.

This document lists publications referenced in the Unified Facilities Guide Specifications (UFGS) of the Corps of Engineers (USACE), the Naval Facilities Engineering Command (NAVFAC), the Air Force Civil Engineer Support Agency (AFCESA), and the guide specifications of the National Aeronautics and Space Administration (NASA). This document is maintained by the National Institute of Building Sciences (NIBS) based on information provided by the agencies involved and the standards producing organizations. The listing is current with information available to NIBS on the date of this publication.

Standards referenced in specifications and drawings prepared by the Contractor shall be by specific issue; the revision letter, date or other specific identification shall be included.

2.5.5 AED DESIGN REQUIREMENTS DOCUMENTS

AED Design Requirements (latest version) documents listed in section 01015, shall be adhered to in this contract. These documents are available from the COR. These documents shall be used as the basis for design and construction, and for selecting options within the United Facilities Guide Specifications (UFGS). It is the contractor's option to use specifications contained in the AED Design Requirements Documents, when provided, or to adapt the UFGS specifications to match the requirements provided in the AED Design Documents and specifications. Site or project specific data and requirements in the AED Design Requirements documents shall supersede UFGS language where there are perceived conflicts.

2.6 DRAWINGS

2.6.1 COMPUTER ASSISTED DESIGN AND DRAFTING (CADD)

Computer Assisted Design and Drafting (CADD) is required for all work related to this contract. Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare new drawings. The CADD deliverables shall meet the requirements of the A/E/C CADD Standard (Release 3.0). Emphasis is on drawings meeting sheet layout standards, level/layer naming standards and sheet naming conventions. The CADD standards may be downloaded at the CAD/BIM Technology Center at the following link: https://cadbim.usace.army.mil/default.aspx?p=s&t=13&i=4.

The Contractor shall furnish all softcopy design submittals (and As-Builts) using software applications in either .dwg (AutoCAD, AutoDesk release 2005 or later) or in .dgn (MicroStation, Bentley Systems version 8.0 or later) format. In addition, the Contractor is required to submit the

softcopy design submittals in .pdf (Adobe Acrobat) format. Drawings prepared in any convention other than CADD, must have the written approval of the Contracting Officer.

CD media submitted containing the softcopy design submittals shall be organized per the instructions below and the diagram in Section 1335a:

CD Title:

Project Name and Location:
Project Number:
Submittal Number:
Date:
Contractor Name, Address, Telephone Number and email

Folders and Folder Contents/Structure:

Main Folder Name	Subfolders, Files and File Format	Description
Administrative Modifications	Multiple PDF files	Files shall include the contract, task order, non-administrative modifications[1] (do not provide time extensions, COR appointments, etc.), variations and Requests for Information/responses.
Design Analysis	One pdf file with identical contents as the printed document of the submittal.	All data, discussion, calculations and information presented in the printed Design analysis.
Specifications	One folder specifications in word format. One folder with specifications in pdf format.	All specification sections including table of contents edited as appropriate for the submittal stage of the project[2].
Geotechnical Report	One file in pdf format	All data, graphs, charts and tables generated during the geotechnical investigation.
PDF Drawings	One Binder of pdf files.	PDF Drawings. Files will be saved in a Binder and ordered in the same order as indicated on the table of contents. The table of contents will immediately follow the Cover Sheet.
CADD Drawings	DGN or DWG files organized in the following folders. Each folder shall contain only drawings pertaining to that discipline. General (Cover Sheet, Index of	CADD Drawings. All referenced files are to be attached without drive or directories. Do not use paths. Do not use live nesting when attaching reference files.

	Drawings, Vicinity Maps) Civil Architectural Structural Mechanical Plumbing Electrical Telecommunications	Sequentially number every file in the set. For example 1 of 250, 2 of 250. This provides each drawing with a unique number.

Notes:
1. The administrative folder shall provide documents submitted by the contractor and received from the COR related to the contract. These documents shall include Requests for Information related to design issues, Variation Requests, Modifications to the Contract. In addition, the folder shall contain a copy of the signed contract, relevant task orders and change orders.
2. DO NOT INCLUDE standard drawings or specifications provided to the contractor as part of the RFP or as part of the contract.

2.6.2 DRAWINGS

Drawings shall be prepared in the English language with metric (SI) units of measure. All the drawings and details of the working drawings shall be adequately labeled and cross-referenced. Complete, thoroughly checked, and coordination with other engineering disciplines design drawings shall be submitted. At the final design submittal (100%) the Contractor shall have incorporated all design review comments generated by previous design review(s), have completed all of the constructability and coordination comments, and have the drawings in a Ready-to-Build condition. The drawings shall be complete at this time and contain all the details necessary to ensure a clear understanding of the work throughout construction.

2.6.3 DRAWING SIZE BORDER SHEETS

All drawings shall be prepared in size "A1" border sheets (594mm by 841mm). Hardcopy design submissions may be printed on half size drawing sheets (“A3”, 279 mm by 420 mm) for purposes of saving paper and for ease of review. If drawings are not readable in the half size reduction, the Contractor shall submit all drawings in A1 border sheets. All final contract drawing sets (As-Builts) shall be submitted on A1 border sheets. Drawing sheets shall be trimmed to specified size if necessary.

2.6.4 SEQUENCE OF DESIGN DRAWINGS

Referencing the A/E/C CADD Standard (pg. 13, Table 2-1 of the A/E/C CADD standards) the sequence of drawings shall follow the sequence as shown below:

Discipline

1. General

2. Hazardous Materials
3. Survey/Mapping
4. Geotechnical
5. Civil
6. Landscape
7. Structural
8. Architectural
9. Interiors
10. Equipment
11. Fire Protection
12. Plumbing
13. Process
14. Mechanical
15. Electrical
16. Telecommunications
17. Resource
18. Other Disciplines
19. Sub-Contractor/Shop Drawings
20. Operations

2.6.5 DRAWING FOLDER STRUCTURE

CADD files shall be organized in a folder structure to what is described in Paragraph 2.6.4. For multi-building projects a folder of each building type shall be created and the applicable folders shown in each building type folder.

2.6.6 DRAWING SHEET ASSEMBLY

CADD files shall be organized to what is described in "Option 2 – Use of Design Model Only" (page 10, Figure 2-3 of the A/E/C CADD Standard). This method will utilize one view and the use of "paper space" is not used. The border sheet shall be X-REF into each model file and scaled up to the applicable scale.

2.6.7 MODEL FILES

Model files represent the building's physical layout and components such as floor plans and elevations. Model files shall be drawn to full size (1:1) in the default view. Floor Plan Model files represent one floor. Model files shall have coordinates (x,y,z) of 0,0,0 in paper space on

layout. The exception for model files with coordinates 0,0,0 shall be the civil site plan (see section 1.5.1.2 Georeferencing).

2.6.8 BORDER SHEET FILES

Border sheet files are used to assemble model files for plotting and viewing purposes. Every border sheet file has a drawing area, title block, border and represents one plotted drawing.

2.6.9 LAYER/LEVEL NAMES

Layer or level files names shall follow the guidelines of appendix A and B of the A/E/C CADD standards. For AutoCAD, .dwt (drawing template files) shall be used to import the proper layers that will be inclusive of the correct line type, color, and line thickness of the respective layer.

2.6.10 DRAWING FILE NAMING CONVENTION

CADD files shall follow the naming convention as described in the A/E/C CADD Standards. For model files reference pg 12 - 16, figure 2-4, tables 2-1 and 2-2. for sheet files reference pg 18 – 22, figure 2-5, table 2-3.

2.6.11 SHEET IDENTIFICATION BLOCK

The sheet identifier will follow the name of the border sheet file. This will consist of the discipline designator, the sheet type designator and the sheet sequence number as referenced in pg 23, figure 2-6 of the A/E/C CADD Standards.

2.6.12 DRAWING SCALES

The scales indicated on the following list shall, in general, be used for all drawings. The Contractor may, at its option, make exceptions to scales indicated, if approved in writing by the Contracting Officer.

TYPICAL DRAWING SCALES	
DRAWING TYPE	**METRIC**
SITE PLAN	1:200
	1:400
	1:500
	1:600
	1:700
	1:1000
	1:2000
	1:5000
	1:6000

	1:10000
	1:20000
FLOOR PLAN	1:50
	1:100
	1:200
ROOF PLAN	1:200
EXTERIOR ELEVATIONS	1:100
	1:200
INTERIOR ELEVATIONS	1:50
	1:100
CROSS SECTIONS	1:50
	1:100
	1:200
WALL SECTIONS	1:20
STAIR DETAILS	1:10
DETAILS	1:5

2.6.13 SYMBOLS, LINE STYLES, & PATTERNS

Approved symbols, line styles, and patterns shall be in accordance with AEC CAD Standard Release 3.0 or current version (see Appendix D of the A/E/C CADD Standards). The approved symbols, line styles, and patterns associated with AutoCAD software maybe downloaded in the following link:

https://tsc.wes.army.mil/products/standards/aec/aecstdsym.asp

2.6.14 PLOTTER PREPARED ORIGINAL DRAWINGS

Plotter prepared original drawings shall be prepared on 20 pound bond paper, unless otherwise approved and shall be plotted on the matte side. Raster plotters must provide a minimum resolution of 400 dpi while vector plotters shall provide a minimum resolution of 0.0010 inch with an accuracy of +0.1% of the move and a repeatability error of not more than 0.005 inch. Drawings produced from dot matrix plotters are not acceptable. Plots accompanied by the digital design file may be prepared on vellum: translucent bond is not acceptable. Line density shall be equivalent to that produced by black India ink: half tone plots are only acceptable where the half-tone color setting of RGB (red, green blue) settings equal a value of 153 (see pg. 27, Table 3-4 of the A/E/C CADD Standards). Drawings plotted in color is not acceptable. Manual changes to plotted originals are not acceptable.

2.6.15 TITLE AND REVISION BLOCK

Title and revision block shall match examples shown in SITE ADAPT 1335a-Attachments-AED.pdf, Figures 1 through 4, furnished as an attachment to this RFP.

2.6.16 LEGENDS

For each submittal, legends of symbols and lists of abbreviations shall be placed on the drawings. They shall include all of the symbols and abbreviations used in the drawing set, but shall exclude any symbols and abbreviations not used. Since many symbols are limited to certain design disciplines, there is a definite advantage to the use of separate legends on the initial sheet of each design discipline or in the Standard Details package for each discipline. If legends have not been shown by discipline, a legend shall be placed on the first drawing.

2.6.17 LOCATION GRID

To facilitate the location of project elements and the coordination of the various disciplines' drawings, all plans shall indicate a column line or planning grid, and all floor plans (except structural plans) shall show room numbers.

2.6.18 COMPOSITE AND KEY PLANS

If the plan of a large building or structure must be placed on two or more sheets in order to maintain proper scale, the total plan shall be placed on one sheet at a smaller scale. Appropriate key plans and match lines shall appear on segmented drawings. Key plans shall be used not only to relate large scale plans to total floor plans but also to relate individual buildings to complexes of buildings. Key plans shall be drawn in a convenient location and shall indicate the relative location of the represented plan area by crosshatching.

2.6.19 SPECIFICATIONS PLACED ON THE DRAWINGS

Details of standard products or items which are adequately covered by specifications shall not be included on the drawings.

2.6.20 REVISIONS

Drawing revisions shall be prepared only on the original CADD files. A revision area is required on all sheets.

2.6.21 BINDING

All volumes of drawing prints shall be firmly bound and shall have covers of heavier bond than the drawing sheets. If posts are used to fasten sheets together, the drilled holes on the bond edges of the sheets shall be on 8-1/2-inch centers.

2.6.22 GOVERNMENT PROVIDED FILES

At the Preconstruction meeting, the Contractor shall be provided a CD that shall contain the AED border sheet, the A/E/C CADD standards, and various other files related to the compliancy of CADD files to the A/E/C CADD standards.

3.0 EXECUTION

3.1 GENERAL

3.1.1 DESIGN CONCEPT COORDINATION MEETING

Shortly after Notice To Proceed (NTP) the Government or contractor may suggest meeting(s) to review the Design Submittal process or discuss various aspects of the contract to enable prompt and efficient initiation of contract actions. Meeting(s) will be held to assure attention is focused on key project requirements (necessary contractor design and Government review that is required to provide Construction Clearance), to discuss features and items of work that need to be submitted early due to long lead time items, or discuss other concepts/ideas that will help accelerate the contract work. Other Design Coordination meetings may be requested throughout the contract period if Government review of various contractor Design Submittals indicate poor design and plan or specification quality in order to clearly explain the changes and improvements required of the contractor, assure understanding of Government comments, code references and required investigations and calculations, to move forward with acceptable design and satisfactory plans and specifications.

3.1.2 GOVERNMENT DESIGN CHANGES

Government design changes which do not increase construction costs shall be made at no charge to the Government. The Contracting Officer may request design submittals in addition to those listed when deemed necessary to adequately describe the work covered in the contract documents. Submittals shall be made in the respective number of copies and to the respective addresses set forth in the paragraph entitled SUBMITTAL PROCEDURE. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

3.2 SUBMITTAL REGISTER

3.2.1 DESIGN SUBMITTALS

The Contractor shall submit as part of his Project Schedule Design Submittal milestone dates. The Contractor shall post all actual dates of submittal actions (including clearance for construction) as they occur.

3.2.2 CONSTRUCTION SUBMITTAL REGISTER (ENG FORM 4288)

Attached to this section is ENG Form 4288 which the Contractor is responsible for developing for this contract. All design and construction submittals shall be shown on this register. The submittal register shall be the controlling document and will be used to control all submittals throughout the life of the contract. The Contractor shall maintain and update the register on a monthly basis for the Contracting Officer's approval.

3.3 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both design and construction submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care will be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.4 PROGRESS SCHEDULE

The Contractor shall prepare and submit a design progress schedule to the Contracting Officer. The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The progress schedule shall show, as a percentage of the total design price, the various items included in the contract and the order in which the Contractor proposes to carry on the work, with dates on which he will start the features of the work and the contemplated dates for completing same. Significant milestones such as review submittals shall be annotated. The Contractor shall assign sufficient technical, supervisory and administrative personnel to insure the prosecution of the work in accordance with the progress schedule. The Contractor shall correct the progress schedule at the end of each month and submit as required to the Contracting Officer. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.5 SCHEDULING

3.5.1 DESIGN SUBMITTALS

Adequate time (a minimum of fourteen (14) full calendar days exclusive of mailing time) shall be allowed for AED review and comment in DrChecks$_{SM}$. This time period starts on the next full day after delivery of the Design Submittal to AED. If the Contractor fails to submit design submittals in a timely fashion, or repetitively submits design submittals that are not in strict conformance with the Contract documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.5.2 CONSTRUCTION SUBMITTALS

Contractor furnished Government Approved Construction Submittals (GA) for items noted in Paragraph 1.2.5 of this Section, or others as required by the COR, shall be submitted to the Area or Resident Office, per directions given at the Pre-Construction meeting. Adequate time (a

minimum of fourteen (14) full calendar days exclusive of mailing time) shall be allowed for AED review and comment.

3.5.3 POST DESIGN CONSTRUCTION SUBMITTALS

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of fourteen (14) full calendar days exclusive of mailing time) shall be allowed for review and approval. If the Contractor fails to submit post design construction submittals in a timely fashion, or repetitively submits submittals that are not in strict conformance with the Contract documents, no part of the time lost due to actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.6 SUBMITTAL PROCEDURE

3.6.1 DESIGN SUBMITTALS

3.6.1.1 AFGHANISTAN ENGINEER DISTRICT (AED)

One (1) half-size hard copy and two (2) soft copies (electronic version) of all design submittals (calculations, reports of field tests, design analysis, plans, specifications, etc) shall be transmitted to the Government at the following address, by means of ENG Form 4025:

AFGHANISTAN ENGINEER DISTRICT NORTH (AEN)

(1) DHL, FEDEX, UPS or any other courier service:
U.S. Army Corps of Engineers
Afghanistan Engineer District
House # 1, St. #1 West
West Wazir Akbar High School
Behind Amani High School
Kabul, Afghanistan
Attention: Chief, Engineering Branch

And

AFGHANISTAN ENGINEER DISTRICT SOUTH (AES)

http://www.aed.usace.army.mil
U.S. Army Corps of Engineers
Kandahar Air Field, Afghanistan
APO, AE 09355

The soft copy (electronic version) and CD case shall both be clearly labeled (hand written information is not acceptable – typed labels are required) with contract information (contract #, title, contractor name, specific design submittal stage including if it is a Resubmittal, date of

submission, components of the submittal – design analysis, plans, specifications, and if more than one CD then state 1 of "X", 2 of "X", etc., anti-virus information below, etc.)

The Contractor shall scan the soft copy (electronic version) of each Design Submittal using most up-to-date version of recognized Industry-standard anti-virus software (Symantec, Norton, etc.) to insure that no viruses are contained in it prior to acceptance by AED. The label shall indicate it has been scanned for viruses and the anti-virus software and version clearly indicated.

3.6.1.2 RESIDENT/AREA ENGINEER OFFICE

Complete design submittals shall be provided to the Area and/or Resident Engineer Office such that these are received **at the same time** as these submittals are delivered to the AED address in Para. 3.6.1.1. At the Pre-Construction meeting, the Contractor will be furnished the Area and/or Resident Office address to which these submittals shall be provided along with the number and size of hard and soft (electronic version) copies required for these offices. As per Paragraph 3.6.1.1, soft copies are to be properly labeled and checked for viruses by the contractor prior to delivery.

3.6.1.3 EDITABLE CADD FORMAT AS-BUILTS

This is a Design-Build project and in accordance with Contract Clause 52.227-7022 GOVERNMENT RIGHTS (UNLIMITED), the Government has non-exclusive rights to use the design on other projects. Therefore, the As-Builts furnished to the Government must be in an editable format. See Section 01780A CLOSEOUT SUBMITTALS, Paragraphs 1.1 and 1.2, for all requirements associated with submission of editable CADD format As-Builts required as part of this contract.

3.6.2 POST DESIGN CONSTRUCTION SUBMITTALS

One (1) copy of all post design construction submittals shall be transmitted to:

AFGHANISTAN ENGINEER DISTRICT NORTH (AEN)

(1) DHL, FEDEX, UPS or any other courier service:
U.S. Army Corps of Engineers
Afghanistan Engineer District
House # 1, St. #1 West
West Wazir Akbar High School
Behind Amani High School
Kabul, Afghanistan
Attention: Chief, Engineering Branch

And

AFGHANISTAN ENGINEER DISTRICT SOUTH (AES)

http://www.aed.usace.army.mil
U.S. Army Corps of Engineers
Kandahar Air Field, Afghanistan

3.6.3 SUBMITTAL NUMBERING SYSTEM

Instructions on the numbering system to be used for construction submittals follows.

