US Army Corps
of Engineers
Savannah District

Fort Bragg
North Carolina

Solicitation Number
DACA21-03-R-0009
SOF Renovate Bryant Hall
FY-03, Line Item 53457
April 2003

PHASE TWO OF TWO PHASE DESIGN/BUILD SUBMITTAL PROCEDURE

THIS SOLICITATION IS UNRESTRICTED PURSUANT TO THE "BUSINESS OPPORTUNITY DEVELOPMENT REFORM ACT OF 1988" (PUBLIC LAW 100-656)

**U.S. ARMY ENGINEER DISTRICT, SAVANNAH
CORPS OF ENGINEERS
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640**

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SOLICITATION, OFFER, AND AWARD *(Construction, Alteration, or Repair)*	1. SOLICITATION NO. DACA21-03-R-0009-0008	2. TYPE OF SOLICITATION [ ] SEALED BID (IFB) [X] NEGOTIATED *(RFP)*	3. DATE ISSUED 06-Dec-2002	PAGE OF PAGES 1 OF 198

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

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

7. ISSUED BY CODE DOC	8. ADDRESS OFFER TO *(If Other Than Item 7)* CODE
US ARMY CORPS OF ENGINEERS 100 WEST OGLETHORPE AVE. SAVANNAH GA 31401-3640 TEL: FAX:	**See Item 7** TEL: FAX:

9. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO. *(Include area code)* *(NO COLLECT CALLS)*
	NORA L JARRELL	(912)652-5705

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):*

Phase One of a Two Phase Design/Build
SOF Renovate Bryant Hall, Fort Bragg, North Carolina
FY-03, Line Item 53457
Contracting Officer: Colleen J. O'Keefe, 912-652-5075
email: colleen.j.okeefe@sas02.usace.army.mil

Contracting Specialist: Nora Louise Jarrell, 912-652-5705
email: nora.l.jarrell@sas02.usace.army.mill

Please forward all correspondence and inquires to Nora Louise Jarrell.
Block 11 - the fill-in for the completion days has been intentionally left blank. This is to be determined by the contractor receiving award.

Block 12A - Performance and Payment Bonds will be required in Phase 2 from awardee. Bid Bonds will only be required in Phase 2.
**NOTE: See Section 00800, FAR Clause 52.211-10, for Commencement, Prosecution, and Completion of Work..

11. The Contractor shall begin performance within 5 calendar days and complete it within _____ calendar days after receiving [ ] award, [X] notice to proceed. This performance period is [X] mandatory, [ ] negotiable. *(See* 52.211-10 *.)*

12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? *(If "YES," indicate within how many calendar days after award in Item 12B.)* [X] YES [ ] NO	12B. CALENDAR DAYS 10

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 6 copies to perform the work required are due at the place specified in Item 8 by 02:00 PM *(hour)* local time 06 Jun 2003 *(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 [X] is, [ ] is not required.

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

D. Offers providing less than 60 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

NOTICE TO OFFERORS

NOTICE TO OFFERORS

1. HAND-CARRIED OR MAILED PROPOSALS:

All proposals must be clearly identified with the contractor's name and address. To ensure timely and proper handling, the lower left corner of the outermost wrapper must indicate the Request For Proposal No., Due Date of Proposal, Time by which Proposals are Due, and Title of Project.

The Government will not be responsible for proposals delivered to any location or to anyone other than those designated to receive proposals on its behalf as indicated below.

Proposals delivered by commercial carrier and those sent by U.S. Mail, including U.S. Express Mail, must be addressed as indicated below. Proposals shall not be addressed to any specific person.

U.S. Army Engineer District, Savannah
ATTN: CESAS-CT-C
100 West Oglethorpe Avenue
Savannah, Georgia 31401-3640

Mailroom personnel on the first floor of 100 West Oglethorpe Avenue must receive proposals sent by U.S. Mail or delivered by commercial carrier by the time specified in Block 13 of the SF1442 for receipt of proposals.

Hand-carried proposals must also be delivered to mailroom personnel on the first floor of 100 West Oglethorpe Avenue by the time specified in Block 13 of SF1442 for receipt of proposals. Due to increased security requirements, it is suggested that hand carried proposals be delivered 30 minutes prior to the specified time of receipt.

Offerors are cautioned that there is no parking in or around the building, and visitors must pass through security and sign in prior to being allowed access to the mailroom. Sufficient time must therefore be allowed when hand carrying proposals.

2. FACSIMILE MODIFICATIONS OF PROPOSALS ARE NOT AUTHORIZED.

3. QUALITY CONTROL SYSTEM (QCS)
Any contract award resulting from this solicitation will require the mandatory use of the automated Quality Control System. Please see section 01312A for additional information.

4. WAGE RATES: NC020032 is applicable to this solicitation at the present time. As future wage rates become available from the Department of Labor, those will be applicable.

5. SECURITY REQUIREMENTS: All commercial vehicles larger than a pickup must enter the Fort Bragg, NC Post through one of two locations: Knox Street or Longstreet Road, where the vehicles will be "scanned." In order for Bragg's security actions to be effective, no commercial vehicles larger than a pickup will be allowed to directly enter into Fort Bragg.

SUPPLIES AND SERVICES AND PRICES/COSTS

SCHEDULE

RENOVATE BRYANT HALL
FORT BRAGG, NORTH CAROLINA

TOTAL PRICE – SCHEDULE I----------$_____

TOTAL PERFORMANCE PERIOD – SCHEDULE I----------_____(CALENDAR DAYS)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	BID SCHEDULE I				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AA	BASE BID, SCHEDULE - 1 Design effort and engineering services during construction for the Base Bid and Option - Complete.	1	Lump Sum	_____	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AB	BASE BID, SCHEDULE 1 Phased renovation of Bryant Hall. Complete to 5-foot building line.	1	Lump Sum	_____	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AC		1	Lump Sum	_____	_____

BASE BID, SCHEDULE I
Support Facilities. Site preparation and development including utilities (all other work outside of the 5-foot building line for Bryant Hall) - Complete.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AD		1	Lump Sum	_____	_____

BASE BID, SCHEDULE I, OPTION 1
Install Government Furnished Furnishings Items (O&M funded)

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001AE		1	Lump Sum	_____	_____

BASE BID, SCHEDULE 1, OPTION 2
Parking Lot & Assoc. Items

NOTE: PROPOSERS ARE REQUIRED TO COMPLETE BID SCHEDULE I, BID SCHEDULE II, AND THE PERFORMANCE PERIOD PROPOSED FOR EACH BID SCHEDULE. ONLY ONE BID SCHEDULE WILL BE AWARDED.

SUPPLIES AND SERVICES AND PRICES/COSTS

SCHEDULE

RENOVATE BRYANT HALL
FORT BRAGG, NORTH CAROLINA

TOTAL PRICE – SCHEDULE II----------$_____

TOTAL PERFORMANCE PERIOD – SCHEDULE II----------_____CALENDAR DAYS

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	BASE BID, SCHEDULE II				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AA	BASE BID, SCHEDULE II Design effort and engineering services during construction for the Base Bid and Option - Complete.t	1	Lump Sum	_____	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AB	BASE BID, SCHEDULE II Construction of building to 5-foot line with building vacant. Renovation of Bryant with the Building vacant, Complete to 5-foot building line.	1	LUMP SUM	_____	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AC		1	Lump Sum	_____	_____

BASE BID, SCHEDULE II
Support Facilities. Site preparation and development including utilities (all other work outside of the 5-foot building line for Bryant Hall), - Complete.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AD		_____	MONTHS	_____	_____

BASE BID, SCHEDULE II
Temporary relocation of a maximum of 100 personnel. ***NOTE: PROPOSERS TO FILL-IN THE NUMBER OF MONTHS AND THE DOLLAR AMOUNT PER MONTH FOR THIS LINE ITEM BASED ON THE PERFORMANCE PERIOD PROPOSED..

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002AE		1	Lump Sum	_____	_____

BASE BID, SCHEDULE II OPTION 1
Install government Furnished Furnnishings Items (O&M funded).

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
02AF		1	Lump Sum	_____	_____

BASE BID, SCHEDULE II,
Parking Lot & Assoc. Items.

NOTE: PROPOSERS ARE REQUIRED TO COMPLETE BID SCHEDULE I, BID SCHEDULE II, AND THE PERFORMANCE PERIOD PROPOSED FOR EACH BID SCHEDULE. ONLY ONE BID SCHEDULE WILL BE AWARDED.

CLAUSES INCORPORATED BY FULL TEXT

52.232-4001 COST LIMITATION – JUNE 1999

The contract award for design and construction shall not exceed $ 10,471,000.00 for this project. Offerors are under no obligation to approach this amount. The cost limitation applies to all line items except : Schedule I, CLIN 0005 and Schedule II, CLIN 0005.