3.6.3.1 SUBMITTALS

Shop drawings and materials are listed on the Submittal Register (ENG Form 4288) as follows:

a. List is prepared according to contract specifications and drawings, picking up all items involved in the project.

b. This list is divided into sections as indicated in the specifications. For example:

Section 01015 "Technical Requirements"

Section 01335 “Design Submittals”

Section 02831 "Chain-Link Fence"

Section 02710 "Subdrainage System"

Section 03300 "Concrete For Building Construction"

Section 04200 "Masonry"

3.6.3.2 NUMBERING PROCEDURES FOR TRANSMITTAL ON ENG FORM 4025

Each Specification Section will have various requirements for submittals (design information, product data, test reports, procedures, etc.) to the Government for Approval (GA) or For Information Only (FIO). Items from different Sections cannot be submitted on the same ENG Form 4025. When furnishing one or more items from the same Section at a given time, a single ENG Form 4025 can be used to identify and submit these items. Block ‘b” of the 4025 entitled “DESCRIPTION OF ITEM SUBMITTED” should provide an accurate and unique description of each item being proposed by the Contractor. Item numbers (block “a” of the 4025 entitled “ITEM NO.”) will be automatically generated in QCS for each ENG Form 4025. QCS will track and automatically generate the “ITEM NO.” for all following ENG Form 4025s for the same Section number. To illustrate, a transmittal for the 65% Design Submittal required by Section 01335 might have the following Items:

ITEM NO. 1 Topographic Information

ITEM NO. 2 Geotechnical Report

ITEM NO. 3 Foundation Design

ITEM NO. 4 65% Plans

ITEM NO. 5 Outline of Construction Specifications to be used

If this was the first submittal furnished by the Contractor for Section 01335, then a Transmittal Number of 01335-1 would be generated using QCS. As new transmittals are generated in QCS, the last digit of the transmittal is increased incrementally, as follows:

Transmittal No. 01335-2

Transmittal No. 01335-3

Transmittal No. 01335-4

and so forth. The first transmittal submitted from each Specification Section will be "-1", in other words, there will never be a "Transmittal No. 01335-0".

The above illustration is true for all other Specification Sections included in the Request for Proposal or in the Construction Specifications compiled by the Contractor in the prosecution of work under the RFP.

3.6.3.3 RESUBMITTALS

Should the Contractor be required to resubmit any transmittal due to one or more items on that transmittal being Coded "C" (Cleared for Construction, except as noted in attached comments, Resubmission Required) or "E" (NOT Cleared for Construction, see attached comments, resubmission required) by the Government, QCS will be used to generate the same transmittal number followed by the number "-1" for the first resubmittal, "-2" for the second resubmittal, "-3" for the third resubmittal, etc.

As an example, assume the 65% Design Submittal is provided to the Government as Transmittal 01335-9. Due to omissions or errors in that Submittal which result in a Code "E" being given, then the subsequent 65% Design Resubmittal #1 would be "Transmittal 01335-9.1". Should a resubmittal again be necessary, it would be Design Resubmittal #2 and would be submitted as "Transmittal 01335-9.2".

The purpose of this system is to avoid deviations from the Submittal Register and to track submittals in both RMS and DrChecks$_{SM}$. <u>It should be noted that a new transmittal number following the above system CANNOT be generated in QCS unless the prior transmittal has been given a Code.</u> If the Contractor is having difficulty generating the correct transmittal number, contact the COR to resolve the matter.

The Contractor use the above nomenclature and date of submission to the Government for Plan Cover Sheets; title blocks for all drawings; all Specification Cover Sheets; all specification pages; all Design Analysis Cover Sheets and associated pages; and similar labeling for all other documents included in the submittal.

See the attachment titled "SITE ADAPT 1335a-Attachments-AED.pdf" (Figures 1-4) for required Title Block Required Annotations drawing guidance.

3.6.4 VARIATIONS

If design or construction submittals show variations from the contract parameters and/or requirements, the Contractor shall justify such variations in writing, at the time of submission. Additionally, the Contractor shall also annotate block "h" entitled "variation" of ENG FORM 4025. After design submittals have been reviewed and cleared for construction by the

Contracting Officer, no resubmittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered unless accompanied by the following:

a. Reason or purpose for proposed variation, substitution, or revision.

b. How does quality of variation compare with quality of the specified item? This shall be in the form of a technical evaluation tabulating differences between the item(s) originally specified and what is proposed.

c. Provide a cost comparison. This shall include an acquisition and life cycle cost comparison.

d. For proprietary materials, products, systems, and patented processes a certification signed by an official authorized to certify in behalf of the manufacturing company that the proposed substitution meets or exceeds what was originally specified.

e. For all other actions, a certification signed by a licensed professional engineer or architect certifying that the proposed variation or revision meets or exceeds what was originally specified.

f. Advantage to the Government, if variation is approved, i.e. Operation and Maintenance considerations, better product, etc.

g. Ramifications and impact, if not approved.

If the Government review detects any items not in compliance with contract requirements or items requiring further clarification, the Contractor will be so advised. Lack of notification by the Contracting Officer of any non-complying item does not relieve the Contractor of any contractual obligation.

3.6.5 NON-COMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the worksite, 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. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.7 REVIEW OF CONTRACTOR PREPARED DESIGN DOCUMENTS

3.7.1 GENERAL

The work under contract will be subject to continuous review by representatives of the Contracting Officer. Additionally, joint design review conferences with representation by all organizations having a direct interest in the items under review may be held. The Contractor shall furnish copies of all drawings and related documents to be reviewed at the review

conference on or before the date indicated by the Government. Additional conferences pertaining to specific problems may be requested by the Contractor or may be directed by the Contracting Officer as necessary to progress the work. The Contractor shall prepare minutes of all conferences and shall furnish two copies to the Contracting Officer within seven (7) days after the conference.

3.7.2 INDEPENDENT DESIGN REVIEW

The Contractor shall have someone other than the Designer or Design Team perform an independent technical review of all specifications, drawings, design analysis, calculations, and other required data prior to submission to the Government. This review shall insure the professional quality, technical accuracy, and the coordination of all design analysis, drawings and specifications, and other services furnished under this contract have been accomplished. Work must be organized in a manner that will assure thorough coordination between various details on drawings, between the various sections of the specifications, and between the drawings and specifications. The Contractor shall thoroughly cross-check and coordinate all work until he is professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved. Upon completion of this review, the Contractor shall certify that each design submittal is complete, accurate, is in strict conformance with all contract requirements, that repetition has been avoided, that all conflicts have been resolved, and that the documents have thoroughly coordinated and cross checked against all the applicable disciplines to prevent the omission of vital information.

3.7.3 CONTRACTOR'S QUALITY CONTROL ORGANIZATION REVIEW

The Contractor shall thoroughly review each submittal prior to submission to the Contracting Officer to assure it is complete, correct and unified. This review shall be for the purposes of eliminating errors, interferences, and inconsistencies, and of incorporating design criteria, review comments, specifications, and any additional information required. The Contractor will give evidence of such review of all items in each submittal ENG Form 4025, by annotating Column “g” (titled “For Contractor Use Code”) of this Form with the letter “A,” meaning the Contractor has reviewed it and is indicating it is “Approved as Submitted”. Design submittals submitted to the Contracting Officer without evidence of the above requirements or the Contractor's certified approval will be returned for resubmission. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.7.4 GOVERNMENT REVIEW

a. Within 14 days after Notice to Proceed, the Contractor shall submit, for approval, a complete design schedule with all submittals and review times indicated in calendar dates. The Contractor shall update this schedule monthly. After receipt, the Government will be allowed fourteen (14) full days to review and comment on all Design Submittals, except as noted below. This time period starts on the next full day after delivery of the Design Submittal to AED.

b. If a design submittal is deficient (errors on ENG Form 4025; incorrect drawing title block information; missing or incomplete features required in the submittal; etc.), it will be returned immediately without further review for correction and resubmission. The review time will begin when the corrected submittal is received. The Contractor may be liable for liquidated damages owed to the Government for returned design submittals due to deficiencies.

c. The contractor shall not begin construction work until the Government has reviewed the Contractor's Design Submittal and cleared it for construction. Clearance for construction does not mean Government approval. Government review shall not be construed as a complete check but will evaluate the general design approach and adherence to contract parameters. The Government Review is often limited in time and scope. Therefore, the Contractor shall not consider any review performed by the Government as an excuse for incomplete work.

d. Upon completion of the review the Contractor will be notified by the Contracting Officer Representative that the DrChecks$_{SM}$ file is open for viewing and response to AED comments. The Contracting Officer will indicate whether the Design Submittal, or portions thereof, has or has not been cleared for construction using the following action codes:

A – Cleared for Construction

B – Cleared for Construction, except as noted in attached comments

C – Cleared for Construction, except as noted in attached comments, resubmission required

E - NOT Cleared for Construction, see attached comments, resubmission required

FX – Receipt acknowledged, does not comply as noted with contract requirements.

These codes shall NOT be used by the Contractor.

Design submittals Cleared for Construction by the Contracting Officer shall not relieve the Contractor from responsibility for any design errors or omissions and any liability associated with such errors, nor from responsibility for complying with the requirements of this contract.

3.7.4.1 INCORPORATION OF GOVERNMENT REVIEW COMMENTS

a. The Contractor shall review each comment, furnish a complete response in DrChecks$_{SM}$ as to how the comment will be addressed in the Design Analysis, Plans and Specifications, or other Design Submittal stipulations required in this Contract. The Contractor will then incorporate each comment into the design submittal along with other work required at the next Design Submittal stage. The Contractor shall furnish disposition of all comments in DrChecks$_{SM}$, with the next scheduled submittal. The disposition shall identify action taken with citation of location within the relevant design

document. Generalized statements of intention such as "will comply" or "will revise the specification" are not acceptable. During the design review process, comments will be made on the design submittals that will change the drawings and specifications. The Government will make no additional payments to the Contractor for the incorporation of comments. Review comments are considered part of the contract administration process.

b. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, he must clearly outline, with ample justification, the reasons for noncompliance within five (5) days after close of review period in order that the comment can be resolved.

c. The Contractor is cautioned that if he believes the action required by any comment exceeds the requirements of this contract, he should flag the comment in DrChecks$_{SM}$ as a scope change, and notify the COR in writing immediately.

d. If a design submittal is over one (1) day late in accordance with the latest design schedule, the Government review period may be extended 7 days. Submittal date revisions must be made in writing at least five (5) days prior to the submittal.

3.7.4.2 CONFERENCES

As necessary, conferences will be conducted between the Contractor and the Government to resolve review comments.

A review conference may be held at the completion of AED review and subsequent Contractor response for each design submittal. The review conference will be held at the Corps District Office in Kabul, Afghanistan. The Contractor shall bring the personnel that developed the design submittal to the review conference.

3.7.4.3 DESIGN DEFICIENCIES

Design deficiencies noted by the Government shall be corrected prior to the start of design for subsequent features of work which may be affected by, or need to be built upon, the deficient design work.

3.7.5 DESIGN DISCREPANCIES

The Contractor shall be responsible for the correction of incomplete design data, omissions, and design discrepancies which become apparent during construction. The Contractor shall provide the Contracting Officer with a proposed recommendation for correcting a design error, within three (3) calendar days after notification by the Contracting Officer. The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the worksite, 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. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. Should extensions of design,

fabrication plans and/or specific manufacturer's details be required as a result of a Government issued Change Order, the Government will make an equitable adjustment in accordance with Contract Clause 52.243-4 entitled CHANGES.

3.8 PHASED OR "FAST-TRACK" DESIGN

3.8.1 GENERAL

If approved by the Government, design and construction sequencing may be effected on an incremental basis as each approved phase or portion (e.g., demolition, geotechnical, site work, exterior utilities, foundations, substructure, superstructure, exterior closure, roofing, interior construction, mechanical, electrical, etc.) of the design is completed.

3.8.2 SEQUENCE OF DESIGN-CONSTRUCTION (FAST-TRACK)

After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submission requirements and obtain Government review of each submission. The contractor may begin construction on portions of the work for which the Government has reviewed the final design submission and has determined satisfactory for purposes of beginning construction. The Contracting Officer will notify the Contractor when the design is cleared for construction. The Government will not grant any time extension for any design resubmittal required when, in the opinion of the Government, the initial submission failed to meet the minimum quality requirements as set forth in the contract.

3.8.3 NOTICE-TO-PROCEED FOR LIMITED CONSTRUCTION

If the Government allows the Contractor to proceed with limited construction based on pending minor revisions to the reviewed Final Design submission, no payment will be made for any in-place construction related to the pending revisions until they are completed, resubmitted and are satisfactory to the Government.

3.8.4 IN-PLACE CONSTRUCTION PAYMENT

No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

3.8.5 COMMENCEMENT OF CONSTRUCTION

Construction of work may begin after receipt of the clearance for construction (Notice to Proceed) for each design phase. Any work performed by the Contractor prior to receipt of the clearance for construction, shall be at the Contractor's own risk and expense. Work cleared for construction that does not conform to the design parameters and/or requirements of this contract shall be corrected by the Contractor at no additional cost or time to the Government.

3.9 CONDUCT OF WORK

3.9.1 PERFORMANCE

Perform the work diligently and aggressively, and promptly advise the Contracting Officer of all significant developments.

3.9.2 TELEPHONE CONVERSATIONS

Prepare a summary, and promptly furnish a copy thereof to the Contracting Officer, of all telephone conversations relating to the design work under this contract.

3.9.3 COOPERATION WITH OTHERS

Cooperate fully with other firms, consultants and contractors performing work under the program to which this contract pertains, upon being advised by the Contracting Officer that such firms or individuals have a legitimate interest in the program, have need-to-know status, and proper security clearance where required.

3.9.4 TECHNICAL CRITERIA

All designs, drawings, and specifications shall be prepared in accordance with the contract documents and with the applicable publications referenced therein. As soon as possible, the Contractor shall obtain copies of all publications applicable to this contract. Availability of publications (where to purchase) is contained in Specification Section 01420 entitled: SOURCES FOR REFERENCE PUBLICATIONS. Any deviations from the technical criteria contained in the contract documents or in the applicable publications, including the use of criteria obtained from the user or other sources, must receive prior approval of the Contracting Officer. Where the technical criteria contained or referred to herein are not met, the Contractor will be required to conform his design to the same at his own time and expense.

3.9.5 CONFLICTS

Any conflicts, ambiguities, questions or problems encountered by the Contractor in following the criteria shall be immediately submitted in writing to the Contracting Officer with the Contractor's recommendations. Prior to submission to the Government the Contractor shall take appropriate measures to obtain clarification of design criteria requirements, to acquire all pertinent design information, and to incorporate such information in the work being performed.

3.9.6 DESIGN PRIORITIES

The design of this project shall consider the remote location and harsh environment of this project and the impact this will have on sources of technical supply, the cost of construction, the low level of maintenance, and the difficulty of obtaining replacement parts. Unless stated otherwise in this contract, the following design priorities shall be followed.

3.9.6.1 CONSTRUCTION LIFE SPAN

Permanent Construction. Buildings and facilities shall be designed and constructed to serve a life expectancy of more than 25 years, to be energy efficient, and to have finishes, materials, and systems that are low maintenance and low life cycle cost.

3.9.6.2 OPERABILITY

Systems including but not necessarily limited to mechanical, electrical, communications, etc., must be simple to operate and easy to maintain.

3.9.6.3 STANDARDIZATION

Use of standardized materials, products, equipment, and systems is necessary to minimize the requirements for replacement parts, storage facilities, and service requirements.

3.9.6.4 TOPOGRAPHIC SURVEYS, EASEMENTS, AND UTILITIES

Unless otherwise stated in the contract, the Contractor will be responsible for detailed topographic mapping, available easements, and utility information for the project.

3.9.6.5 HORIZONTAL AND VERTICAL CONTROL

The mapping shall be based on the base coordinate system. If the base system cannot be found, the surveyor shall use any established monuments. If monuments have been destroyed or do not exist, an assumed horizontal and vertical datum shall be established, using arbitrary coordinates of 10,000n and 10,000e and an elevation of 1,000 meters. The horizontal and vertical control established on site shall be a closed loop with third order accuracy and procedures. Provide three (3) concrete survey monuments at the survey site. All of the control points established at the site shall be plotted at the appropriate coordinate point and shall be identified by name or number, and adjusted elevations. The location of the project site, as determined by the surveyor shall be submitted in writing to the Contracting Officer. The site location shall be identified by temporary markers, approved by the Contracting Officer before proceeding with the surveying work.

3.9.6.6 TOPOGRAPHY REQUIREMENTS

A sufficient quantity of horizontal and vertical control shall be established to provide a detailed topographic survey at 1:500 scale with one quarter meter contour intervals minimum. Intermediate elevations shall be provided as necessary to show breaks in grade and changes in terrain.

The contours shall accurately express the relief detail and topographic shapes. In addition, 90 percent of the elevations or profiles interpolated from the contours shall be correct to within one-half of the contour interval and spot elevations shall be correct within plus or minus 20 millimeters.

Spot elevations affecting design of facilities shall be provided. Specifically, break points or control points in grades of terrain such as tops of hills, bottoms of ditches and gullies, high bank elevations, etc.

All surface and sub-surface structures features within the area to be surveyed shall be shown and identified on the topographic maps. In addition, these features shall be located by sufficient distance ties and labeled on the topographic sheets to permit accurate scaling and identification.

The location and sizes of potable, sanitary, electrical and mechanical utilities within the survey site shall be shown on the survey map. Sanitary manholes and appurtenances shall show top elevations and invert elevations.

3.9.7 OCCUPATIONAL SAFETY AND HEALTH ACT

The facilities, systems, and equipment designed under this contract shall comply with the Occupational Safety and Health Act (OSHA), Code of Federal Regulations, Title 29, Chapter XVII, Parts 1910 and 1926. Any problems in incorporating these standards due to conflicts with other technical criteria shall be submitted to the Contracting Officer for resolution.

3.9.8 ASBESTOS CONTAINING MATERIALS

Asbestos containing material (ACM) will not be used in the design of new structures or systems. In the event no other material is available which will perform the required function or where the use of other material would be cost prohibitive, a waiver for the use of asbestos containing materials must be obtained from AED.

3.9.8.1 EXISTING CONSTRUCTION

Asbestos containing materials (ACM) presently included in existing construction to be rehabilitated or otherwise modified as a result of this project shall be removed and a non-asbestos containing material substituted in lieu thereof.

3.9.8.2 SUSPECTED ASBESTOS CONTAINING MATERIALS

All such structures and systems shall be inspected to determine the presence or probable presence of ACM. When ACM is suspected, a documented survey will be performed. The survey will be developed into an abatement design and will be made a part of the design documents. In the event no other material is available which will perform the required function or the use of a substitute material would be cost prohibitive due to initial cost and tear-out of existing construction, a waiver for the retention of the asbestos containing material must be obtained from the Contracting Officer.

3.10 ATTACHMENTS

The following attachments form an integral part of this specification:

ENG FORM 4025-R, Mar 95 - Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificate of Compliance (2 pages)

ENG FORM 4288-R, Mar 95 - Submittal Register

Figure 1 – AED Title Block

Figure 2 – AED Management Block

Figure 3 – AED Issue Block & Required Notations

Figure 4 – Border Sheet Size

-- END OF SECTION -

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating this form)*	DATE	TRANSMITTAL NO.

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO.	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____
SPECIFICATION SEC. NO. *(Cover only one section with each transmittal)*	PROJECT TITLE AND LOCATION		CHECK ONE: THIS TRANSMITTAL IS FOR ☐ FIO ☐ GOV'T. APPROVAL

ITEM NO. *a.*	DESCRIPTION OF ITEM SUBMITTED *(Type size, model number/etc.)* *b.*	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction no. 8)* *c.*	NO. OF COPIES *d.*	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE *g.*	VARIATION *(See instruction No. 6)* *h.*	FOR CE USE CODE *i.*
				SPEC. PARA. NO. *e.*	DRAWING SHEET NO. *f.*			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated. _____ NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.

3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.

4. Submittals requiring expeditious handling will be submitted on a separate form.

5. Separate transmittal form will be used for submittals under separate sections of the specifications.

6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".

7. Form is self-transmittal, letter of transmittal is not required.

8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.

9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A	--	Approved as submitted.	E	--	Disapproved (See attached).
B	--	Approved, except as noted on drawings.	F	--	Receipt acknowledged.
C	--	Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX	--	Receipt acknowledged, does not comply as noted with contract requirements.
D	--	Will be returned by separate correspondence.	G	--	Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

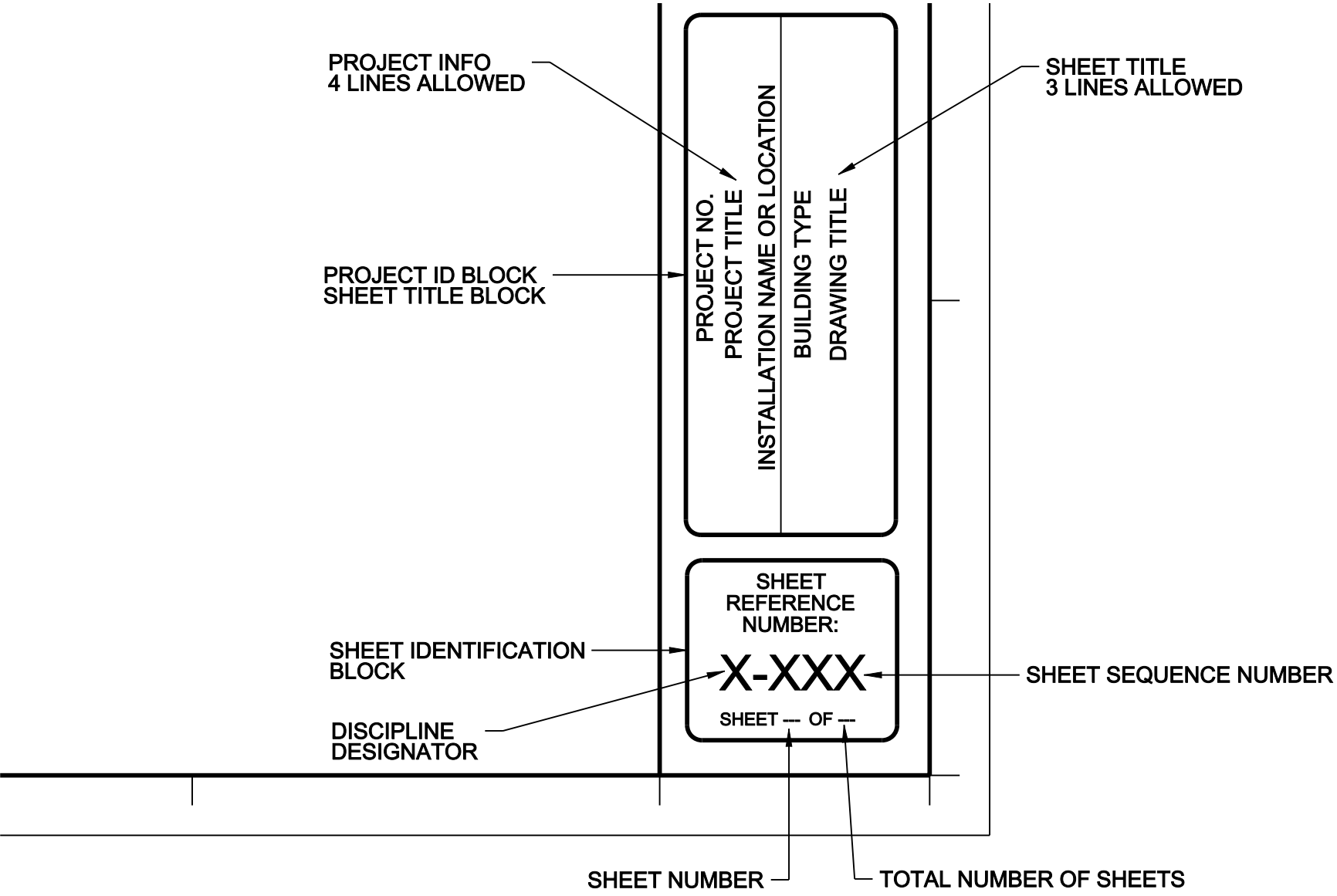


FIGURE 1 - AED TITLE BLOCK

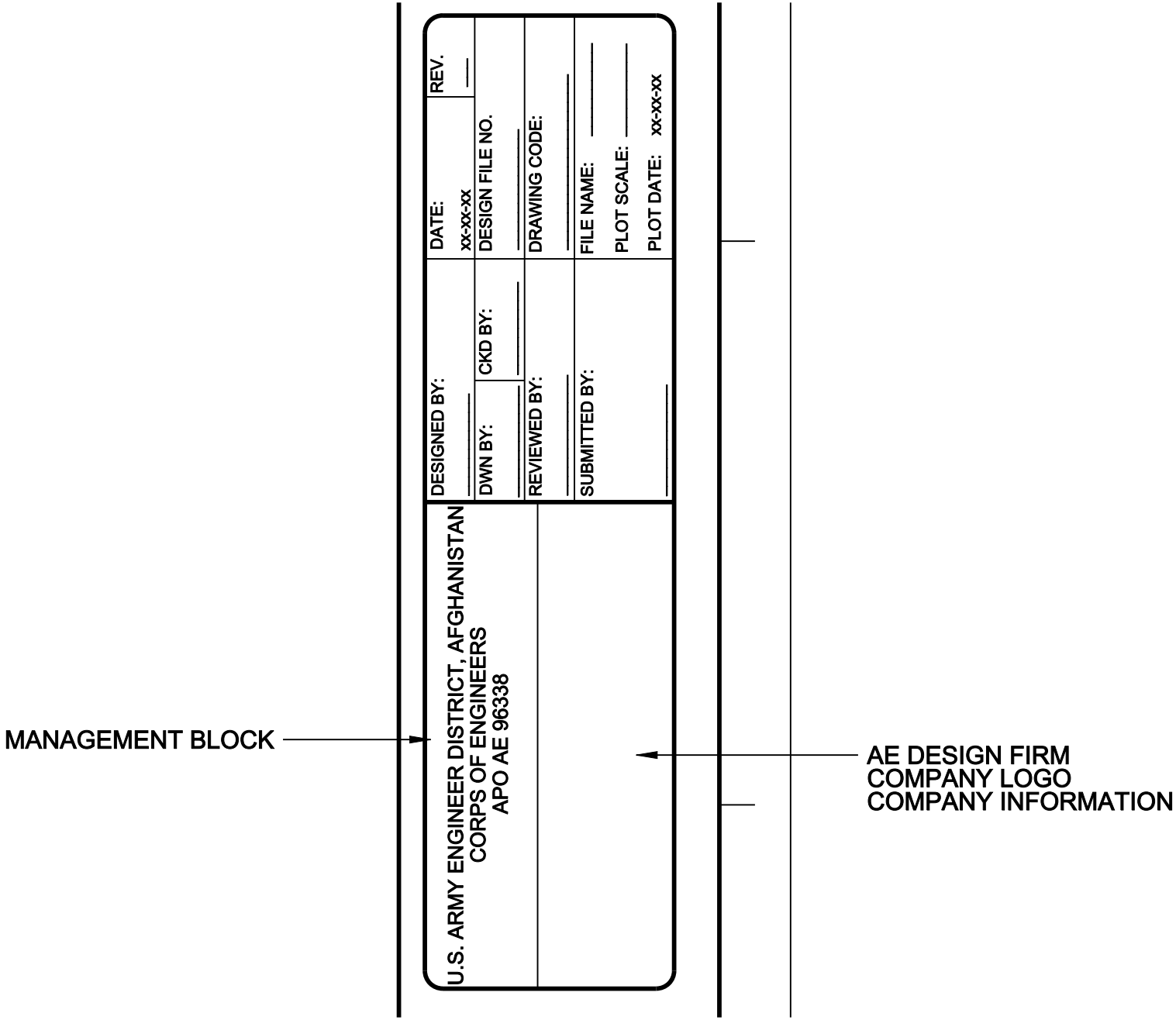


FIGURE 2 - AED MANAGEMENT BLOCK

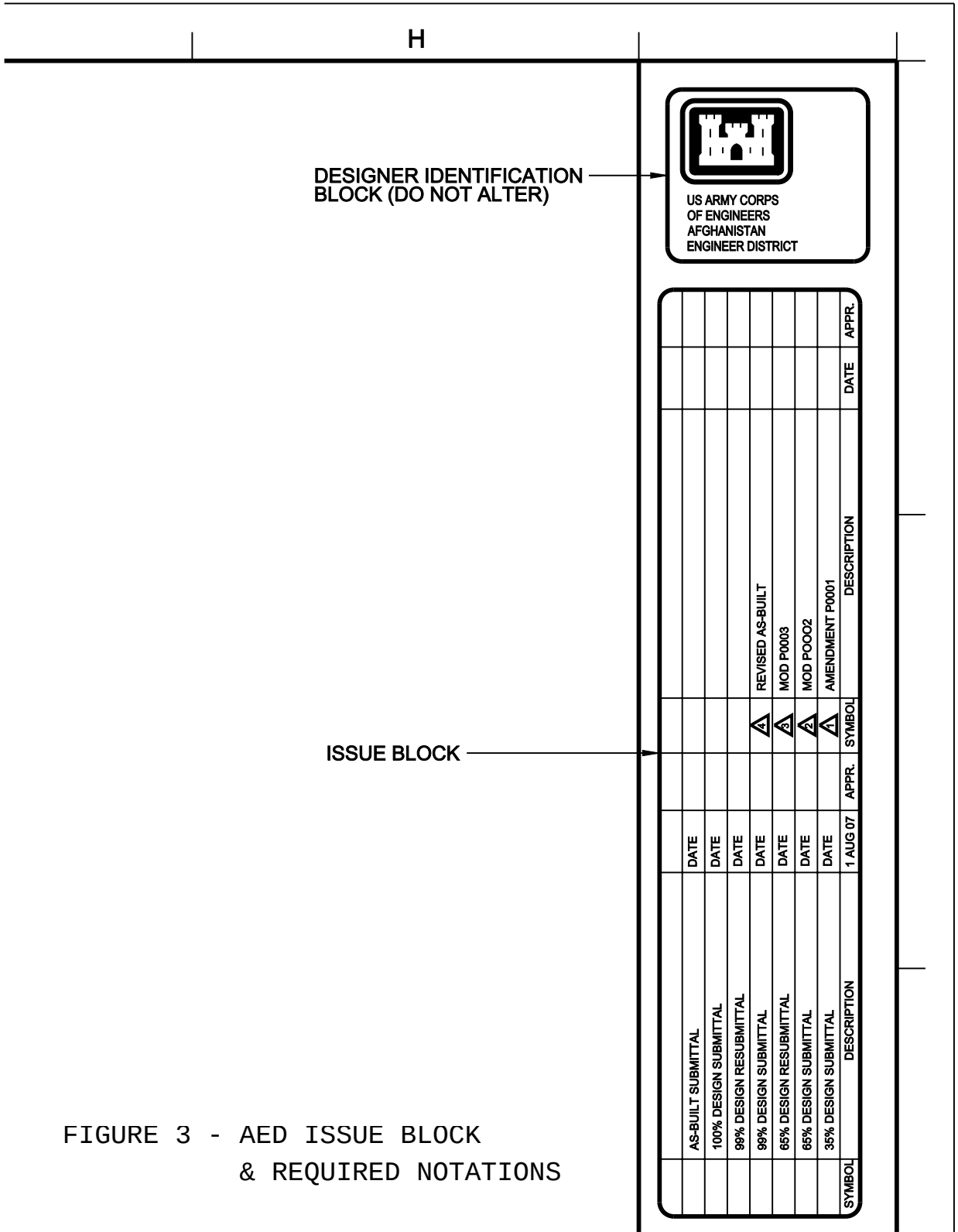


FIGURE 3 - AED ISSUE BLOCK
& REQUIRED NOTATIONS

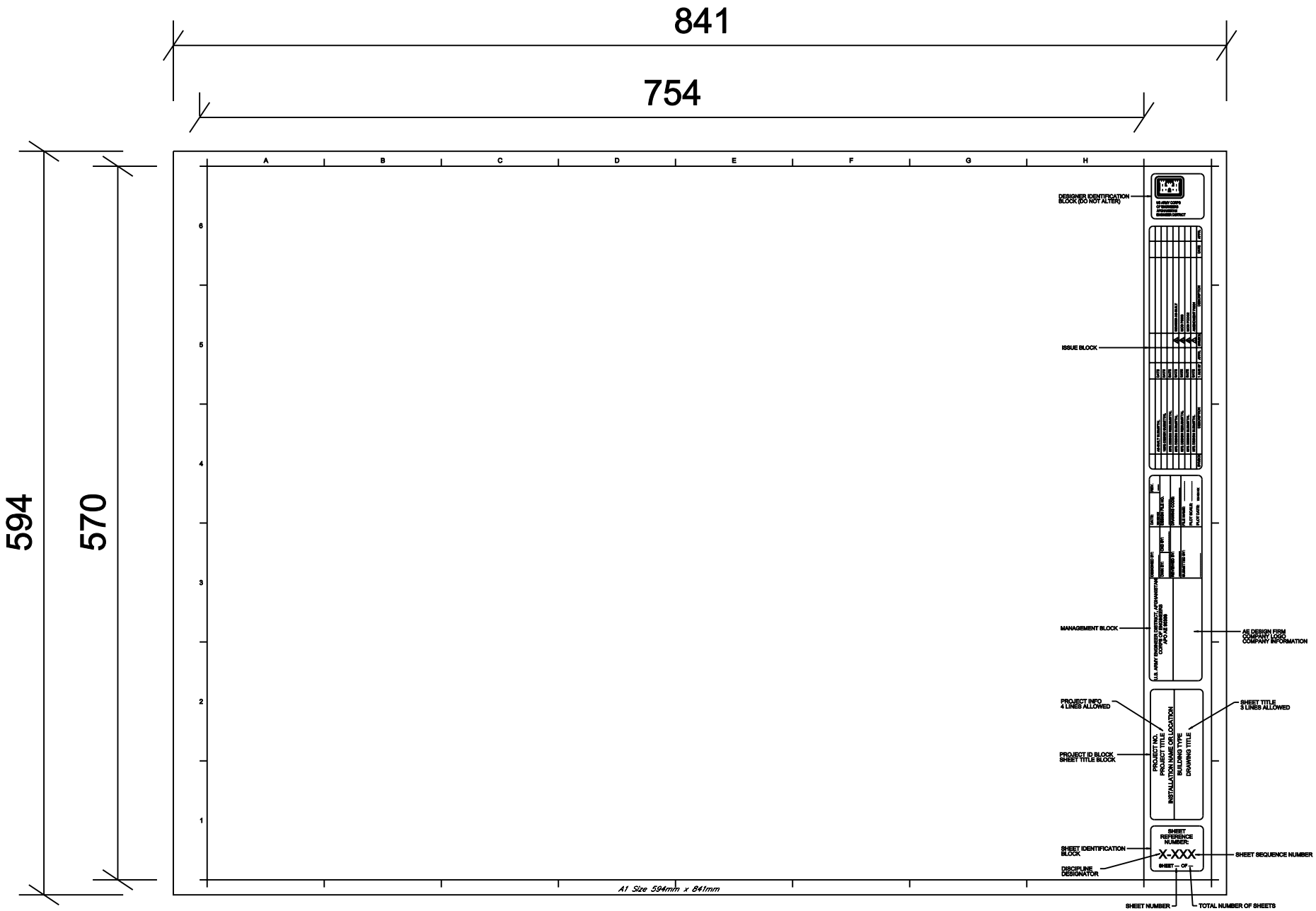
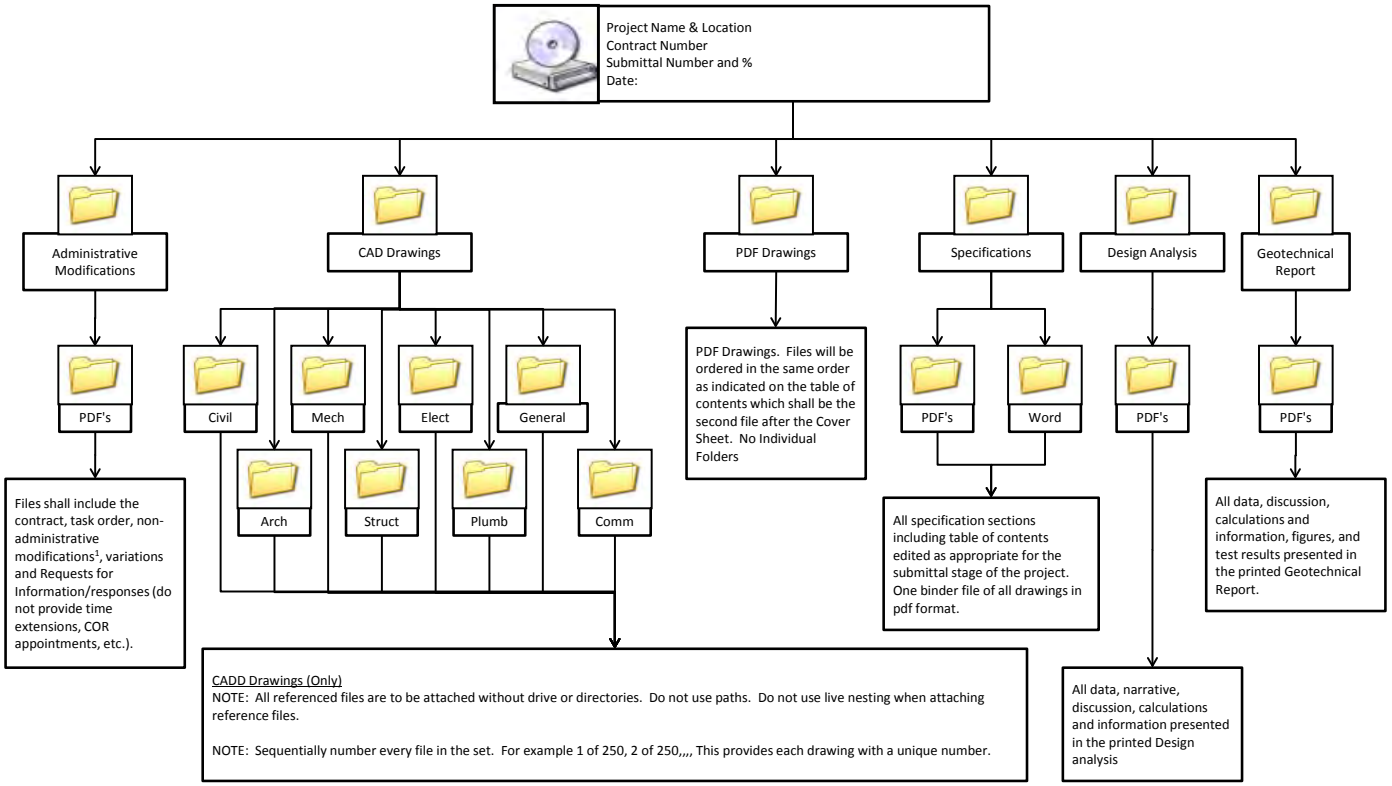


FIGURE 4 - BORDER SHEET SIZE


Project Name & Location
Contract Number
Submittal Number and %
Date:
Administrative Modifications
CAD Drawings
PDF Drawings
Specifications
Design Analysis
Geotechnical Report
PDF's
Civil
Mech
Elect
General
Arch
Struct
Plumb
Comm
PDF's
Word
PDF's
PDF's
Files shall include the contract, task order, non-administrative modifications[1], variations and Requests for Information/responses (do not provide time extensions, COR appointments, etc.).
PDF Drawings. Files will be ordered in the same order as indicated on the table of contents which shall be the second file after the Cover Sheet. No Individual Folders
All specification sections including table of contents edited as appropriate for the submittal stage of the project. One binder file of all drawings in pdf format.
All data, discussion, calculations and information, figures, and test results presented in the printed Geotechnical Report.
CADD Drawings (Only)
NOTE: All referenced files are to be attached without drive or directories. Do not use paths. Do not use live nesting when attaching reference files.
NOTE: Sequentially number every file in the set. For example 1 of 250, 2 of 250,,,, This provides each drawing with a unique number.
All data, narrative, discussion, calculations and information presented in the printed Design analysis

SUBMITTAL REGISTER

TITLE AND LOCATION:

Solicitation No.