(End of Clause)

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY REFERENCE

52.233-2	Service Of Protest	AUG 1996

CLAUSES INCORPORATED BY FULL TEXT

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address exactly as stated in the offer.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

(1) Company name.

(2) Company address.

(3) Company telephone number.

(4) Line of business.

(5) Chief executive officer/key manager.

(6) Date the company was started.

(7) Number of people employed by the company.

(8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at http://www.customerservice@dnb.com. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@mail.dnb.com.

(End of provision)

52.211-2 AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) AND DESCRIPTIONS LISTED IN THE ACQUISITION MANAGEMENT SYSTEMS AND DATA REQUIREMENTS CONTROL LIST, DOD 5010.12-L (DEC 1999)

Copies of specifications, standards, and data item descriptions cited in this solicitation may be obtained--

(a) From the ASSIST database via the Internet at http://assist.daps.mil; or

(b) By submitting a request to the--Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(End of provision)

52.211-14 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (SEP 1990)

Any contract awarded as a result of this solicitation will be DO rated order certified for national defense use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation. [Contracting Officer check appropriate box.]

(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 (MAY 2001)

(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) The Government may disclose the following information in postaward debriefings to other offerors:

(i) The overall evaluated cost or price and technical rating of the successful offeror;

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

(iii) A summary of the rationale for award; and

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

(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 clause)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

(a) Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the

basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(b) The Government may reject an offer as nonresponsive if it is materially unbalanced as to prices for the basic requirement and the option quantities. An offer is unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(End of provision)

52.219-4001 SUBCONTRACTING PLAN FOR SMALL BUSINESS CONCERNS
(SEP 2002 CESAS-CT)

(a) In accordance with FAR Clause 52.219-9, large businesses must submit a subcontracting plan. A sample subcontracting plan is located in Section 00800.

(b) The subcontracting targets (expressed in terms of percentages of total planned subcontracting dollars) of the Savannah District are as follows:

Small Business	-	57.2%
Small Disadvantaged Business	-	8.9%
HUBZone Small Business		3.0%
Women-Owned Business	-	8.1%
Veteran-Owned Small Business		0%*
Service-Disabled Veteran-Owned Small Business	-	3.0%**

If you cannot reach the above-stated targets, you must provide written justification with your subcontracting plan detailing the reasons you cannot meet the requirements.

*(c) While Savannah District does not have a specific target for subcontracting with Veteran-Owned small businesses, this must be addressed in any subcontracting plan.

**(d) Service-disabled Veteran-owned Small Business (SD/VOSB) is a composite of Veteran-Owned Small Business. The SD/VOSB target must be included in the Veteran-Owned small business target.

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
26.2%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor

performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Fort Bragg, NC.

52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENT-- CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (MAY 2002)

(a) Definitions. Construction material, designated country construction material, domestic construction material, foreign construction material, and NAFTA country construction material, as used in this provision, are defined in the clause of this solicitation entitled “Buy American Act --Construction Materials under Trade Agreements” (Federal Acquisition Regulation (FAR) clause 52.225-11).

(b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

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

(d) Alternate offers. (1) When an offer includes foreign construction material, other than designated country or NAFTA country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic, designated country, or NAFTA country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic, designated country, or NAFTA country construction material, and the offeror shall be required to furnish such domestic, designated country, or NAFTA country construction material. An offer based on use of the foreign construction material for which an exception was requested--

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

(ii) May be accepted if revised during negotiations.

(End of provision)

52.236-27 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:
Name: Vernon Crudup
Address: North Carolina Air Force & Special Operations Area Office
Bldg D-2507, Ardennes St.
Fort Bragg, NC 29307-0247
Telephone: 910-432-8121

(End of provision)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) – ALTERNATE I (FEB 1995)

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

(b) An organized site visit has been scheduled for--
April 16, 2003 at 0900 am EST.

(c) Participants will meet at--

N.C. Air Force & Special Ops Area Office
PO Box 70069
(or)
N.C. Air Force & Special Ops
Bldg D-2507, Ardennes Street
Fort Bragg, NC 28307-0069

(End of provision)

52.236-28 PREPARATION OF PROPOSALS--CONSTRUCTION (OCT 1997)

(a) Proposals must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a proposal must initial each erasure or change appearing on any proposal form.