CONTRACTOR:

CONTRACT:

Activity No.	Transmittal No.	Section Number	Paragraph Number	Description of Submittal	TYPE OF SUBMITTAL											Classification		Reviewing Office					Contractor Scheduled Dates			Contr Actions		Govt Actions		Remarks
					01-PRECON SUBMITTALS	02-SHOP DRAWINGS	03-PRODUCT DATA	04-SAMPLES	05-DESIGN DATA	06-TEST REPORTS	07-CERTIFICATES	08-MFRS INSTRUCTIONS	09-MFRS FIELD REPORT	10-O&M DATA	11-CLOSEOUT SUBMITTALS	Information Only	Government Approved	DO-District Office	AO-Area Office	RO-Resident Office	PO-Project Office	AE-Architect /Engineer	Submit	Approval Needed By	Material Needed By	Action Code	Date of Action	Action Code	Date of Action	
		01010	1.4	Construction Quality Management Course	X												X			X										
		01010	3.1	Demining Plan (if required)	X												X	X												
		01010	3.1	Demining Certificate	X												X	X												
		01010	1.6	Electrician Qualifications							X						X			X										
		01010	1.7	Plumbing Qualifications							X						X			X										
		01010	1.8	Sheetmetal Worker Qualifications							X						X			X										
		01010	2	Right of Entry Coordinate Data	X												X	X												
		01040	3.1	Securtiy Plan	X												X			X										
		01060	1.2	Area Use Plan	X												X			X										
		01335	1.2.1.1	Preliminary Design Reports - 10%					X								X	X												
		01335	1.2.1.2	Site-Adapt General Design Review - 65%					X								X	X												
		01335	1.2.1.3	Final Site-Adapt Design Review - 90%					X								X	X												
		01335	1.2.1.4	Cleared For Construction Review - 100%					X								X	X												
		01321	1.1	Initial Schedule	X												X			X										
		01355	1.7	Environmental Protection Plan	X												X			X										
		01451	2.3	Quality Control Plan Design	X												X			X										
		01451	2.3	Quality Control Plan Construction	X												X			X										
		01525	1.2	Accident Prevention Plan	X												X	X												
		01525	1.2	Activity Hazard Analysis	X												X			X										
		01525	1.2	Confined Space Entry Permit (If Needed)							X						X	X												
		01770	1.2.2	Hardware Schedule											X		X	X												
		01770	1.2.2	Final Architectural O&M Manuals											X		X	X												
		01770	1.2.2	Final Fire Detection & Alarm O&M Manuals											X		X	X												
		01770	1.2.2	Final Mechanical Systems O&M Manuals											X		X	X												
		01770	1.2.2	Generator O&M Manuals											X		X	X												
		01770	1.2.2	Diesel Fuel Tank and Fuel Pump O&M Manuals																										
		01770	1.2.2	Wood Windows O&M Manuals											X		X	X												
		01770	1.2.2	Final Electrical Systems O&M Manuals											X		X	X												
		01770	1.2.2	Submersible and Hand Pumping Units O&M Manuals											X		X	X												
		01770	1.2.2	Chlorine-Feeding Machine O&M Manual											X		X	X												
		01770	1.2.2	Propane Stove O&M Manuals											X		X	X												
		01770	1.2.2	Key Bitting											X		X	X												

SUBMITTAL REGISTER

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		01770	1.5	Training Plan											X		X	X												
		01770	1.7	Spare Parts											X		X	X												
		01780	1.2.1	As-Built Drawings											X		X	X												
		01780	1.2.2	As-Built Record of Equipment and Materials											X		X	X												
		01780	1.3	Warranty Management Plan											X		X	X												
		01780	1.3.4	Warranty Tags											X		X	X												
		01780	1.5	Final Cleaning											X		X	X												
		02 41 00	1.2	Demolition Plan (if required)	X												X			X										
		03 30 00	1.2	Concrete Mix Design					X							X				X										
		03 30 00	1.2	Portland Cement			X									X				X										
		03 30 00	1.2	Ready-Mix Concret			X									X				X										
		03 30 00	1.2	Concrete Aggregates			X									X				X										
		03 30 00	1.2	Reinforcing and Joint Materials			X									X				X										
		03 30 00	1.2	Concrete Curing Materials (if required)			X									X				X										
		03 30 00	1.2	Portland Cement			X									X				X										
		03 30 00	1.2	Concrete Mix Design Mill Certificates							X					X				X										
		03 30 00	1.2	Concrete Aggregates Mill Certificates							X					X				X										
		03 30 00	1.2	Admixtures								X				X				X										
		04 20 00	1.2	Structural Masonry Shop Drawings		X											X	X												
		04 20 00	1.2	Cold Weather Installation			X										X	X												
		04 20 00	1.2	Concrete Masonry Units (CMU)				X								X				X										
		04 20 00	1.2	Expansion Joint Materials				X								X				X										
		04 20 00	1.2	Pre-Mixed Mortar					X								X			X										
		04 20 00	1.2	Concrete Masonry Units (CMU)							X					X				X										
		04 20 00	1.2	Control Joint Keys							X					X				X										
		04 20 00	1.2	Anchors, Ties, and Bar Positioners							X					X				X										
		04 20 00	1.2	Expansion Joint Materials							X					X				X										
		04 20 00	1.2	Reinforcing Steel Bars and Rods							X					X				X										
		04 20 00	1.2	Masonry Cement							X					X				X										
		04 20 00	1.2	Admixtures for Masonry Mortar and/or Grout							X					X				X										
		04 20 00	1.2	Masonry Cement								X				X				X										
		04 43 00	1.2	Stone Masonry Shop Drawings		X											X	X												
		04 43 00	1.2	Cold Weather Installation			X										X	X												
		04 43 00	1.2	Stone				X								X				X										
		04 43 00	1.2	Anchors, Ties, and Bar Positioners				X								X				X										
		04 43 00	1.2	Anchors, Ties, and Bar Positioners							X					X				X										

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		04 43 00	1.2	Expansion Joint Materials							X					X				X										
		04 43 00	1.2	Reinforcing Steel Bars and Rods							X					X				X										
		04 43 00	1.2	Masonry Cement							X					X				X										
		04 43 00	1.2	Admixtures for Masonry Mortar and/or Grout							X					X				X										
		04 57 13	1.2	Wood Stove Shop Drawings		X											X	X												
		05 12 00	1.4	Structural Steel Erection Plan		X											X	X												
		05 12 00	1.4	Structural Steel Fabrication Drawings		X											X	X												
		05 12 00	1.4	Shop Primer			X									X				X										
		05 12 00	1.4	Welding Electrodes and Rods			X										X			X										
		05 12 00	1.4	Non-Shrink Grout			X									X				X										
		05 12 00	1.4	Class B Coating						X						X				X										
		05 12 00	1.4	Bolts, Nuts, and Washers						X						X				X										
		05 12 00	1.4	Steel Certifications							X					X				X										
		05 12 00	1.4	Bolts, Nuts, and Washers Certifications							X					X				X										
		05 12 00	1.4	Galvanizing							X					X				X										
		05 12 00	1.4	AISC Quality Certification							X					X				X										
		05 12 00	1.4	Welding Procedures and Qualifications							X						X			X										
		05 40 00	1.2	Framing Components		X											X	X												
		05 40 00	1.2	Steel Studs, Joists, Tracks, Bracing, Bridging & Acces.			X									X				X										
		05 40 00	1.2	Metal Framing Calculations					X								X	X												
		05 40 00	1.2	Load Bearing Cold-Formed Metal Framiing							X					X				X										
		05 40 00	1.2	Weld Certifications							X					X				X										
		05 50 00	1.2	Structural Steel Door Frames Fabrication Drawings		X										X				X										
		05 50 00	1.2	Access Doors and Panels Installation Drawings		X										X				X										
		05 50 00	1.2	Cover Plates and Frames Installation Drawings		X										X				X										
		05 50 00	1.2	Floor Gratings, Exterior Stair Trends and Landings		X										X				X										
		05 50 00	1.2	Handrails, Ladders		X											X			X										
		05 50 00	1.2	Embedded Angles and Plates Installation Drawings		X										X				X										
		05 50 00	1.2	Metal Window Sills Installation Drawings		X										X				X										
		05 50 00	1.2	Steel Corner Guards Installation Drawings		X										X				X										
		05 50 00	1.2	Stainless Steel Back Splash Installation Drawings		X										X				X										
		05 50 00	1.2	Access Doors and Panels			X									X				X										
		05 50 00	1.2	Cover Plates and Frames			X									X				X										
		05 50 00	1.2	Control Joint Covers			X									X				X										
		05 50 00	1.2	Expansion Joint Covers			X									X				X										
		05 50 00	1.2	Handrails, Ladders, Steel Stairs			X									X				X										
		05 50 00	1.2	Window Sub Sill			X									X				X										

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		05 50 00	1.2	Cast Iron Plate for Wood Stove Top			X									X				X										
		05 50 00	1.2	Cast iron Grid Plate for Wood Stove Fire Box			X									X				X										
		05 50 00	1.2	Cast Iron Insert for Wood Stove			X									X				X										
		05 50 00	1.2	Cast Iron Hinged Cleanout Door for Wood Stove			X									X				X										
		05 50 00	1.2	Cast Iron Sliding Fire Box Door for Wood Stove			X									X				X										
		05 50 00	1.2	Structural Steel Door Frames			X									X				X										
		05 50 00	1.2	Window and Door Guards			X									X				X										
		05 50 00	1.2	Roof and Floor Hatch			X									X				X										
		05 50 00	1.2	Steel Corner Guard			X									X				X										
		05 50 00	1.2	Stainless Steel Back Splash			X									X				X										
		05 50 00	1.2	Expansion Joint Covers				X								X				X										
		05 50 00	1.2	Control Joint Covers				X								X				X										
		05 50 00	1.2	Steel Corner Guards				X								X				X										
		05 50 00	1.2	Stainless Steel Back Splash				X								X				X										
		06 10 00	1.2	Nailers and Nailing Strips		X										X				X										
		06 10 00	1.2	Adhesives			X									X				X										
		06 10 00	1.4	Certificates of Grade							X					X				X										
		07 13 53	1.2	Elastomeric Waterproofing Sheet Metal			X									X				X										
		07 13 53	1.2	Protection Board			X									X				X										
		07 13 53	2.1	Primers, Adhesives, and Mastics			X									X				X										
		07 13 53	1.2	Elastomeric Waterproofing Sheet Metal				X								X				X										
		07 13 53	1.2	Protection Board				X								X				X										
		07 13 53	2.1	Primers, Adhesives, and Mastics				X								X				X										
		07 13 53	2.1	Primers, Adhesives, and Mastics								X				X				X										
		07 21 13	1.2	Board Insulation			X										X			X										
		07 21 13	1.2	Vapor Retarder			X									X				X										
		07 21 13	1.2	Board Insulation			X									X				X										
		07 21 16	1.2	Blanket Insulation			X										X	X												
		07 21 16	1.2	Vapor Retarder			X									X				X										
		07 21 16	1.2	Pressure Sensitive Tape			X									X				X										
		07 21 16	1.2	Accessories			X									X				X										
		07 21 16	1.2	Insulation								X				X				X										
		07 41 13	1.3	Metal Roofing		X											X	X												
		07 41 13	1.3	Roof Panels			X									X				X										
		07 41 13	1.3	Accessories			X									X				X										
		07 41 13	1.3	Fasteners			X									X				X										
		07 41 13	1.3	Underlayments			X									X				X										

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		07 41 13	1.3	Gasket and Insulating Compounds			X									X				X										
		07 41 13	1.3	Roof Curbs			X									X				X										
		07 41 13	1.3	Roof Panels				X								X				X										
		07 41 13	1.3	Factory-Applied Color Finish Charts				X									X	X												
		07 41 13	1.3	Accessories				X								X				X										
		07 41 13	1.3	Fasteners				X								X				X										
		07 41 13	1.3	Sealant				X								X				X										
		07 41 13	1.3	Gasket and Insulating Compounds				X								X				X										
		07 41 13	1.3	Roof Curbs				X								X				X										
		07 41 13	1.3	Wind Uplift Resistance					X							X				X										
		07 41 13	1.3	Roof Assembly						X						X				X										
		07 41 13	1.3	Factory Color Finish Performance Requirements						X						X				X										
		07 41 13	1.3	Roof Panels							X					X				X										
		07 41 13	1.3	Self-Adhering Modified Bitumen Underlayment							X					X				X										
		07 41 13	1.3	Qualification of Manufacturer							X					X				X										
		07 41 13	1.3	Qualification of Applicator							X					X				X										
		07 41 13	1.3	Insulationi Installation Instructions								X				X				X										
		07 41 13	1.3	Metal Roof Panel Manufacturer Warranty											X		X	X												
		07 41 13	1.3	Manufacturer's Finish Warranty											X		X	X												
		07 41 13	1.3	Metal Roof System Installer Warranty											X		X	X												
		07 41 13	3.7	Information Card											X		X	X												
		07 60 00	1.3	Covering on Flat, Sloped, or Curved Surfaces		X										X				X										
		07 60 00	1.3	Gutters, Downspouts		X										X				X										
		07 60 00	1.3	Expansion Joints		X										X				X										
		07 60 00	1.3	Gravel Stops and Fascias		X										X				X										
		07 60 00	1.3	Splash Pans		X										X				X										
		07 60 00	1.3	Flashing for Roof Drains, Base Flashing, Counterflashing, F		X										X				X										
		07 60 00	1.3	Reglets, Scuppers, Copings, Drip Edge		X										X				X										
		07 60 00	1.3	Conductor Heads, Open Valley Flsshing, Eave Flashing		X										X				X										
		07 84 00	1.2	Firestopping Materials		X										X				X										
		07 84 00	1.2	Firestopping Materials							X					X				X										
		07 84 00	1.2	Firestopping Installer Qualifications							X					X				X										
		07 84 00	1.2	Firestopping Inspection						X						X				X										
		07 92 00	1.2	Sealants, Primers, Bond Breakers, Backstops			X									X				X										
		07 92 00	1.2	Sealants							X					X				X										
		08 11 13	1.2	Steel Doors and Frames		X											X	X												
		08 11 13	1.2	Accessories, Weatherstripping		X										X				X										
		08 11 13	1.2	Steel Doors and Frames Schedule					X							X				X										

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		08 11 13	1.2	Steel Doors and Frames			X									X				X											
		08 11 13	1.2	Accessories, Weatherstripping			X									X				X											
		08 11 13	1.2	Factory-Applied Enamel Finish				X								X				X											
		08 14 00	1.2	Wood Doors		X											X	X													
		08 14 00	1.2	Wood Doors, Frames, Accessories			X									X				X											
		08 14 00	1.2	Wood Doors				X								X				X											
		08 14 00	1.2	Wood Doors Finish Colors				X								X				X											
		08 34 63	1.2	Detention Hollow Metal Doors and Frames		X											X	X													
		08 34 63	1.2	Detention Hollow Metal Doors and Frames			X									X				X											
		08 34 63	1.2	Door Fabrication Test Reports						X						X				X											
		08 52 00	1.2	Wood Windows		X											X	X													
		08 52 00	1.2	Wood Windows								X				X				X											
		08 56 63	1.2	Window Units		X										X				X											
		08 56 63	1.2	Window Units, Fasteners, Accessories			X									X				X											
		08 71 00	1.2	Hardware Schedule, Keying System		X										X				X											
		08 71 00	1.2	Hardware Items			X									X				X											
		08 71 00	1.2	Hardware Installation								X				X				X											
		08 81 00	1.2	Glass Installation		X										X				X											
		08 81 00	1.2	Glass			X										X	X													
		08 81 00	1.2	Plastic Glazing, Glazing Accessories			X									X				X											
		08 81 00	1.2	Plastic Sheet, Glazing Compound, Glazing Tape, Sealant			X									X				X											
		08 81 00	1.2	Plastic Glazing, Glazing Accessories							X					X				X											
		08 81 00	1.2	Setting and Sealing Materials								X				X				X											
		08 81 00	1.2	Plastic Glazing Setting								X				X				X											
		09 22 37.00 10	1.2	Lathing and Plastering Detail Drawings		X											X	X													
		09 22 37.00 10	1.2	Lathing Installation			X									X				X											
		09 22 37.00 10	1.2	Portland Cement Plaster				X								X				X											
		09 22 37.00 10	1.2	Qualifactions							X					X				X											
		09 24 23	1.2	Lath Shop Drawings		X										X				X											
		09 24 23	1.2	Portland Cement, Lime, Sand			X									X				X											
		09 24 23	1.2	Colored Stucco Finish Coat				X								X				X											
		09 24 23	1.2	Sample Panel				X								X				X											
		09 66 16	1.2	Terrazzo Tile Shop Drawings		X											X	X													
		09 66 16	1.2	Terrazzo Tile Product Data			X									X				X											

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		09 66 16	1.2	Terrazzo Tile Sample				X								X				X											
		09 66 16	1.2	Terrazzo Tile Certificates							X					X				X											
		09 90 00	1.2	Piping Identification Shop Drawings		X										X				X											
		09 90 00	1.2	Coatings			X									X				X											
		09 90 00	1.2	Manufacturers Technical Data Sheets			X									X				X											
		09 90 00	1.2	Sealants			X									X				X											
		09 90 00	1.2	Color Samples				X								X				X											
		09 90 00	1.2	Applicators Qualifications							X					X				X											
		09 90 00	1.2	Qualification Testing							X					X				X											
		09 90 00	1.2	Mixing and Application Instructions								X				X				X											
		10 28 13	2.2	Finishes, Accessory Items			X									X				X											
		10 28 13	2.2	Finishes, Accessory Items				X								X				X											
		10 28 13	2.2	Accessory Items							X					X				X											
		10 35 13.13	1.1	Stove Wall Thimble				X								X				X											
		10 35 23.13	1.3	Propane Stove			X									X				X											
		10 35 23.13	1.3	Propane Stove								X				X				X											
		10 35 23.13	1.3	Exhaust Hood								X				X				X											
		10 35 23.13	1.3	5 year Warranty Propane Stove											X		X	X													
		10 44 16	1.2	Fire Extinguisher, Wall Brackets, Accessories		X										X				X											
		10 44 16	1.2	Fire Extinguisher, Wall Brackets, Accessories			X									X				X											
		10 44 16	1.2	Fire Extinguisher, Wall Brackets, Accessories				X								X				X											
		10 44 16	1.2	Warranty Tags											X		X	X													
		10 90 00.00.48	1.2	Clothesline Structure Shop Drawings		X										X				X											
		10 90 00.00.48	1.2	Clothesline Structure			X									X				X											
		12 30 00.00.40	1.2	Steel and Wood Cabinets Fabrication Drawings		X										X				X											
		12 30 00.00.40	1.2	Steel and Wood Cabinets Installation Drawings		X											X			X											
		12 30 00.00.40	1.2	Corrosion-Resistant Steel			X									X				X											
		12 30 00.00.40	1.2	Plywood, Hardwood, Glass			X									X				X											
		12 30 00.00.40	1.2	Adhesives, Filler Material, Varnish			X									X				X											
		12 30 00.00.40	1.2	Fasteners, Fixtures, Accessories, Hardware			X									X				X											
		12 30 00.00.40	1.2	Softwoods (If required)			X									X				X											
		12 30 00.00.40	1.2	Countertop, Backsplash				X								X				X											
		12 30 00.00.40	1.2	Acessories, Hardware				X								X				X											
		12 30 00.00.40	1.2	Manufacturer's Standard Color Charts				X								X				X											

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		22 00 00	1.2	Plumbing System Shop Drawings		X										X				X										
		22 00 00	1.2	Water Closets			X									X				X										
		22 00 00	1.2	Faucets and Trim, All Locations			X									X				X										
		22 00 00	1.2	Utility Sinks			X									X				X										
		22 00 00	1.2	Water Heaters			X									X				X										
		22 00 00	1.2	Hose Bibs and Wall Hydrants			X									X				X										
		22 00 00	1.2	Shower Faucets			X									X				X										
		22 00 00	1.2	Valves			X									X				X										
		22 00 00	1.2	Drains and Cleanouts			X									X				X										
		22 00 00	1.2	Pipe Insulation			X									X				X										
		22 00 00	1.2	Propane Storage Tanks, Welding			X									X				X										
		22 00 00	1.2	Drainage and Vent System Test						X							X			X										
		22 00 00	1.2	Building Sewer Tests						X							X			X										
		22 00 00	1.2	Water Supply System Test (Disinfection)						X							X			X										
		22 00 00	1.2	Propane Gas Supply, Sleeve, and Vent System Test						X							X			X										
		22 00 00	3.1	Posted Instructions											X		X			X										
		22 07 19	1.3	Pipe Insulation Installation Drawings		X										X				X										
		22 07 19	1.3	Adhesives			X									X				X										
		22 07 19	1.3	Coatings			X									X				X										
		22 07 19	1.3	Insulating Cement			X									X				X										
		22 07 19	1.3	Insulation Materials			X									X				X										
		22 07 19	1.3	Jacketing			X									X				X										
		22 07 19	1.3	Tape			X									X				X										
		23 00 00	1.5	Air Supply, Distributions, Ventilation, and Exhaust System		X										X				X										
		23 00 00	1.5	Duct Connectors			X									X				X										
		23 00 00	1.5	Duct Access Doors			X									X				X										
		23 00 00	1.5	Manual Balancing Dampers			X									X				X										
		23 00 00	1.5	Registers and Grille			X									X				X										
		23 00 00	1.5	Louvers			X									X				X										
		23 00 00	1.5	Centrifugal Fans			X									X				X										
		23 00 00	1.5	Centrifugal Type Power Wall Ventilators			X									X				X										
		23 00 00	1.5	Centrifugal Type Power Roof Ventilators			X									X				X										
		23 00 00	1.5	Filtered Supply Fans			X									X				X										
		23 00 00	1.5	Electric Resistant Heater			X									X				X										
		23 00 00	1.5	Kitchen Hoods			X									X				X										
		23 00 00	1.5	Ceiling Fans			X									X				X										
		23 00 00	1.5	Wall Fans			X									X				X										
		23 00 00	1.5	Final Performance Tests						X							X			X										
		23 00 00	1.5	Damper Acceptance Test						X							X			X										

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		26 05 48.00 10	1.2	Lighting Fixtures in Buildings		X										X				X										
		26 05 48.00 10	1.2	Lighting Fixtures in Buildings			X									X				X										
		26 05 48.00 10	1.2	Contractor Designed Bracing		X										X				X										
		26 20 00	1.3	Panelboards Shop Drawings		X											X	X												
		26 20 00	1.3	Wireways Drawings		X										X				X										
		26 20 00	1.3	Marking Strips Drawings		X										X				X										
		26 20 00	1.3	Receptacles and Circuit Breakers			X										X	X												
		26 20 00	1.3	Switches			X									X				X										
		26 20 00	1.3	Enclosed Circuit Breakers			X										X			X										
		26 20 00	1.3	Motor Controllers			X										X			X										
		26 20 00	1.3	Combination Motor Controllers			X										X			X										
		26 20 00	1.3	Manual Motor Starters			X										X			X										
		26 20 00	1.3	Telecommunications Grounding Busbar			X										X			X										
		26 20 00	1.3	Surge Protective Devices			X										X			X										
		26 20 00	1.3	600-volt Wiring Test						X							X	X												
		26 20 00	1.3	Ground System Test						X							X	X												
		26 20 00	1.3	Ground -Fault Receptacle Test						X							X	X												
		26 20 00	1.3	Fuses							X					X				X										
		26 28 01.00 10	1.2	Fault Current Analysis			X									X				X										
		26 28 01.00 10	1.2	Field Test Plan						X						X				X										
		26 28 01.00 10	1.2	Devices and Equipment							X					X				X										
		26 32 15.00 10	1.2	Detailed Drawings		X											X	X												
		26 32 15.00 10	1.2	Performance Criteria			X										X	X												
		26 32 15.00 10	1.2	Generator			X										X	X												
		26 32 15.00 10	1.2	On-Site Training			X										X	X												
		26 32 15.00 10	1.2	Generator Instructions								X					X	X												
		26 32 15.00 10	1.2	Factory and Inspection Tests						X							X	X												
		26 32 15.00 10	1.2	Final Acceptance Performance Tests						X							X	X												
		26 32 15.00 10	1.2	Posted Data and Instructions											X		X	X												
		26 41 00.00 20	1.3	Overall Lightning Protection System		X											X	X												
		26 41 00.00 20	1.3	Grounding System Test						X							X	X												
		26 41 00.00 20	1.3	Lightning Protection System Inspection						X						X				X										
		26 41 00.00 20	1.3	UL Listing or Label							X					X				X										
		26 51 00	1.4	Fluorescent Lighting Fixtures			X									X				X										
		26 51 00	1.4	Fluorescent Electronic Ballasts			X									X				X										

SUBMITTAL REGISTER

TITLE AND LOCATION:

Solicitation No.

CONTRACTOR:

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					01-PRECON SUBMITTALS	02-SHOP DRAWINGS	03-PRODUCT DATA	04-SAMPLES	05-DESIGN DATA	06-TEST REPORTS	07-CERTIFICATES	08-MFRS INSTRUCTIONS	09-MFRS FIELD REPORT	10-O&M DATA	11-CLOSEOUT SUBMITTALS	Information Only	Government Approved	DO-District Office	AO-Area Office	RO-Resident Office	PO-Project Office	AE-Architect /Engineer	Submit	Approval Needed By	Material Needed By	Action Code	Date of Action	Action Code	Date of Action	
		26 51 00	1.4	Fluorescent Lamps			X									X				X										
		26 51 00	1.4	Incandescent Lighting Fixtures			X									X				X										
		26 51 00	1.4	Exit Signs			X									X				X										
		26 51 00	1.4	Emergency Lighting Equipment			X									X				X										
		26 51 00	1.4	Lighting Fixtures				X								X				X										
		26 51 00	1.4	Operating Tests						X						X				X										
		26 51 00	1.4	Lighting Control System										X			X	X												
		26 56 00	1.3	Luminaire Drawings, Poles		X										X				X										
		26 56 00	1.3	Luminaires			X									X				X										
		26 56 00	1.3	Lamps, Ballasts			X									X				X										
		26 56 00	1.3	Time Switch, Photocell Switch			X									X				X										
		26 56 00	1.3	Luminaires				X								X				X										
		28 31 64.00 10	1.2	Fire Detection and Alarm System		X											X			X										
		28 31 64.00 10	1.2	Storage Batteries			X									X				X										
		28 31 64.00 10	1.2	Low Battery Voltage			X									X				X										
		28 31 64.00 10	1.2	Special Tools and Spare Parts			X									X				X										
		28 31 64.00 10	1.2	Technical Data and Computer Software			X										X			X										
		28 31 64.00 10	1.2	Training Plan								X				X				X										
		28 31 64.00 10	1.2	Final Acceptance Test Reports						X							X			X										
		28 31 64.00 10	1.2	Equipment Certificates							X					X				X										
		28 31 64.00 10	1.2	Installer Qualifications							X					X				X										
		31 05 19	1.2	Thread			X									X				X										
		31 05 19	1.2	Manufacturing Quality Control Sampling and Testing			X									X				X										
		31 05 19	1.2	Quality Assurance Samples and Tests				X								X				X										
		31 05 19	1.2	Geotextile Certificates			X									X				X										
		32 11 16	1.2	Aggregate Base Course			X									X				X										
		32 15 00	1.2	Aggregate Surface Course			X									X				X										
		32 31 00.00 10	1.2	Chain Link Fence						X						X				X										
		32 31 00.00 10	1.2	Barbed Wire						X						X				X										
		32 31 00.00 10	1.2	Barbed (Razor) Type Concertina Wire						X						X				X										
		33 11 00	1.4	Piping Materials			X									X				X										
		33 11 00	1.4	Valve Boxes			X									X				X										
		33 11 00	1.4	Design Calculations of Water Piping					X							X				X										
		33 11 00	1.4	Bacteriological Disinfection						X							X			X										

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		33 16 15	1.4	Water Storage Tank Installation		X										X				X											
		33 16 15	1.4	Tank, Controls and Instrumentation, Valves, Piping			X									X				X											
		33 16 15	1.4	Tank Coating Test Reports						X							X			X											
		33 16 15	1.4	Tank Testing and Balancing						X							X			X											
		33 20 00	1.4	Water Well Installation Diagrams		X											X	X													
		33 20 00	1.4	Water Well Installation Plan			X										X	X													
		33 20 00	1.4	Well Materials			X										X	X													
		33 20 00	1.4	Qualifications							X						X	X													
		33 20 00	1.4	Site Conditions			X										X	X													
		33 20 00	1.4	Geophysical Logging			X										X	X													
		33 20 00	1.4	Survey Maps and Notes						X							X	X													
		33 20 00	1.4	Well Development Records						X							X	X													
		33 20 00	1.4	Geophysical Logs						X							X	X													
		33 20 00	1.4	Decommissioning/Abandonment Records						X						X				X											
		33 20 00	1.4	Project Photographs						X						X				X											
		33 20 00	1.4	Water Source						X						X				X											
		33 20 00	1.4	Filter Pack						X						X				X											
		33 30 00	1.4	Sanitary Sewer Drawings and Calculations		X										X				X											
		33 30 00	1.4	Metal Items, Frames, Covers, Gradings		X										X				X											
		33 30 00	1.4	Pipline Materials			X									X				X											
		33 30 00	1.4	Portland Cement			X									X				X											
		33 40 01	1.4	Storm Drainage Shop Drawings		X										X				X											
		33 40 01	1.4	Piping Materials			X									X				X											
		33 40 01	1.4	Pipe for Culverts and Storm Drains				X								X				X											
		33 56 10	1.3	Diesel Fuel Storage Tanks		X											X	X													
		33 56 10	1.3	Fuel Pumps		X										X				X											
		33 56 10	1.3	Pipe and Fittings			X										X			X											
		33 56 10	1.3	Fuel Pumps			X										X			X											
		33 56 10	1.3	Valves			X										X			X											
		33 56 10	1.3	Flexible Hose			X										X			X											
		33 56 10	1.3	Dielectric Unions			X										X			X											
		33 56 10	1.3	Strainers			X										X			X											
		33 56 10	1.3	Instruments			X										X			X											
		33 56 10	1.3	Secondary Containment System for Piping			X										X			X											
		33 56 10	1.3	Testing of Fuel Oil Tanks and Fuel Oil Pumps						X							X			X											
		33 56 10	1.3	Welding Procedure							X						X			X											
		33 56 10	1.3	Welding Qualifications							X						X			X											

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		33 56 10	1.3	Flexible Hose							X						X			X										
		33 56 10	1.3	Dielectric Unions							X						X			X											
		33 56 10	1.3	Tank Surface Preparation							X						X			X											
		33 56 10	1.3	Coating Materials							X						X			X											
		33 56 10	1.3	Coating Applicatin Procedure							X						X			X											
		33 56 10	1.3	Secondary Containment System for Piping								X				X				X											
		33 56 10	1.3	Flexible Pipe								X				X				X											
		33 70 02.00 1	1.4	Electrical Distribution System Detail Drawings		X										X				X											
		33 70 02.00 1	1.4	Nameplates			X									X				X											
		33 70 02.00 1	1.4	Material and Equipment			X									X				X											
		33 70 02.00 1	1.4	Factory Tests						X							X			X											
		33 70 02.00 1	1.4	Low-Voltage Cable Test						X							X			X											
		33 70 02.00 1	1.4	Ground Resistance Test						X							X			X											
		33 70 02.00 1	1.4	Circuit Breaker Test						X							X			X											
		33 70 02.00 1	1.4	Operating Tests						X							X			X											
		34 71 13.19	1.2	Vehicle Barriers Shop Drawings		X										X				X											
		34 71 13.19	1.2	Vehicle Barriers		X										X				X											
		43 21 39	1.3	Submersible Water Pumps Installation		X											X			X											
		43 21 39	1.3	Submersible Pumping Units			X										X			X											
		43 21 39	1.3	Hand Pump Units		X											X			X											
		43 21 39	1.3	Controls and Instrumentation, Valves, and Piping		X											X			X											
		43 21 39	1.3	Spare Parts Data											X		X			X											
		43 21 39	1.3	Posted Instructions											X		X			X											
		43 21 39	1.3	Factory Submersible Pump Test						X							X			X											
		43 21 39	1.3	Testing, Adjusting, and Balancing						X							X			X											
		43 32 76	1.3	Chlorine Feeding Machines Installation		X										X				X											
		43 32 76	1.3	Material and Equipment			X										X			X											
		43 32 76	1.3	Final Test Report						X							X			X											
		43 32 76	1.3	Framed Instructions											X		X			X											

SECTION 01355

ENVIRONMENTAL PROTECTION (ANSF Version)

1 GENERAL

1.1 REFERENCES

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

ISLAMIC REPUBLIC OF AFGHANISTAN

Official Gazette No. 912	Environmental Law (2007)

U.S. DEPARTMENT OF DEFENSE (DoD)

DoD 4715.05-G (2007)	Overseas Environmental Baseline Guidance Document (OEBGD)

U.S. ARMY (DA)

AR 200-1	Environmental Protection and Enhancement (2007)

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	Safety and Health Requirements Manual (2009)

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and fuel/oils/lubricants.

1.2.4 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor shall discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion,

discharge into storm sewers, discharge into defined drainage areas, or discharge into the waters of Afghanistan shall occur.

1.2.5 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or waters of Afghanistan would require a permit to discharge water from the project.

1.2.6 Hazardous Material (HM)

A useful product that requires special management because it has hazardous characteristics (ignitability, corrosivity, reactivity, or toxicity) that could pose dangers to human health or the environment. A HM becomes a Hazardous Waste when it can no longer be used for its intended purpose.

1.2.7 Hazardous Waste (HW)

A discarded material with properties that could pose dangers to human health or the environment. A HW either exhibits a hazardous characteristic or is specifically listed as a HW by the EPA or by the State.

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. Environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable Afghanistan environmental laws and regulations. The Contractor shall be responsible for delays resulting from failure to comply with environmental laws and regulations.

For the purpose of this specification, environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the utility of the environment for aesthetic, cultural, and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, land, and includes management of visual esthetics, noise, solid waste, and erosion from stormwater, as well as pollutants.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by all subcontractors, suppliers, and vendors.

1.5 ABBREVIATIONS AND ACRONYMS

BACT Best Available Control Technology

BMP Best Management Practice

COR Contracting Officer's Representative

ECO Environmental Compliance Officer

HM Hazardous Material HW Hazardous Waste

HW Hazardous Waste

HWT Hazardous Waste Technician

KO Contracting Officer

PPE Personal Protective Equipment

USACE US Army Corps of Engineers

1.6 LAWS AND REGULATIONS

The Contractor shall comply with all applicable Afghanistan environmental, natural and cultural resources, and historic preservation laws and regulations.

1.7 SUBMITTALS

1.7.1 Environmental Protection Plan

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental, natural and cultural resources, and historic preservation issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

1.7.1.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Afghanistan environmental, natural and cultural resources, and historic preservation protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting, for approval, any additional requirements to be included in the Environmental Protection Plan.

1.7.1.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

1. Name(s) of the on-site Environmental Manager who is responsible for ensuring adherence to the Environmental Protection Plan and monitoring and documenting environmental procedures.
2. An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan shall include monitoring and reporting requirements to assure that the control measures are effective.
3. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.
4. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.
5. Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a hazardous material. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

a. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.
b. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
c. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
d. The methods and procedures to be used for expeditious contaminant cleanup.

6. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.
7. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
8. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site and identifies the intended actions to prevent introduction of such materials into the air, water, or ground. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.
9. A hazardous waste plan that: identifies potentially hazardous waste that may be generated by the project.
10. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, decontamination water, hydrostatic test water, and water used in flushing of lines.
11. A historical, archaeological, cultural resources, and biological resources plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, and biological resources known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, and biological resources not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Contracting Officer.

1.8 PROTECTION FEATURES

Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

1.9 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves

the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.10 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with environmental, natural and cultural resources, and historic preservation laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions.

2 PRODUCTS (NOT USED)

3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall be responsible for obtaining and complying with all environmental, natural and cultural resources, and historic preservation permits and commitments required by Afghanistan environmental, natural and cultural resources, and historic preservation laws and regulations.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

3.2.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality is not degraded as a result of the Contractor's construction activities. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs) as indicated on the drawings. BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. Any temporary measures shall be removed after the area has been stabilized.

3.2.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

3.2.5 Tree Protection

All costs associated with tree protection requirements required by specifications and drawings are the full responsibility of the Contractor. The Contractor shall exercise care when excavating trenches in the vicinity of trees.

3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor.

3.3.1 Cofferdams, Diversions, and Dewatering Operations

Construction operations for dewatering, removal of cofferdams, and tailrace excavation shall be controlled at all times to maintain compliance designated uses of the surface water body.

3.3.2 Stream Crossings

Stream crossings (wet or dry) shall allow movement of materials or equipment without blocking the natural flow of water, if water became present.

3.4 AIR RESOURCES

3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks.

Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs.

3.4.2 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard.

3.4.3 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise.

3.4.4 Burning

All areas within facility perimeter fence line are designated as no burn areas.

3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

3.5.1 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes shall be classified, managed, stored, and disposed at an appropriate disposal site.

3.5.2 Contractor Hazardous Material / Generated Hazardous Wastes / Excess Hazardous Materials

The Contractor shall, at a minimum, manage and store hazardous material and waste in an area designed and operated to provide appropriate segregation for different waste streams, including those that are chemically incompatible. Each area will have warning signs appropriate for the waste being accumulated at that site. Facilities or areas shall provide adequate ventilation, containment, and protection from the elements. Provide warning signs, limit access to the facility, and lock it when it is unattended. Contractor vehicles are not considered a proper storage facility. No HM or HW shall be stored in vehicles overnight or for any length of time. The Contractor shall take sufficient measures to prevent spillage or leakage of hazardous and toxic materials during dispensing or storage. The Contractor shall protect HM and HW from the weather by placing it in a safe covered location. The Contractor shall be responsible for storage, describing, packaging, labeling, and marking hazardous waste and hazardous material. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility.

3.5.3 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation.

3.5.4 Waste Water

Disposal of waste water shall be as specified below.

a. Waste water from construction activities shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water off site, unless on-site disposal is approved by the Contracting Officers Representative.

b. Water generated from the flushing of lines after decontamination or decontamination in conjunction with hydrostatic testing or only hydrostatic testing shall be discharged into the sanitary sewer with prior approval and/or notification to the Waste Water Treatment Plant's Operator.

3.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

3.7 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Afghanistan regulations.

3.8 MAINTENANCE OF POLLUTION CONTROL

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.9 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area restored to its original condition.

-- End of Section --

01355

SECTION 01415

METRIC MEASUREMENTS

1. REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM E 621	(1994; R 1999e1) Use of Metric (SI) Units in Building Design and Construction (Committee E-6 Supplement to E380)
ASTM SI 10	(2002) American National Standard for Use of the International System of Units (SI): The Modern Metric System

2. GENERAL

This project includes metric units of measurements. The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the11th CGPM in 1960. A number of circumstances require that both metric SI units and English inch-pound (I-P) units be included in a section of the specifications. When both metric and I-P measurements are included, the section may contain measurements for products that are manufactured to I-P dimensions and then expressed in mathematically converted metric value(soft metric) or, it may contain measurements for products that are manufactured to an industry recognized rounded metric (hard metric)dimensions but are allowed to be substituted by I-P products to comply with the law. Dual measurements are also included to indicate industry and/or Government standards, test values or other controlling factors, such as the code requirements where I-P values are needed for clarity or to trace back to the referenced standards, test values or codes.