(b) The proposal form may require offerors to submit proposed prices for one or more items on various bases, including--

(1) Lump sum price;

(2) Alternate prices;

(3) Units of construction; or

(4) Any combination of paragraphs (b)(1) through (b)(3) of this provision.

(c) If the solicitation requires submission of a proposal on all items, failure to do so may result in the proposal being rejected without further consideration. If a proposal on all items is not required, offerors should insert the words “no proposal” in the space provided for any item on which no price is submitted.

(d) Alternate proposals will not be considered unless this solicitation authorizes their submission.

(End of provision)

52.236-4011 Disclosure of Magnitude of Construction (FAR 36.204 and DFARS 236.204)

The estimated price range for this project is between

$10,000,000.00 and $15,000,000.00 .

52.999

Section 00110

PROPOSAL SUBMISSION REQUIREMENTS AND INSTRUCTIONS

1. PROPOSAL OVERVIEW.

1.1 General. Since the proposal describe the capability of the offeror to perform any resultant contract, as well as describe its understanding of the requirements of the Statement of Work, it should be specific and complete in every detail. The proposal should be prepared simply and economically, providing straight-forward, concise delineation of capabilities to satisfactorily perform the contract being sought. The proposal should therefore be practical, legible, clear, and coherent.

1.2 Proposal Submissions and the Two (2) Phase Design-Build Process. This process requires potential contractors to submit their performance and capability information initially (Phase 1) for review and consideration by the Government. Following the review, evaluation, and rating of these proposals, the Government select up to five of the highest rated contractors to receive the technical requirements package and provide a technical and cost proposal for consideration by the Government at Phase 2. The technical and cost proposals of the selected contractors, be reviewed by the Government. The technical information contained in this Phase 2 proposal be reviewed and evaluated by the Government in accordance with the evaluation criteria set out in Section 00120 – PART 2, PHASE 2 EVALUATION MANUAL. The final evaluation rating used for comparison, selection, and award reflect both the rating received in Phase 1 and the evaluation rating received in Phase 2. Cost information not be rated in either phase but be evaluated in response to the funding limitations set out in Section 00010 – PRICE PROPOSAL SCHEDULE and other offeror's price proposals.

1.3 FOR ALL THOSE CONTRACTORS WHO COMPETE IN BOTH PHASE 1 AND PHASE 2, THE CONTRACTOR'S PROPOSAL SHALL BE DEFINED AS ALL INFORMATION WHICH WAS SUBMITTED IN RESPONSE TO THE REQUIREMENTS OF BOTH PHASES OF THE SOLICITATION.

1.4 Compliance Statement: The Offerors selected to compete in Phase 2 are required to certify that all items submitted in its technical proposal comply with the RFP requirements and any differences, deviations or exceptions have been identified and explained. Offerors are required to complete the statement and submit it with their technical proposal. Even if there are no differences, deviations or exceptions, the Offeror must submit the Compliance Statement and state that none exist.

Statement of Compliance

[*Insert name of the offeror*] hereby certifies that all items submitted in this proposal and final design documents (after contract award) comply with the solicitation requirements. The criteria specified in Request for Proposal No. DACA21-03-R-0009are binding contract criteria and in case of any conflict after award, between DACA21-03-R-0009 and the contractor's proposal, the Request for Proposal criteria shall govern unless there is a written and signed agreement between the contractor and the Government waiving a specific requirement. Should this proposal result in the award of a contract. this statement be included on each sheet of drawings and on the cover of the specifications.

1.5 Exceptions. Exceptions to the contractual terms and conditions of the solicitation (e.g., standard company terms and conditions) must not be included in the proposal.

2. PHASE 1 PROPOSAL SUBMISSION INSTRUCTIONS

2.1 Who May Submit.

2.1.1 Proposals may be submitted by firms formally organized as design/build entities, or by design firms and construction contractors that have associated specifically for this project. In the latter case, a single design firm or construction contractor may offer more than one proposal by entering into more than one such association. For the purpose of this solicitation, no distinction is made between formally organized design/build entities and project-specific design/build associations. Both are referred to as the design/build offeror, (or simply "Offeror"), or the design/build contractor, (or simply "Contractor"), after award of a contract.

2.1.2 Any legally organized Offeror may submit a proposal.

2.2 Where to Submit. Offerors shall submit their proposal packages to the Savannah District at the address shown in Block 7 of Standard Form 1442.

2.3 Submission Deadline. Proposals shall be received by the Savannah District no later than the time and date specified in Block 13 of Standard Form 1442.

2.4 General Requirements.

2.4.1 In order to effectively and equitably evaluate all proposals, the Contracting Officer must receive information sufficiently detailed to allow review and evaluation by the Government.

2.4.2 Tabs. Proposal shall be organized and tabbed as shown.

2.4.3 Size of Printed Matter Submissions.

2.4.3.1 Written materials shall be on 8-1/2" x 11" paper.

2.4.3.2 The proposals shall contain a detailed table of contents. If more than one binder is used, the complete table of contents shall be included in each. Any materials submitted but not required by this solicitation, (such as company brochures), shall be relegated to appendices.

2.4.4 Number of Copies. Offerors shall submit one (1) original and six (6) hard copies of their Phase One Proposal.

2.4.5 Electronic Copy of Submissions. In addition to the hard copies of the proposal, Offerors shall also submit the Phase 1 Proposal on a CD ROM disk. The proposal should be in MS Word, Adobe Acrobat PDF file, or WordPerfect format. The electronic version shall be either a single file tabbed in the same order as the hard copy or multiple files hyperlinked to a single table of contents.

2.5 Submission Format.

2.5.1 The Phase One Proposal be tabbed and submitted in a three ring binder in the following format:

<u>PHASE 1 PROPOSAL</u>

TAB A

52 SF 1442

53 Section 00600 – Representations and Certifications

52 PROPOSAL DATA SHEET – include Offeror's DUNS #, CAGE Code, Email Address, Fax No., and A-E ACASS ID # and Contractor's CCASS #

TAB B – FACTOR 1-1 Offeror Past Performance Information

53 PAST PERFORMANCE INFORMATION Sheets

TAB C – FACTOR 1-2 Relevant Specialized Experience

54 RELEVANT SPECIALIZED EXPERIENCE Sheets (Example Projects)

TAB D – FACTOR 1-3 Technical Approach Narrative

TAB E – FACTOR 1-4 Offeror Sustainable Design Experience

55 SUSTAINABLE DESIGN EXPERIENCE Sheets (Example Projects)

TAB F - Other Information

2.6 TAB B – FACTOR 1-1 Offeror Past Performance Information. A sample Past Performance Evaluation Questionnaire is included at the end of this section. The offeror shall identify the three completed projects (or substantially complete) to be used for reference and evaluation purposes and provide a questionnaire to the Point of Contact for each project listed for completion. When completed, these forms shall be mailed, faxed or e-mailed to the Savannah District Contract Specialist identified in the sample transmittal letter provided. It is the contractor's responsibility to ensure that the reference documentation is provided. The Government may not make additional requests for past performance information from the references. Copies of the evaluation form shall be provided to the Savannah District directly from the reference. Projects from which questionnaires are received shall have been completed within three years of the date of the solicitation. The Government may contact sources other than those provided by the Offeror for information with respect to past performance. These other sources may include CCASS (Construction Contractor Appraisal Support System), ACASS (Architect-Engineer Contractor Appraisal Support System), telephone interviews with organizations familiar with the Offeror's performance, and Government personnel with personal knowledge of the Offeror's performance capability. The experience of individuals not be credited under this factor but be evaluated under "Project Key Personnel" in Phase 2.

2.7 TAB C – FACTOR 1-2 Relevant Specialized Experience. Provide examples (at least three) of projects for which the offeror has been responsible. The examples should be as similar as possible to this solicitation in project type and scope. Provide references (with contract names and telephone numbers) for all examples cited. Each example shall indicate the general character, scope, location, cost, and date of completion of the project. If the offeror represents the combining of two or more companies for the purpose of this RFP, each company shall list project examples. Example projects must have been completed not later than three years prior to the date of the solicitation. The experience of individuals not be credited under this factor but be evaluated under "Project Key Personnel" in Phase 2.

2.8 TAB D FACTOR 1-3 Technical Approach Narrative. Describe in general terms how the offeror approach the design and construction of these facilities. Technical Approach Narrative shall be limited to a maximum of ten (10) typewritten pages, 12 pitch, and double spaced**.** At a minimum the narrative should address the following:

56 Does the Offeror demonstrate a suitable understanding of the process to enable it to adequately address and anticipate the risks associated with Design/Build processes?

57 The roles and responsibilities of the various sub-contractors for both design and construction shall be addressed.

58 How does the Offeror continue the design phase of the project and incorporate User comments and reviews into the process?