3. USE OF MEASUREMENTS IN SPECIFICATIONS

Measurements in specifications shall be either in SI or I-P units as indicated, except for soft metric measurements or as otherwise authorized. When only SI or I-P measurements are specified for a product, the product shall be procured in the specified units (SI or I-P) unless otherwise authorized by the Contracting Officer. The Contractor shall be responsible for all associated labor and

materials when authorized to substitute one system of units for another and for the final assembly and performance of the specified work and/or products.

3.1 HARD METRIC

A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value. Hard metric measurements are often used for field data such as distance from one point to another or distance above the floor. Products are considered to be hard metric when they are manufactured to metric dimensions or have an industry recognized metric designation.

3.2 SOFT METRIC

a. A soft metric measurement is indicated by an SI value which is a mathematical conversion of the I-P value shown in parentheses (e.g. 38.1 mm (1-1/2 inches)). Soft metric measurements are used for measurements pertaining to products, test values, and other situations where the I-P units are the standard for manufacture, verification, or other controlling factor. The I-P value shall govern while the metric measurement is provided for information.

b. A soft metric measurement is also indicated for products that are manufactured in industry designated metric dimensions but are required by law to allow substitute I-P products. These measurements are indicated by a manufacturing hard metric product dimension followed by the substitute I-P equivalent value in parentheses (e.g., 190 x 190 x 390 mm (7-5/8 x 7-5/8 x 15-5/8inches)).

3.3 NEUTRAL

A neutral measurement is indicated by an identifier which has no expressed relation to either an SI or an I-P value (e.g., American Wire Gage (AWG) which indicates thickness but in itself is neither SI nor I-P).

3.4 COORDINATION

Discrepancies, such as mismatches or product unavailability, arising from use of both metric and non-metric measurements and discrepancies between the measurements in the specifications and the measurements in the drawings shall be brought to the attention of the Contracting Officer for resolution.

3.5 RELATIONSHIP TO SUBMITTALS

Submittals for Government approval or for information only shall cover the SI or I-P products actually being furnished for the project. The Contractor shall submit the required drawings and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved. The Contractor shall use ASTM SI 10 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

-- END OF SECTION --

SPECIFICATION SECTION 01451

CONTRACTOR QUALITY CONTROL

1. GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1110-1-12 (1993)	Quality Management
EM 385-1-1	Safety and Health Requirements Manual

1.2 SUBMITTALS

QUALITY CONTROL PLAN DESIGN; G

QUALITY CONTROL PLAN CONSTRUCTION; G

1.3 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program. All associated costs are included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

2. EXECUTION

2.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clauses and this specification section. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the

quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

2.2 CQM TRAINING REQUIREMENT

Before project design and construction begin, the Contractor's Quality Control Manager is required to have completed the U.S. Army Corps of Engineers (USACE) Construction Quality Management (CQM) course, or equivalent. The Champion Technical Training Center (CTTC) in Jalalabad and Kabul, Afghanistan provide a course that satisfies the requirement. Courses are offered at regular intervals. For enrollment and course information contact WWW.CTTC-AF.ORG. Alternative CQM courses, other than those mentioned above, must be approved by the Quality Assurance Branch.

The contractor's quality control plan, as defined in USACE Guide Specification 01451 (or 01 45 04.00 10), entitled "Contractor Quality Control", must include "The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function." For the QC Manager, qualifications must include a certificate demonstrating completion of an approved CQM course.

2.3 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than five (5) days after receipt of Notice-to-Proceed (NTP) the proposed Contractor Quality Control (CQC) Plan. The plan shall identify personnel, procedures, control, instructions, records, and forms to be used.

2.3.1 CONTENT OF THE CQC PLAN

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both on site and off-site, including work by subcontractors, fabricators, suppliers and purchasing agents:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to

stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.

d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, consultants, and purchasing agents. These procedures shall be in accordance with Specification 01335 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test.

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

2.3.2 ADDITIONAL REQUIREMENTS FOR DESIGN QUALITY CONTROL (DQC) PLAN

The following additional requirements apply to the Design Quality Control (DQC) plan:

(1) The Contractor shall provide and maintain a Design Quality Control (DQC) Plan as an effective quality control program which will assure that all services required by this design contract are performed and provided in a manner that meets professional architectural and engineering quality standards. As a minimum, all documents shall be technically reviewed by competent, independent reviewers identified in the DQC Plan. The same element that produced the product shall not perform the independent technical review (ITR). The Contractor shall

correct errors and deficiencies in the design documents prior to submitting them to the Government.

(2) The Contractor shall include the design schedule in the master project schedule, showing the sequence of events involved in carrying out the project design tasks within the specific contract period. This should be at a detailed level of scheduling sufficient to identify all major design tasks, including those that control the flow of work. The schedule shall include review and correction periods associated with each item. This should be a forward planning as well as a project monitoring tool. The schedule reflects calendar days and not dates for each activity. If the schedule is changed, the Contractor shall submit a revised schedule reflecting the change within 7 calendar days. The Contractor shall include in the DQC Plan the discipline-specific checklists to be used during the design and quality control of each submittal. These completed checklists shall be submitted at each design phase as part of the project documentation. Example checklists can be found in ER 1110-1-12.

(3) The DQC Plan shall be implemented by an Design Quality Control Manager who has the responsibility of being cognizant of and assuring that all documents on the project have been coordinated. This individual shall be a person who has verifiable engineering or architectural design experience and is a registered professional engineer or architect. The Contractor shall notify the Contracting Officer, in writing, of the name of the individual, and the name of an alternate person assigned to the position.

The Contracting Officer will notify the Contractor in writing of the acceptance of the DQC Plan. After acceptance, any changes proposed by the Contractor are subject to the acceptance of the Contracting Officer.

2.3.3 ACCEPTANCE OF PLAN

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in the CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

2.3.4 NOTIFICATION OF CHANGES

Notification of Changes. After acceptance of the QC plan, the Contractor shall notify the Contracting Officer in writing a minimum of seven calendar days prior to any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

2.4 COORDINATION MEETING

After the Pre-construction Conference, before start of construction, and prior to acceptance by the Government of the Quality Control Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The

CQC Plan shall be submitted for review a minimum of 5 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both on-site and off-site work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures, which may require corrective action by the Contractor.

2.5 QUALITY CONTROL ORGANIZATION

2.5.1 PERSONNEL REQUIREMENTS

The requirements for the CQC organization are a CQC System Manager, and sufficient number of additional qualified personnel to ensure safety and contract compliance. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

2.5.2 CQC SYSTEM MANAGER

The Contractor shall identify an individual within his organization at the site of the work who shall be responsible for overall management of the CQC and have the authority to act in all CQC matters for the Contractor. The CQC system manager shall be a graduate engineer, graduate architect, or a graduate construction manager, with experience on construction projects similar in type to this contract OR a construction person with a minimum of ten (10) years in related work. The CQC System Manager shall be on the site at all times during construction and shall be employed by the Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager will be identified in the plan to serve in the event of the CQC system manager's absence. The requirements for the alternate will be the same as for the designated CQC manager.

2.5.3 ADDITIONAL REQUIREMENT

In addition to the above experience and/or education requirements, the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered by the government, and inquiries as to the next course offering may be directed to the local construction field office.

2.5.4 ORGANIZATIONAL CHANGES

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

2.6 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in the STR titled SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

2.7 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of the construction work as follows:

2.7.1 PREPARATORY PHASE.

This phase shall be performed prior to beginning work on each definable feature of work, after all required documents and materials are approved/accepted, and after copies are at the work site. This phase shall include:

a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards, in the English language unless specifically approved otherwise by the Contracting Officer, applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.

b. A review of the contract drawings.

c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.

d. A check to assure that provisions have been made to provide required control inspection and testing.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

f. A physical examination of required materials, equipment, and sample work to verify that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. Reviews of the appropriate activity hazard analysis to ensure safety requirements are met.

h. Discussion of procedures for constructing the work including repetitive deficiencies, construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the Contracting Officer has accepted the portion of the plan for the work to be performed.

j. Discussion of the initial control phase.

k. The Government shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

2.7.2 INITIAL PHASE.

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

a. A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verification of full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

2.7.3 FOLLOW-UP PHASE.

Daily checks shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted, and all noted deficiencies corrected, prior to the start of additional features of work that may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

2.7.4 ADDITIONAL PREPARATORY AND INITIAL PHASES

Additional preparatory and initial phases may be required by the Contracting Officer on the same definable features of work if the quality of on-going work is unacceptable; if there are changes in the applicable QC staff or in the on-site production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

2.8 TESTS

2.8.1 TESTING PROCEDURE

The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product that conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Costs incidental to the transportation of samples or materials shall be borne by the Contractor.

Testing includes operation and/or acceptance tests when specified. A list of tests to be performed shall be furnished as a part of the CQC plan. The list shall give the test name, frequency, specification paragraph containing the test requirements, the personnel and laboratory responsible for each type of test, and an estimate of the number of tests required. The Contractor shall perform the following activities and record and provide the following data:

a. Verify that testing procedures comply with contract requirements.

b. Verify that facilities and testing equipment are available and comply with testing standards.

c. Check test instrument calibration data against certified standards.

d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.

e. Results of all tests taken, both passing and failing tests, shall be recorded on the Quality Control report for the date taken. Specification paragraph/item reference, location where tests were taken, and the sequential control number identifying the test will be given. Actual test reports may be submitted later, if approved by the Contracting Officer, with a reference to the test number and date taken. An information copy of tests performed by an off-site or commercial test facility will be provided directly to the Contracting Officer. Failure to submit timely test reports, as stated, may result in nonpayment for related work performed and disapproval of the test facility for this contract.

2.9 COMPLETION INSPECTION

2.9.1 PUNCH-OUT INSPECTION

Near the end of the work, or any increment of the work established by a time stated in the SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.9.2 Pre-Final Inspection

The Government will perform the pre-final 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 Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

2.9.2 FINAL ACCEPTANCE INSPECTION

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3. DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

a. Contractor/subcontractor and their area of responsibility.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.

d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.

f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.

g. Offsite surveillance activities, including actions taken.

h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

i. Instructions given/received and conflicts in plans and/or specifications.

j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within forty-eight (48) hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.1 SAMPLE FORMS

In accordance with Specification 01312 QUALITY CONTROL SYSTEM, the contractor shall use the forms produced by and printed from QCS. Samples of any forms required to meet the requirements of this section which are not produced by that system shall be included in the contractors Quality Control Plan.

3.2 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. 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. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- END OF SECTION --

SECTION 01525

SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS

1. GENERAL

For contractor safety on projects associated with this program, compliance with EM 385-1-1 safety requirements will be the long-term goal reached by growing a safety culture. This compliance will, by necessity, be achieved through a phased-in process. In the Commander's letter at the preface of the EM 385-1-1, he acknowledges that in OCONUS locations, strict compliance with the manual may not be possible – and through the hazard analysis process, safety measures can be developed to attain the same degree of safety.

This specification consists of two parts:

1) Sections 1.1 through 3.12.1, which are the standard safety specifications for work in Europe District and;

2) Appendix A, Phasing approach for safety in emerging countries where there is little or no national safety standards.

1.1 REFERENCES

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

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A10.32	Personal Fall Protection - Safety Requirements for Construction and Demolition Operations
ANSI Z359.1(1992; R 1999)	Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
ASME B30.3(1996)	Construction Tower Cranes

ASME INTERNATIONAL (ASME)

ASME B30.22(2000)	Articulating Boom Cranes
ASME B30.5(2004)	Mobile and Locomotive Cranes

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10(2002)	Portable Fire Extinguishers
NFPA 241(2000)	Safeguarding Construction, Alteration, and Demolition Operations

NFPA 51B(2003) Fire Prevention During Welding, Cutting, and Other Hot Work

NFPA 70(2005) National Electrical Code

NFPA 70E(2004) Electrical Safety in the Workplace

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1(2008) Safety Safety and Health Requirements

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

29 CFR 1910 Occupational Safety and Health Standards (OSHA)

29 CFR 1910.146 Permit-required Confined Spaces

29 CFR 1915 Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment

29 CFR 1919 Gear Certification

29 CFR 1926 Safety and Health Regulations for Construction

29 CFR 1926.500 Fall Protection

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with SR SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G, ACC

Activity Hazard Analysis (AHA); G, ACC

Crane Critical Lift Plan; G, ACC

Proof of qualification for Crane Operators; G, ACC

SD-06 Test Reports

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

Accident Reports

Monthly Exposure Reports

Crane Reports

Regulatory Citations and Violations

SD-07 Certificates

Confined Space Entry Permit

Contractor Safety Self-Evaluation Checklist; G, ACC

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

1.3 DEFINITIONS

a. Competent Person for Fall Protection. A person who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as their application and use with related equipment, and has the authority to take prompt corrective measures to eliminate the hazards of falling.

b. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.

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

d. Qualified Person for Fall Protection. A person with a recognized degree or professional certificate, extensive knowledge, training and experience in the field of fall protection who is capable of performing design, analysis, and evaluation of fall protection systems and equipment.

e. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:

(1) Death, regardless of the time between the injury and death, or the length of the illness;

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

(3) Restricted work;

(4) Transfer to another job;

(5) Medical treatment beyond first aid;

(6) Loss of consciousness; or

(7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

f. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

1.4 DRUG PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employee uses illegal drugs or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test the injured and involved employees for the influence of drugs and alcohol. A copy of the test shall be made available to the Contracting Officer upon request.

1.5 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with USACE EM 385-1-1.

1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.6.1 PERSONNEL QUALIFICATIONS

1.6.1.1 SITE SAFETY AND HEALTH OFFICER (SSHO)

Site Safety and Health Officer (SSHO) shall be provided at the work site at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The Contractor Quality Control (QC) person can only be the SSHO on this project if approved by the Contracting Officer. Any project exceeding 1 Million US dollars in value shall have a full time SSHO. The SSHO shall meet the following requirements: A minimum of 1 year safety work on similar projects; 30-hour OSHA construction safety class or equivalent within the last 3 years. Competent person training as needed.

1.6.1.2 COMPETENT PERSON FOR CONFINED SPACE ENTRY

Provide a competent person meeting the requirements of EM 385-1-1 who is assigned in writing by the Government Designated Authority (GDA) to assess confined spaces and who possesses demonstrated knowledge, skill and ability to:

a. Identify the structure, location, and designation of confined and permit-required confined spaces where work is done;

b. Calibrate and use testing equipment including but not limited to, oxygen indicators, combustible gas indicators, carbon monoxide indicators, and carbon dioxide indicators, and to interpret accurately the test results of that equipment;

c. Perform all required tests and inspections specified in Section 06.I of EM 385-1-1;

d. Assess hazardous conditions including atmospheric hazards in confined space and adjacent spaces and specify the necessary protection and precautions to be taken;

e. Determine ventilation requirements for confined space entries and operations;

f. Assess hazards associated with hot work in confined and adjacent space and determine fire watch requirements; and,

g. Maintain records required.

1.6.1.3 CRANE OPERATORS

Crane operators shall meet the requirements in USACE EM 385-1-1, Section 16 and Appendix G.

1.6.2 PERSONNEL DUTIES

1.6.2.1 SITE SAFETY AND HEALTH OFFICER (SSHO)/SUPERINTENDENT

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractors' daily quality control report.

b. Conduct mishap investigations and complete required reports. Maintain an accident/injury log such as the OSHA Form 300 or host nation equivalent, and Daily Production reports for prime and sub-contractors.

c. Maintain applicable safety reference material on the job site.

d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.

e. Implement and enforce accepted APPS and AHAs.

f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

Failure to perform the above duties will result in dismissal of the superintendent and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

1.6.3 MEETINGS

1.6.3.1 PRECONSTRUCTION CONFERENCE

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).

b. The Contractor shall discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, a schedule for the preparation, submittal, review, and acceptance of AHAs shall be established to preclude project delays.

c. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work shall not begin until there is an accepted APP.

d. The functions of a Preconstruction conference may take place at the Post-Award Kickoff meeting for Design Build Contracts.

1.6.3.2 SAFETY MEETINGS

Shall be conducted and documented as required by EM 385-1-1. Minutes showing contract title, signatures of attendees and a list of topics discussed shall be attached to the Contractors' daily quality control report.

1.7 TRAINING

1.7.1 NEW EMPLOYEE INDOCTRINATION

New employees (prime and sub-contractor) will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

1.7.2 PERIODIC TRAINING

Provide Safety and Health Training in accordance with USACE EM 385-1-1 and the accepted APP. Ensure all required training has been accomplished for all onsite employees.

1.7.3 TRAINING ON ACTIVITY HAZARD ANALYSIS (AHA)

Prior to beginning a new phase, training will be provided to all affected

1.8 ACCIDENT PREVENTION PLAN (APP)

The Contractor shall use a qualified person to prepare the written site-specific APP in both English and in the host nation language. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and shall address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Any portions of the Contractor's overall safety and health program referenced in the APP shall be included in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer.

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.

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

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any hazard become evident, stop work in the area, secure the area, and develop a plan to remove the hazard. Notify the Contracting Officer within 24 hours of discovery. In the interim, all necessary action shall be taken to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment.

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

The APP shall be continuously reviewed and amended, as necessary, throughout the life of the contract. Unusual or high-hazard activities not identified in the original APP shall be incorporated in the plan as they are discovered.

1.8.1 EM 385-1-1 CONTENTS

In addition to the requirements outlines in Appendix A of USACE EM 385-1-1, the following is required:

a. Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel to be. The duties of each position shall be specified.

b. Qualifications of competent and of qualified persons. As a minimum, competent persons shall be designated and qualifications submitted for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; personal protective equipment and clothing to include selection, use and maintenance.

c. Confined Space Entry Plan. Develop a confined space entry plan in accordance with USACE EM 385-1-1, Section 06.I, and any other federal, state and local regulatory requirements identified in this contract. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)

d. Crane Critical Lift Plan. Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. The plan shall be submitted 15 calendar days prior to on-site work and include the requirements of USACE EM 385-1-1, paragraph 16.C.18. and the following:

   (1) For lifts of personnel, the plan shall demonstrate compliance with the requirements of EM 385-1-1, Section 22.F.

(2) For barge mounted mobile cranes, barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. The amount of list and trim shall be within the crane manufacturer's requirements.

e. Fall Protection and Prevention (FP&P) Plan. The plan shall be site specific and address all fall hazards in the work place and during different phases of construction. It shall address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 1.8 m (6 feet). A qualified person for fall protection shall prepare and sign the plan. The plan shall include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, assisted rescue, self-rescue and evacuation procedures, training requirements, and monitoring methods. Fall Protection and Prevention Plan shall be revised every six months for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. The accepted Fall Protection and Prevention Plan shall be kept and maintained at the job site for the duration of the project. The Fall Protection and Prevention Plan shall be included in the Accident Prevention Plan (APP).

1.9 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, and shall be written in both English and the host nation language. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

The activity hazard analyses shall be developed using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

1.10 DISPLAY OF SAFETY INFORMATION

Within 1 calendar day after commencement of work, erect a safety bulletin board at the job site. The safety bulletin board shall include information and be maintained as required by EM 385-1-1, section 01.A.06.

1.11 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project. Maintain applicable equipment manufacturer's manuals.

1.12 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. The Government has no responsibility to provide emergency medical treatment. Military medical clinics may provide emergency treatment for serious injuries; the contractor is responsible for coordination with the local military medical clinic prior to mobilization.