59 The Offeror's Design Quality Control Program shall be briefly described.

60 What is the design team's involvement throughout the construction period?

61 How does the Offeror integrate construction subcontractors into the design process?

62 What are the Offeror's processes for handling construction and design problems.

63 Offeror's implementation plans to utilize "fast track" procedures on this project whereby preliminary site construction activities can begin prior to 100% completion of the design documents.

Offerors are cautioned that this narrative shall not exceed ten (10) pages and that the Government review staff review and evaluate only the information contained on the first ten pages in this section.

2.9 TAB E – FACTOR 1-4 Offeror Sustainable Design Experience. Provide examples of at least three projects for which the Offeror has been responsible and which included sustainable features. Specific experience in LEED/SPIRIT application be given more favorable consideration. Provide references (with contract names and telephone numbers) for all examples cited. Each example shall indicate the general character, scope, location, cost, and date of completion of the project. Each example shall also indicate what sustainable features the project included, a quantification of the results as applicable (i.e. "diverted 25% of construction waste") and the role(s) the Offeror had in the accomplishment of each sustainable goal. If the Offeror represents the combining of two or more companies for the purpose of this RFP, each company shall list project examples. Example projects must have been completed not later than three years prior to the date of the solicitation.

2.10 No cost information shall be included in the Phase 1 proposal package.

3. PHASE 2 PROPOSAL SUBMISSION INSTRUCTIONS

3.1 Who May Submit. Proposals may be submitted by the Offerors who receive written notification from the Savannah District Contracting Officer that their firm has been selected to participate in Phase 2 of this solicitation. No more than five Offerors compete in Phase 2 under typical circumstances. The Government intends to announce the names of Offerors selected for Phase 2 in the FEDBIZOPS website unless an Offeror provides written notification and explanation for not wanting this information released.

3.2 General Requirements.

3.2.1 Title Page. Include the title of the solicitation, solicitation number, Offeror name, and date of the submittal.

3.2.2 Table of Contents. The proposals shall contain a detailed table of contents. If more than one binder is used, the complete table of contents shall be included in each. Any materials submitted but not required by this solicitation, (such as company brochures), shall be relegated to appendices.

3.2.3 Tabs. Proposal shall be organized and tabbed as shown.

3.2.4 Size of Printed Matter Submissions.

3.2.4.1 Written materials: 8-1/2" x 11" format.

3.2.5.2 Drawing sheets:

3.2.5.2.1 Offerors shall submit one set of full size drawings Size A1 (approximately 24" x 36").

3.2.5.2.2 Offerors shall submit five half size sheets size A2 (approximately 16" x 23").

3.2.5.3.3 Drawings shall be bound.

3.2.5.3.4 Drawings submitted for the proposal may be done with any CAD software available to the Offeror. However, the drawings for 60% and Final design submittals be done and submitted in the latest version of Microstation format only. Conversions from AutoCAD are discouraged because of file incompatibility and the added work necessary for the conversion.

3.2.5.4 Electronic Submission. In addition to the hard copies required above, all Offerors that advance to Phase 2 shall submit on a CD-ROM their complete submittal. This includes the Phase One Submission and the Phase Two Submission (Volumes I and II) including all drawings. Written portions of the proposal should be in MS Word, Adobe Acrobat PDF, or WordPerfect format. The electronic version shall be either a single file tabbed in the same order as the hard copy or multiple files hyperlinked to a single table of contents. Drawings should be in one of the following formats: Microstation DGN, Adobe Acrobat PDF, Max View CAL (with Sendable INDEX.SVD), or Auto Cad DWG. Any portion of the proposal not available in electronic format, i.e. cut sheets, should be scanned in Adobe Acrobat PDF format. The CD ROM must be clearly labeled by solicitation number, project name, installation, and Offeror's name.

3.3 PHASE 2 PROPOSAL, VOLUME I – Contract Requirements & Price Proposal

3.3.1 Submit original and one (1) copy of VOLUME I - Contract Requirements & Price Proposal. This information shall be submitted in separate three-ring binders labeled "Contract Requirements & Price Proposal."

3.3.2 Volume I – CONTRACT REQUIREMENTS & PRICE PROPOSAL shall be organized as follows:

VOLUME I - Contract Requirements & Price Proposal

TAB A – Standard Form 1442, completed and signed by an authorized person from the company or team.

TAB B – Proposal Schedule “Supplies or Services Price/Cost”

TAB C – Bid Bond

TAB D – Section 00600 – Representations and Certifications .

TAB E – Financial Information (e.g. latest financial statement, annual reports, Dun & Bradstreet Ratings, and or number, etc.)

TAB F – Statement of Compliance (See paragraph 1.4)

3.4 PHASE 2 PROPOSAL, VOLUME II – Technical information.

3.4.1 Number of copies. Offerors shall submit six (6) copies of VOLUME II of their Phase 2 Proposal and six (6) half-size copies of all drawings and one (1) full-size copy of all drawings.

3.4.2 This information shall be submitted in separate three-ring binders labeled "Technical Information." This category consists of design documents, drawings, sketches, outline specifications, design analysis, catalog cuts, and other information.

3.4.3 VOLUME II – TECHNICAL INFORMATION shall be organized as follows:

VOLUME II – TECHNICAL INFORMATION

TAB A – BETTERMENTS

TAB B – FACTOR 2-1: SCHEDULE

TAB C – FACTOR 2-2: BUILDING SYSTEMS

TAB D – FACTOR 2-3: BUILDING FUNCTION AND AESTHETICS

TAB E – FACTOR 2-4: SITE DESIGN

TAB F – FACTOR 2-5: SUSTAINABLE DESIGN CONSIDERATIONS

TAB G – FACTOR 2-6: MANAGEMENT PLAN

TAB H – Any other information provided by the Offeror

DRAWINGS (Minimum drawings required are outlined in each section)

3.4.4 The technical data described in Paragraphs 4 through 9 below shall be submitted as part of the formal proposal. All alternate designs shall be graphically described on separate drawings from the basic proposal. Offerors are advised that the required data listed below be utilized for technical review and evaluation and used for determination of a "Quality Rating" by a Technical Evaluation Team. Materials indicated in the design/construction criteria, but not indicated in the Offeror's specifications, be assumed to be included and a part of the proposal.

3.4.5 Incomplete proposals. Failure to submit all the data indicated in this section may be cause for determining a proposal incomplete and, therefore, not considered for technical evaluation in Phase 2, or for subsequent award.

4. TAB A – BETTERMENTS

4. 1 Definition of Betterments. A “Betterment” is defined as any component or system, which meets and exceeds the minimum requirements, stated in the Request for Proposal. This includes all proposed betterments listed in accordance with the “Proposal Submission Requirements” of this TAB, and all Government identified betterments.

4.2 During discussions, the Government may request that betterments be removed from the Offeror’s proposal in order to reduce costs.

4.3 The minimum requirements of the contract are identified in the Request for Proposal. All betterments offered in the proposal become a requirement of the awarded contract.

4.4 Submission of Betterments. The Offeror shall identify "Betterments" in the following manner:

64 Short descriptive title of the betterment and how it exceeds RFP requirements.

65 Narrative of the proposed betterment and rationale as to why it has been included.

66 Reference in the Offeror's proposal where the betterment is shown or specified.

67 Estimated value of the betterment.

5. TAB B – FACTOR 2-1 Schedule.

9.2.1 Provide integrated Design and Construction Schedules for each bid schedule with all areas clearly identified. The schedules shall clearly show all phasing requirements and the total duration required to complete all construction, to include punchlist items. They shall identify time allowed for the user to accomplish moves into and out of all areas. The total period proposed for design and construction by the successful offeror for the applicable bid schedule shall become the contract performance period. The schedule for design and construction shall be task oriented, indicating dates by which milestones are to be achieved. The offeror may use a critical path or other method of his/her choice; however, the schedules shall be graphically represented.

9.2.2 The offeror shall also submit a narrative explaining how the schedules be achieved. The narrative shall discuss all means the contractor proposes to employ to minimize the impacts to the buildings occupants. It shall identify all outages of utilities or building systems to include length of the outages that would impact the occupants.

6 TAB C – FACTOR 2-2: BUILDING SYSTEMS

6.1. STRUCTURAL SUBMITTAL REQUIREMENTS. The structural portion of the proposal must outline the proposed methods and materials of design and construction. The submittal shall include the following:

6.1.1 Structural Narrative. Provide a general description of the scope of the project and all of the major structures. Give overall building dimensions and a description of the principal features such as wall and roof construction proposed.

6.1.1.1 Provide a list of special design features including features to be used in compliance with the AT/FP requirements.