1.13 REPORTS

1.13.1 ACCIDENT REPORTS

For recordable injuries and illnesses, and property damage accidents resulting in at least $2,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the USACE Accident Report Form 3394 and provide the report to the Contracting Officer within 5 calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

1.13.2 ACCIDENT NOTIFICATION

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.13.3 MONTHLY EXPOSURE REPORTS

Monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor. The Contracting Officer will provide copies of any special forms.

1.13.4 CRANE REPORTS

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix H and as specified herein with Daily Reports of Inspections.

1.14 HOT WORK

Prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, a written permit shall be requested from the Installation. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) six kilogram ABC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in fire fighting techniques and remain on-site for a minimum of 120 minutes after completion of the task or as specified on the hot work permit.

When starting work in the facility, Contractors shall require their personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency phone numbers. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DIVISION/DEPARTMENT IMMEDIATELY.

2. EXECUTION

2.1 CONSTRUCTION AND/OR OTHER WORK

Before initiation of work at the job site, an accident prevention plan, written by the Contractor for the specific work and hazards of the contract and implementing in detail the pertinent requirements of EM 385-1-1, will be reviewed and found acceptable by designated Government personnel. Specific requirements for development of the accident prevention plan are found in sections 01.A and Appendix A of EM 385-1-1.

Before beginning each activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform the work, activity hazard analysis (AHA) shall be prepared by the Contractor performing the work activity. See paragraph 01.A.09 of EM 385-1-1.

The Contractor shall require subcontractors to submit their plan of operations showing methods they propose to use in accomplishing major phases of work.

The Contractor shall be prepared to discuss the plans in conferences convened by the Contracting Officer prior to starting work on each major phase of operation. Plans shall include all pertinent information such as layout of haul roads, access roads, storage areas, electrical distribution lines, methods of providing minimum exposure to overhead loads, and methods of access to work areas. The plan for accomplishing the initial work phase shall be submitted within 15 calendar days after award of the contract. Plans for subsequent major phases of work shall be submitted not later than 15 calendar days prior to initiation of work on each major phase.

All areas where construction, demolition, alteration, building, or similarly related activities take place, all workers shall have the following minimum personal protective clothing and equipment:

1. Short sleeve shirt.
2. Long trousers.
3. Steel-toed safety boots.
4. Hard hat.

2.1.1 FALLING OBJECT PROTECTION

All areas must be barricaded to safeguard employees. When working overhead, barricade the area below to prevent entry by unauthorized employees. Construction warning tape and signs shall be posted so they are clearly visible from all possible access points. When employees are working overhead all tools and equipment shall be secured so that they will not fall. When using guardrail as falling object protection, all openings shall be small enough to prevent passage of potential falling objects.

2.1.2 HAZARDOUS MATERIAL USE

Each hazardous material must receive approval prior to being brought onto the job site or prior to any other use in connection with this contract. Allow a minimum of 10 working days for processing of the request for use of a hazardous material. Any work or storage involving hazardous chemicals or materials must be done in a manner that will not expose Government or Contractor employees to any unsafe or unhealthful conditions. Adequate protective measures must be taken to prevent Government or Contractor employees from being exposed to any hazardous condition that could result from the work or storage. The Prime Contractor shall keep a complete inventory of hazardous materials brought onto the work-site. Approval by the Contracting Officer of protective measures and storage area is required prior to the start of the work.

2.1.3 HAZARDOUS MATERIAL EXCLUSIONS

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocynates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

2.1.4 UNFORESEEN HAZARDOUS MATERIAL

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos. If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

2.2 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

The Contractor shall establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. The program shall include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

2.2.1 TRAINING

The Contractor shall institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, the Contractor shall provide training for each employee who might be exposed to fall hazards. A competent person for fall protection shall provide the training. Training requirements shall be in accordance with USACE EM 385-1-1, section 21.A.16.

2.2.2 FALL PROTECTION EQUIPMENT AND SYSTEMS

The Contractor shall enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard. Employees shall be protected from fall hazards as specified in EM 385-1-1, section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, paragraphs 05.H. and 05.I. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with USACE EM 385-1-1 and host nation requirements, whichever is more stringent.

2.2.2.1 PERSONAL FALL ARREST EQUIPMENT

Personal fall arrest equipment, systems, subsystems, and components shall meet ANSI Z359.1 or European Union equivalent. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 1.8 m (6 feet). The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

2.2.3 FALL PROTECTION FOR ROOFING WORK

Fall protection controls shall be implemented based on the type of roof being constructed and work being performed. The roof area to be accessed shall be evaluated for its structural integrity including weight-bearing capabilities for the projected loading.

a. Low Sloped Roofs:

(1) For work within 1.8 m (6 feet) of an edge, on low-slope roofs, personnel shall be protected from falling by use of personal fall arrest systems, guardrails, or safety nets. A safety monitoring system is not adequate fall protection and is not authorized.

(2) For work greater than 1.8 m (6 feet) from an edge, warning lines shall be erected and installed in accordance with USACE EM 385-1-1.

b. Steep-Sloped Roofs: Work on steep-sloped roofs requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also includes residential or housing type construction.

2.2.4 EXISTING ANCHORAGE

Existing anchorages, to be used for attachment of personal fall arrest equipment, shall be certified (or re-certified) by a qualified person for fall protection in accordance with ANSI Z359.1 or European Union equivalent. Exiting horizontal lifeline anchorages shall be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

2.2.5 HORIZONTAL LIFELINES

Horizontal lifelines shall be designed, installed, certified and used under the supervision of a qualified person for fall protection as part of a complete fall arrest system which maintains a safety factor of 2.

2.2.6 GUARDRAILS AND SAFETY NETS

Guardrails and safety nets shall be designed, installed and used in accordance with EM 385-1-1 or Host Nation requirements, whichever is more stringent.

2.2.7 RESCUE AND EVACUATION PROCEDURES

When personal fall arrest systems are used, the contractor must ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. A Rescue and Evacuation Plan shall be prepared by the contractor and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. The Rescue and Evacuation Plan shall be included in the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the Accident Prevention Plan (APP).

2.3 SCAFFOLDING

Employees shall be provided with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access to scaffold platforms greater than 6 m in height shall be accessed by use of a scaffold stair system. Vertical ladders commonly provided by scaffold system manufacturers shall not be used for accessing scaffold platforms greater than 6 m in height. The use of an adequate gate is required. Contractor shall ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Special care shall be given to ensure scaffold systems are not overloaded. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Work platforms shall be placed on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than six feet. Delineate fall protection requirements when working above six feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

2.4 EQUIPMENT

2.4.1 MATERIAL HANDLING EQUIPMENT

a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.

c. Operators of forklifts or power industrial trucks shall be trained/licensed in accordance with Host Nation requirements.

2.4.2 WEIGHT HANDLING EQUIPMENT

a. Cranes and derricks shall be equipped as specified in EM-385-1-1 section 16.

b. The Contractor shall notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.

c. The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person. All testing shall be performed in accordance with the manufacturer's recommended procedures.

d. Under no circumstance shall a Contractor make a lift at or above 90% of the cranes rated capacity in any configuration.

e. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 section 11.

f. Crane suspended personnel work platforms (baskets) shall not be used unless the Contractor proves to the satisfaction of the Contracting Officer that using any other access to the work location would provide a greater hazard to the workers or is impossible. Personnel shall not be lifted with a line hoist or friction crane.

g. Portable fire extinguishers shall be inspected, maintained, and recharged.

h. All employees shall be kept clear of loads about to be lifted and of suspended loads.

i. The Contractor shall use cribbing when performing lifts on outriggers.

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

k. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.

l. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.

m. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

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

o. Take steps to ensure that wind speed does not contribute to loss of control of the load during lifting operations. Prior to conducting lifting operations the contractor shall set a maximum wind speed at which a crane can be safely operated based on the equipment being used, the load being lifted, experience of operators and riggers, and hazards on the work site. This maximum wind speed determination shall be included as part of the activity hazard analysis plan for that operation.

2.5 EXCAVATIONS

The competent person for excavations performed as a result of contract work shall be on-site when excavation work is being performed, and shall inspect, and document the excavations daily prior to entry by workers. The competent person must evaluate all hazards, including atmospheric, that may be associated with the work, and shall have the resources necessary to correct hazards promptly.

2.5.1 UTILITY LOCATIONS

Prior to any excavation, all underground utilities in the work area must be positively identified by the contractor utilizing a) a private utility locating service in addition to any station locating service, and/or b) a metal and/or cable-detecting device along the route of the excavation. All underground utilities discovered will be flagged a distance of one-half (1/2) meter on each side of the location, and any markings made during the utility investigation must be maintained throughout the contract.

Damage occurring to existing utilities, when the above procedures are not followed, will be repaired at the Contractor's expense.

2.5.2 UTILITY LOCATION VERIFICATION

The Contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within 0.61 m (2 feet) of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility the utility shall be exposed by hand digging every 30.5 m (100 feet) if parallel within 1.5 m (5 feet) of the excavation.

2.5.3 SHORING SYSTEMS

Trench and shoring systems must be identified in the accepted safety plan and AHA. Manufacture tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on-site for review. Job-made shoring or shielding shall have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electric underground cables.

2.5.4 TRENCHING MACHINERY

Trenching machines with digging chain drives shall be operated only when the spotters/laborers are in plain view of the operator. Operator and spotters/laborers shall be provided training on the hazards of the digging chain drives with emphasis on the distance that needs to be maintained when the digging chain is operating. Documentation of the training shall be kept on file at the project site.

2.6 UTILITIES WITHIN CONCRETE SLABS

Utilities located within concrete slabs or pier structures, bridges, and the like, are extremely difficult to identify due to the reinforcing steel used in the construction of these structures. Whenever contract work involves concrete chipping, saw cutting, or core drilling, the existing utility location must be coordinated with station utility departments in addition to a private locating service. Outages to isolate utility systems shall be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

2.7 ELECTRICAL

2.7.1 CONDUCT OF ELECTRICAL WORK

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting

Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA.

2.7.2 PORTABLE EXTENSION CORDS

Portable extension cords shall be sized in accordance with manufacturer ratings for the tool to be powered and protected from damage. All damaged extension cords shall be immediately removed from service. Portable extension cords shall meet the requirements of NFPA 70 or European Union equivalent.

2.8 WORK IN CONFINED SPACES

The Contractor shall comply with the requirements in Section 06.I of USACE EM 385-1-1. Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedures. Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. (See Section 06.I.06 of USACE EM 385-1-1 for entry procedures). All hazards pertaining to the space shall be reviewed with each employee during review of the AHA.

b. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

c. Ensure the use of rescue and retrieval devices in confined spaces greater than 1.5 m (5 feet) in depth. Conform to Sections 06.I.08, 06.I.09 and 06.I.10 of USACE EM 385-1-1.

d. Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

e. Include training information for employees who will be involved as entrants and attendants for the work. Conform to Section 06.I.07 of USACE EM 385-1-1.

f. Daily Entry Permit. Post the permit in a conspicuous place close to the confined space entrance.

2.9 CRYSTALLINE SILICA

Grinding, abrasive blasting, and foundry operations of construction materials containing crystalline silica, shall comply with USACE EM 385-1-1, Appendix C. The Contractor shall develop and implement effective exposure control and elimination procedures to include dust control systems, engineering controls, and

establishment of work area boundaries, as well as medical surveillance, training, air monitoring, and personal protective equipment.

2.10 DEMOLITION

2.10.1 DEMOLITION PLAN

The Contractor shall submit a written demolition plan for all demolition work to be carried on the site. In addition, the demolition plan shall be signed by a Professional Registered Engineer and meet the requirements of the Corps of Engineers Safety and Health Manual, EM 385-1-1, section 23. The demolition plan shall be submitted to the COR at least 1 week before the beginning of the work, including structural calculations for the demolition, if necessary. The demolition work shall not begin before the Contractor has received a written approval from the COR.

2.10.2 PROTECTION OF PERSONNEL

During the demolition work the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the demolition site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workers remove debris or perform other work in the immediate area.

2.10.3 PROTECTION OF STRUCTURES

Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, shall remain standing without additional bracing, shoring, or lateral support until demolished, unless directed otherwise by the COR. The Contractor shall ensure that no elements determined to be unstable are left unsupported and shall be responsible for placing and securing bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

Interior concrete or masonry walls shall be demolished from the top down unless a Registered Engineer can demonstrate that an alternate method poses no additional safety hazards

2.11 HOUSEKEEPING

2.11.1 CLEAN-UP

The Contractor shall be responsible for cleaning up. The Contractor shall require his personnel to keep the immediate work site clean of all dirt and debris resulting from work under this contract. Accumulated dirt and debris shall be hauled off and disposed of in accordance with local law and at least once a week by the Contractor. Additionally, all debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location, however garbage accumulation must be removed each day.

Stairwells used by the Contractor during execution of work shall be cleaned daily. Cloths, mops, and brushes containing combustible materials shall be disposed of or stored outside of the buildings in tight covered metal containers. Paints and thinners shall not be poured into inlets of the interior or exterior sewage system. Paint, stains, and other residues on adjacent surfaces or fixtures caused by the Contractor shall be carefully removed and cleaned to original finish. Upon completion of the work, the Contractor shall

remove all construction equipment, materials and debris resulting from the work. The entire work site and the area used by Contractor personnel shall be left clean.

-- END OF SECTION --

SPECIFICATION SECTION 01770

CLOSEOUT PROCEDURES

1. GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01335 SUBMITTAL PROCEDURES:

SD-10 Operation and Maintenance Data

Equipment/Product Warranty List; G

Submit Data Package 1 in accordance with Section 01781 OPERATION AND MAINTENANCE DATA.

SD-11 Closeout Submittals

As-Built Drawings; G

Record Of Materials; G

Equipment/Product Warranty Tag; G

1.2 PROJECT RECORD DOCUMENTS

1.2.1 AS-BUILT DRAWINGS

As built drawings shall be submitted in accordance with Section 01780A CLOSEOUT SUBMITTALS

1.2.2 AS-BUILT RECORD OF MATERIALS

Furnish a record of materials.

Where several manufacturers' brands, types, or classes of the item listed have been used in the project, designate specific areas where each item was used. Designations shall be keyed to the areas and spaces depicted on the contract drawing. Furnish the record of materials used in the following format:

MATERIALS DESIGNATION	SPECIFICATION	MANUFACTURER	MATERIALS USED (MANUFACTURER'S DESIGNATION)	WHERE USED

1.3 EQUIPMENT/PRODUCT WARRANTIES

1.3.1 EQUIPMENT/PRODUCT WARRANTY LIST

The Contractor shall develop a warranty management plan which shall contain information relevant to the clause Warranty of Construction. At least 30 days before the planned pre-warranty conference, the Contractor shall submit the warranty management plan for Government approval. The warranty management plan shall include all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan shall be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below shall include due date and whether item has been submitted or was accomplished. Warranty information made available during the construction phase shall be submitted to the Contracting Officer for approval prior to each monthly pay estimate. Approved information shall be assembled in a binder and shall be turned over to the Government upon acceptance of the work. The construction warranty period shall begin on the date of project acceptance and shall continue for the full product warranty period. A joint 4 month and 9 month warranty inspection shall be conducted, measured from time of acceptance, by the Contractor, Contracting Officer and the Customer Representative. Information contained in the warranty management plan shall include, but shall not be limited to, the following:

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

b. Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.

c. A list for each warranted equipment, item, feature of construction or system indicating:

1. Name of item.
2. Model and serial numbers.
3. Location where installed.
4. Name and phone numbers of manufacturers or suppliers.
5. Names, addresses and telephone numbers of sources of spare parts.
6. Warranties and terms of warranty. This shall include one-year overall warranty of construction. Items which have extended warranties shall be indicated with separate warranty expiration dates.

7. Cross-reference to warranty certificates as applicable.
8. Starting point and duration of warranty period.
9. Summary of maintenance procedures required to continue the warranty in force.
10. Cross-reference to specific pertinent Operation and Maintenance manuals.
11. Organization, names and phone numbers of persons to call for warranty service.
12. Typical response time and repair time expected for various warranted equipment.

d. The Contractor's plans for attendance at the 4 and 9 month post-construction warranty inspections conducted by the Government.

e. Procedure and status of tagging of all equipment covered by extended warranties.

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

1.3.2 PERFORMANCE OF WARRANTY WORK

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

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

1.3.3 PRE-WARRANTY CONFERENCE

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

1.3.4 WARRANTY TAGS

At the time of installation, each warranted item shall be tagged with a durable, oil and water resistant tag approved by the Contracting Officer. Each tag shall be attached with a copper wire and shall be sprayed with a silicone waterproof coating. The date of acceptance and the QC signature shall remain blank until project is accepted for beneficial occupancy. The tag shall show the following information.

a. Type of product/material_____

b. Model number_____

c. Serial number _____

d. Contract number _____

e. Warranty period _____ from _____ to _____

f. Inspector's signature _____

g. Construction Contractor _____

Address _____

Telephone number _____

h. Warranty contact_____

Address _____

Telephone number _____

i. Warranty response time priority code_____

j. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.

1.4 MECHANICAL TESTING AND BALANCING

All contract requirements for testing/adjusting/balancing shall be fully completed, including all testing, prior to contract completion date. The time required to complete all testing/adjusting/balancing is included in the allotted calendar days for completion.

1.5 FINAL CLEANING

The premises shall be left broom clean. Stains, foreign substances, and temporary labels shall be removed from surfaces. Carpet and soft surfaces shall be vacuumed. Equipment and fixtures shall be cleaned to a sanitary condition. Filters of operating equipment shall be replaced. Debris shall be removed from roofs, drainage systems, gutters, and downspouts. Paved areas shall be swept and landscaped areas shall be raked clean. The site shall have waste, surplus materials, and rubbish removed. The project area shall have temporary structures, barricades, project signs, and construction facilities removed. A list of completed clean-up items shall be submitted on the day of final inspection.

-- END OF SECTION --

SECTION 01780A

CLOSEOUT SUBMITTALS

1. GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01335 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

As-Built Drawings

Drawings showing final as-built conditions of the project. The local language of Afghanistan shall be added to project As-Built drawings. The final CADD as-built drawings shall consist of **[XX – PM TO PROVIDE #] set[s]** of electronic CADD drawing files in the specified format, and **[XX – PM TO PROVIDE #] half-size and [XX – PM TO PROVIDE #] full-size paper copy[ies]** of the approved as-built drawings.

SD-03 Product Data

As-Built Record of Equipment and Materials

Two copies of the record listing the as-built materials and equipment incorporated into the construction of the project.

Warranty Management Plan

One set of the warranty management plan containing information relevant to the warranty of materials and equipment incorporated into the construction project, including the starting date of warranty of construction. The Contractor shall furnish with each warranty the name, address, and telephone number of each of the guarantor's representatives nearest to the project location.

Warranty Tags

Two record copies of the warranty tags showing the layout and design.

Final Cleaning

Two copies of the listing of completed final clean-up items.

1.2 PROJECT RECORD DOCUMENTS

1.2.1 AS-BUILT DRAWINGS

This paragraph covers as-built drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings which are revised to be used for final as-built drawings.

1.2.1.1 GOVERNMENT FURNISHED MATERIALS

One set of electronic CADD files in the specified software and format revised to reflect all bid amendments will be provided by the Government at the preconstruction conference for projects requiring CADD file as-built drawings.

1.2.1.2 WORKING AS-BUILT AND FINAL AS-BUILT DRAWINGS

a. The Contractor shall revise 2 sets of paper drawings by red-line process to show the as-built conditions during the prosecution of the project. These working as-built marked drawings shall be kept current on a weekly basis and at least one set shall be available on the jobsite at all times. Changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes. Final as-built drawings shall be prepared after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (Foundations, Utilities, Structural Steel, etc., as appropriate for the project). The working as-built marked prints and final as-built drawings will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the working and final as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built drawings. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of updated drawings. The working and final as-built drawings shall show, but shall not be limited to, the following information:

b. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, the as-built drawings shall show, by offset dimensions to two permanently fixed surface features, the end of each run including each change in direction. Valves, splice boxes and similar appurtenances shall be located by dimensioning along the utility run from a reference point. The average depth below the surface of each run shall also be recorded.

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

d. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

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

f. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

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

h. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.

i. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, the Contractor shall furnish a contour map of the final borrow pit/spoil area elevations.

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

k. Modifications (change order price shall include the Contractor's cost to change working and final as-built drawings to reflect modifications) and compliance with the following procedures.

1. Directions in the modification for posting descriptive changes shall be followed.
2. A Modification Circle shall be placed at the location of each deletion.
3. For new details or sections which are added to a drawing, a Modification Circle shall be placed by the detail or section title.
4. For minor changes, a Modification Circle shall be placed by the area changed on the drawing (each location).
5. For major changes to a drawing, a Modification Circle shall be placed by the title of the affected plan, section, or detail at each location.
6. For changes to schedules or drawings, a Modification Circle shall be placed either by the schedule heading or by the change in the schedule.
7. The Modification Circle size shall be 12.7 mm 1/2 inch diameter unless the area where the circle is to be placed is crowded. Smaller size circle shall be used for crowded areas.

1.2.1.3 DRAWING PREPARATION

The as-built drawings shall be modified as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract set into agreement with approved working as-built prints, and adding such additional drawings as may be necessary. These working as-built marked prints shall be neat, legible and accurate. These drawings are part of the

permanent records of this project and shall be returned to the Contracting Officer after approval by the Government. Any drawings damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at no expense to the Government.

1.2.1.4 COMPUTER AIDED DESIGN AND DRAFTING (CADD) DRAWINGS

a. Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare additional new drawings. Additions and corrections to the contract drawings shall be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols shall be the same as the original line colors, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CADD files. The Contractor will be furnished "as-designed" drawings in AutoCAD Release 2007 or Microstation V8 format compatible with a Windows XP operating system. The electronic files will be supplied on compact disc, read-only memory (CD-ROM). The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings.

b. Prior to submittal of the first design submittal involving CADD drawings, the Contractor shall prepare one typical CADD drawing for the project and furnish, via ENG Form 4025, the electronic CADD drawing file for review and approval by the Contracting Officer. All Government comments involving changes to this single drawing shall be accomplished and resubmittal(s) made until the Government is satisfied that all CADD Standards are being followed and all subsequent drawings will also be in compliance with these Standards.

c. CADD colors shall be the "base" colors of red, green, and blue. Color code for changes shall be as follows:

1. Deletions (red) - Deleted graphic items (lines) shall be colored red with red lettering in notes and leaders.
2. Additions (Green) - Added items shall be drawn in green with green lettering in notes and leaders.
3. Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes shall be in blue.

d. The Contract Drawing files shall be renamed in a manner related to the contract number (i.e., 98-C-10.DGN) as instructed in the Pre-Construction conference. Marked-up changes shall be made only to those renamed files. All changes shall be made on the layer/level as the original item. There shall be no deletions of existing lines; existing lines shall be over struck in red. Additions shall be in green with line weights the same as the drawing. Special notes shall be in blue on layer#63.

e. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 5 mm 3/16 inch high. All other contract drawings shall be marked either "As-Built" drawing denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. Original contract drawings shall be dated in the revision block.

f. After Government approval of all of the working as-built drawings for a phase of work, the Contractor shall prepare the final CADD as-built drawings for that phase of work and submit two sets of full size paper copy prints of these drawings for Government review, comparison with approved red-line marked up drawings, and approval. The Government will promptly return one set of prints annotated with any necessary corrections to the CADD file(s) if corrections are required prior to approval. Within 20 days of substantial completion of all phases of work, the Contractor shall submit the final as-built drawing package for the entire project. The submittal shall consist of one set of electronic files on compact disc, read-only memory (CD-ROM), one set of full size paper prints and one set of the approved working as-built drawings. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any transactions or adjustments necessary to accomplish this is the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with the CADD system. Upon approval by the Government of the final as-built drawing package for the entire project, the Contractor shall provide the number of as-built copies noted in Paragraph 1.1 of this Section.

g. Paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked prints as specified shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.2.1.5 PAYMENT

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

1.2.2 AS-BUILT RECORD OF EQUIPMENT AND MATERIALS

The Contractor shall furnish one copy of preliminary record of equipment and materials used on the project 15 days prior to final inspection. This preliminary submittal will be reviewed and returned 2 days after final inspection with Government comments. Two sets of final record of equipment and materials shall be submitted 10 days after final inspection. The designations shall be keyed to the related area depicted on the contract drawings. The record shall list the following data:

RECORD OF DESIGNATED EQUIPMENT AND MATERIALS DATA

Description	Specification	Manufacturer	Composition	Where

Section	and Catalog, Model, and Serial Number	and Size	Used

1.2.3 FINAL APPROVED SHOP DRAWINGS

The Contractor shall furnish final approved project shop drawings 30 days after transfer of the completed facility.

1.2.4 CONSTRUCTION CONTRACT SPECIFICATIONS

The Contractor shall furnish final as-built construction contract specifications, including modifications thereto, 30 days after transfer of the completed facility.

1.2.5 REAL PROPERTY EQUIPMENT

The Contractor shall furnish a list of installed equipment furnished under this contract. The list shall include all information usually listed on manufacturer's name plate. The "EQUIPMENT-IN-PLACE LIST" shall include, as applicable, the following for each piece of equipment installed: description of item, location (by room number), model number, serial number, capacity, name and address of manufacturer, name and address of equipment supplier, condition, spare parts list, manufacturer's catalog, and warranty. A draft list shall be furnished at time of transfer. The final list shall be furnished 30 days after transfer of the completed facility.

1.3 WARRANTY MANAGEMENT

1.3.1 WARRANTY MANAGEMENT PLAN

The Contractor shall develop a warranty management plan which shall contain information relevant to the clause Warranty of Construction. At least 30 days before the planned pre-warranty conference, the Contractor shall submit the warranty management plan for Government approval. The warranty management plan shall include all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan shall be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below shall include due date and whether item has been submitted or was accomplished. Warranty information made available during the construction phase shall be submitted to the Contracting Officer for approval prior to each monthly pay estimate. Approved information shall be assembled in a binder and shall be turned over to the Government upon acceptance of the work. The construction warranty period shall begin on the date of project acceptance and shall continue for the full product warranty period. A joint 4 month and 9 month warranty inspection shall be conducted, measured from time of acceptance, by the Contractor, Contracting Officer and the Customer Representative. Information contained in the warranty management plan shall include, but shall not be limited to, the following:

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

b. Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.

c. A list for each warranted equipment, item, feature of construction or system indicating:

1. Name of item.
2. Model and serial numbers.
3. Location where installed.
4. Name and phone numbers of manufacturers or suppliers.
5. Names, addresses and telephone numbers of sources of spare parts.
6. Warranties and terms of warranty. This shall include one-year overall warranty of construction. Items which have extended warranties shall be indicated with separate warranty expiration dates.
7. Cross-reference to warranty certificates as applicable.
8. Starting point and duration of warranty period.
9. Summary of maintenance procedures required to continue the warranty in force.
10. Cross-reference to specific pertinent Operation and Maintenance manuals.
11. Organization, names and phone numbers of persons to call for warranty service.
12. Typical response time and repair time expected for various warranted equipment.

d. The Contractor's plans for attendance at the 4 and 9 month post-construction warranty inspections conducted by the Government.

e. Procedure and status of tagging of all equipment covered by extended warranties.

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

1.3.2 PRE-WARRANTY CONFERENCE

Prior to contract completion, and at a time designated by the Contracting Officer, the Contractor shall meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this section. Communication procedures for Contractor notification of construction warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty shall be established/reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, the Contractor shall furnish the name, telephone number and address of a licensed

and bonded company which is authorized to initiate and pursue construction warranty work action on behalf of the Contractor. This point of contact will be located within the local service area of the warranted construction, shall be continuously available, and shall be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of its responsibilities in connection with other portions of this provision.

1.3.3 CONTRACTOR'S RESPONSE TO CONSTRUCTION WARRANTY SERVICE REQUIREMENTS

Following oral or written notification by the Contracting Officer, the Contractor shall respond to construction warranty service requirements in accordance with the "Construction Warranty Service Priority List" and the three categories of priorities listed below. The Contractor shall submit a report on any warranty item that has been repaired during the warranty period. The report shall include the cause of the problem, date reported, corrective action taken, and when the repair was completed. If the Contractor does not perform the construction warranty within the timeframes specified, the Government will perform the work and backcharge the construction warranty payment item established.

a. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.

b. Second Priority Code 2. Perform onsite inspection to evaluate situation, and determine course of action within 8 hours, initiate work within 24 hours and work continuously to completion or relief.

c. Third Priority Code 3. All other work to be initiated within 3 work days and work continuously to completion or relief.

d. The "Construction Warranty Service Priority List" is as follows:

Code 1-Air Conditioning Systems

1) Recreational support.
2) Air conditioning leak in part of building, if causing damage.
3) Air conditioning system not cooling properly.

Code 1-Doors

1) Overhead doors not operational, causing a security, fire, or safety problem.
2) Interior, exterior personnel doors or hardware, not functioning properly, causing a security, fire, or safety problem.

Code 3-Doors

1) Overhead doors not operational.
2) Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical

1) Power failure (entire area or any building operational after 1600 hours).

2) Security lights
3) Smoke detectors

Code 2-Electrical
1) Power failure (no power to a room or part of building).
2) Receptacle and lights (in a room or part of building).

Code 3-
Electrical
Street lights.

Code 1-Gas
1) Leaks and breaks.
2) No gas to family housing unit or cantonment area.

Code 1-Heat
1) Area power failure affecting heat.
2) Heater in unit not working.

Code 2-Kitchen Equipment
1) Dishwasher not operating properly.
2) All other equipment hampering preparation of a meal.

Code 1-Plumbing
1) Hot water heater failure.
2) Leaking water supply pipes.

Code 2-Plumbing
1) Flush valves not operating properly.
2) Fixture drain, supply line to commode, or any water pipe leaking.
3) Commode leaking at base.

Code 3 –Plumbing
Leaky faucets.

Code 3-Interior
1) Floors damaged.
2) Paint chipping or peeling.
3) Casework.

Code 1-Roof Leaks
Temporary repairs will be made where major damage to property is occurring.

Code 2-Roof Leaks
Where major damage to property is not occurring, check for location of leak

during rain and complete repairs on a Code 2 basis.

Code 2-Water (Exterior)
No water to facility.

Code 2-Water (Hot)
No hot water in portion of building listed.

Code 3-All other work not listed above.

1.3.4 WARRANTY TAGS

At the time of installation, each warranted item shall be tagged with a durable, oil and water resistant tag approved by the Contracting Officer. Each tag shall be attached with a copper wire and shall be sprayed with a silicone waterproof coating. The date of acceptance and the QC signature shall remain blank until project is accepted for beneficial occupancy. The tag shall show the following information.

a. Type of product/material_____.

b. Model number_____.

c. Serial number_____.

d. Contract number_____.

e. Warranty period_____from_____to_____.

f. Inspector's signature_____.

g. Construction Contractor_____. Address_____. Telephone number_____.

h. Warranty contact_____. Address_____. Telephone number_____.

i. Warranty response time priority code_____.

j. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.

1.4 MECHANICAL TESTING, ADJUSTING, BALANCING, AND COMMISSIONING

Prior to final inspection and transfer of the completed facility; all reports, statements, certificates, and completed checklists for testing, adjusting, balancing, and commissioning of mechanical systems shall be submitted to and approved by the Contracting Officer as specified in applicable technical specification sections.

1.5 OPERATION AND MAINTENANCE MANUALS

Three (3) copies of all Operation and Maintenance (O&M) manuals shall be submitted as follows:

AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers

Afghanistan Engineer District

House # 1, St. #1 West

West Wazir Akbar High School

Behind Amani High School

Kabul, Afghanistan

Attn: Chief, Engineering Branch

Operation manuals and maintenance manuals shall be provided in a common volume, complete, clearly differentiated and separately indexed.

1.6 FINAL CLEANING

The premises shall be left broom clean. Stains, foreign substances, and temporary labels shall be removed from surfaces. Carpet and soft surfaces shall be vacuumed. Equipment and fixtures shall be cleaned to a sanitary condition. Filters of operating equipment shall be replaced. Debris shall be removed from roofs, drainage systems, gutters, and downspouts. Paved areas shall be swept and landscaped areas shall be raked clean. The site shall have waste, surplus materials, and rubbish removed. The project area shall have temporary structures, barricades, project signs, and construction facilities removed. A list of completed clean-up items shall be submitted on the day of final inspection.

-- END OF SECTION -

SECTION 01781

OPERATION AND MAINTENANCE DATA

1. GENERAL

1.1 SUBMISSION OF OPERATION AND MAINTENANCE DATA

Submit Operation and Maintenance (O&M) Data specifically applicable to this contract and a complete and concise depiction of the provided equipment, product, or system. Organize and present information in sufficient detail to clearly explain O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with this section and Section 01335 SUBMITTAL PROCEDURES. The O&M manuals shall be provided prior to any training activities. Manuals shall be tri-lingual (e.g.) in Dari, Pashto, and English.

1.1.1 PACKAGE QUALITY

Documents must be fully legible. Poor quality copies and material with hole punches obliterating the text or drawings will not be accepted.

1.1.2 PACKAGE CONTENT

Data package content shall be as shown in the paragraph titled "Schedule of Operation and Maintenance Data Packages." Comply with the data package requirements specified in the individual technical sections, including the content of the packages and addressing each product, component, and system designated for data package submission.

1.1.3 CHANGES TO SUBMITTALS

Manufacturer-originated changes or revisions to submitted data shall be furnished by the Contractor if a component of an item is so affected subsequent to acceptance of the O&M Data. Changes, additions, or revisions required by the Contracting Officer for final acceptance of submitted data, shall be submitted by the Contractor within 30 calendar days of the notification of this change requirement.

1.2 TYPES OF INFORMATION REQUIRED IN O&M DATA PACKAGES

1.2.1 OPERATING INSTRUCTIONS

Include specific instructions, procedures, and illustrations for the following phases of operation:

1.2.1.1 SAFETY PRECAUTIONS

List personnel hazards and equipment or product safety precautions for all operating conditions.

1.2.1.2 OPERATOR PRESTART

Include procedures required to set up and prepare each system for use.

1.2.1.3 STARTUP, SHUTDOWN, AND POST-SHUTDOWN PROCEDURES

Provide narrative description for Startup, Shutdown and Post-shutdown operating procedures including the control sequence for each procedure.

1.2.1.4 NORMAL OPERATIONS

Provide narrative description of Normal Operating Procedures. Include Control Diagrams with data to explain operation and control of systems and specific equipment.

1.2.1.5 EMERGENCY OPERATIONS

Include Emergency Procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Include Emergency Shutdown Instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance and procedures for emergency operation of all utility systems including required valve positions, valve locations and zones or portions of systems controlled.

1.2.1.6 OPERATOR SERVICE REQUIREMENTS

Include instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and recording gage readings.

1.2.1.7 ENVIRONMENTAL CONDITIONS

Include a list of Environmental Conditions (temperature, humidity, and other relevant data) that are best suited for the operation of each product, component or system. Describe conditions under which the item equipment should not be allowed to run.

1.2.2 PREVENTIVE MAINTENANCE

Include the following information for preventive and scheduled maintenance to minimize corrective maintenance and repair.

1.2.2.1 LUBRICATION DATA

Include preventative maintenance lubrication data, in addition to instructions for lubrication provided under paragraph titled "Operator Service Requirements":

a. A table showing recommended lubricants for specific temperature ranges and applications.
b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities.
c. A Lubrication Schedule showing service interval frequency.

1.2.2.2 PREVENTIVE MAINTENANCE PLAN AND SCHEDULE

Include manufacturer's schedule for routine preventive maintenance, inspections, tests and adjustments required to ensure proper and economical operation and to minimize corrective maintenance. Provide manufacturer's projection of preventive maintenance work-hours on a daily, weekly, monthly, and annual basis including craft requirements by type of craft. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation.

1.2.3 CORRECTIVE MAINTENANCE (REPAIR)

Include manufacturer's recommended procedures and instructions for correcting problems and making repairs.

1.2.3.1 TROUBLESHOOTING GUIDES AND DIAGNOSTIC TECHNIQUES

Include step-by-step procedures to promptly isolate the cause of typical malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.

1.2.3.2 WIRING DIAGRAMS AND CONTROL DIAGRAMS

Wiring diagrams and control diagrams shall be point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering.

1.2.3.3 MAINTENANCE AND REPAIR PROCEDURES

Include instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards.

1.2.3.4 REMOVAL AND REPLACEMENT INSTRUCTIONS

Include step-by-step procedures and a list required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Instructions shall include a combination of text and illustrations.

1.2.3.5 SPARE PARTS AND SUPPLY LISTS

Include lists of spare parts and supplies required for maintenance and repair to ensure continued service or operation without unreasonable delays. Special consideration is required for facilities at remote locations. List spare parts and supplies that have a long lead-time to obtain.

1.2.4 CORRECTIVE MAINTENANCE WORK-HOURS

Include manufacturer's projection of corrective maintenance work-hours including requirements by type of craft. Corrective maintenance that requires completion or participation of the equipment manufacturer shall be identified and tabulated separately.

1.2.5 APPENDICES

Provide information required below and information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment. Include the following:

1.2.6 PARTS IDENTIFICATION

Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number that will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies in accordance with the manufacturer's standard practice. Parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as typically shown in a master parts catalog

1.2.6.1 WARRANTY INFORMATION

List and explain the various warranties and include the servicing and technical precautions prescribed by the manufacturers or contract documents in order to keep warranties in force. Include warranty information for primary components such as the compressor of air conditioning system.

1.2.6.2 PERSONNEL TRAINING REQUIREMENTS

Provide information available from the manufacturers that is needed for use in training designated personnel to properly operate and maintain the equipment and systems.

1.2.6.3 TESTING EQUIPMENT AND SPECIAL TOOL INFORMATION

Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components.

1.2.6.4 CONTRACTOR INFORMATION

Provide a list that includes the name, address, and telephone number of the General Contractor and each Subcontractor who installed the product or equipment, or system. For each item, also provide the name address and telephone number of the manufacturer's representative and service organization most convenient to the project site. Provide the name, address, and telephone number of the product, equipment, and system manufacturers.

EXECUTION

1.3 TRAINING

Unless provided for elsewhere, the Contractor shall provide operational and maintenance training for all systems furnished under this contract in accordance with this section. The training shall not take place until the operation and maintenance manuals are submitted and approved.

Training will be given to personnel responsible for the operation and maintenance of the system at the installation. Orient training to the specific system being installed under this contract. Use operation and maintenance manual as the primary instructional aid in contractor provided activity personnel training. Manuals shall be delivered for each trainee with two additional sets delivered for archiving at the project site. Submit a training course schedule, syllabus, and training materials 14 days prior to the start of training. Obtain approval of the training course before beginning that phase of training. Furnish a qualified instructor approved by the system manufacturer to conduct training for the specific system.

Training manuals shall include an agenda, defined objectives and a detailed description of the subject matter for each lesson. Furnish audio-visual equipment and all other training materials and supplies. A training day is defined as 8 hours of classroom or lab instruction, including two 15 minute breaks and excluding lunch time, Monday through Friday, during the daytime shift in effect at the training facility. For guidance, the Contractor should assume the attendees will have a high school education.

The Contractor shall videotape the training session on VHS tapes and provide the tapes to the Government.

-- END OF SECTION --