6.1.2 Fire Resistance Statement. State the required fire resistance criteria for all portions of the structural system and the proposed method of meeting these requirements.

6.1.3 Outline Specifications. The Offeror shall provide a list of titles of specifications he proposes to use in the design, if sections are not provided in this RFP.

6.2 MECHANICAL SUBMITTAL REQUIREMENTS.

6.2.1 Heating, Ventilating, and Air Conditioning Narrative. Narrative of design analysis contain the following:

6.2.1.1 Design conditions used in calculations - inside and outside temperatures, personnel load, outside air or ventilation requirements, U-factors, and other special conditions.

6.2.1.2 Block loads for heating and cooling shall be calculated using ASHRAE-based methods. Where passive solar applications prove feasible and cost effective, the Offeror shall employ a load calculation method that can incorporate all applicable passive solar factors. All load calculation software must be traditionally used by the industry.

6.2.1.3 A description of all HVAC systems to be considered in a life cycle cost analysis (LCCA). A LCCA, using the program LCCID, of each of the HVAC systems described shall be submitted by the successful contractor – after contract award, verifying that the system selected for the building is the most efficient and is within the energy budget. For additional requirements, see Section 01020.

6.2.1.4. A description of piping systems including type of pipe, insulation requirements, and whether concealed or exposed, including catalog cuts.

6.2.1.5 Energy Budget Certification. Provide a certification that the final design comply with Energy Budget requirements of specification Section 01020.

6.2.1.6 Controls System Narrative. A description of the proposed Direct Digital Controls System to be used.

6.2.1.7 Catalog Cuts. Brief description of various items of equipment, including catalog cuts. Manufacturers, level of quality, warranties, etc. are more important to the evaluators than selections of specific sizes or capacities.

6.2.1.8 Specifications. List of specifications to be used.

6.2.2 Plumbing Narrative. Plumbing analysis to determine number of fixture units, cold and hot water capacity requirements, and equipment or capacities of miscellaneous and special systems.

6.2.2.1 Fixture determination listing quantity and type of fixtures for both men's and women's toilets, and other fixtures such as drinking water fountains, service sinks, etc.

6.2.2.2 Description of domestic water heating and storage equipment, including capacity, type (gas, electric, boiler, water), materials, and insulation.

6.2.2.3 Piping types and location (concealed or exposed), together with material proposed and insulation requirements.

6.2.2.4. Brief description of miscellaneous systems such as compressed air (capacity, pressure, piping, location of air outlets, etc.), roof drainage, natural gas (pressure, quantity, and equipment to be served), and other special systems.

6.2.2.5 Catalog Cuts. Brief description of various items of equipment, including catalog cuts. Manufacturers, level of quality, warranties, etc. are more important to the evaluators than selections of specific sizes or capacities.

6.2.2.6 Specifications. The Offeror shall provide a list of titles of specifications he proposes to use in the design, if section not provided in this RFP.

6.2.3 Mechanical Drawings. Provide plan view showing the following:

6.2.3.1 Heating, Ventilating, and Air Conditioning Drawings. Heating, ventilating, and air conditioning equipment layout - chillers or refrigeration compressors, boilers, pumps, condensers or cooling tower, air handling units, fans, hoods, and other items of major equipment required for the facility.

6.2.3.2 Plumbing Drawings. Plumbing fixture layout, floor and area drains, and plumbing equipment layout (hot water generator, storage tank, air compressors, etc.).

6.2.3.3 Mechanical Room(s) Drawings. Provide a 1/4 inch = 1 foot scale (1:50) plan showing equipment layout of major components in mechanical rooms. The Engineer/ Architect of record be required to certify that adequate space has been provided for safe operation of equipment and maintenance capability. Mechanical equipment layouts shall comply with Section 01020.

6.3 ELECTRICAL DESIGN SUBMITTAL REQUIREMENTS.

6.3.1 Interior Electrical System Design Narrative. Provide an overview of the interior electrical design describing the major features of the power, lighting, communication and security systems.

6.3.2 Interior Lighting System. Provide an Interior Concept Lighting Schedule tabulating room names, fixture types, lighting intensities, and basis of design (e.g., IES criteria, RFP requirement). The schedule shall include but not be limited to the following typical areas:

6.3.3 Interior Electrical Distribution. For typical areas within the various buildings, describe the type of power and communication wiring systems proposed (e.g., cable tray, rigid metallic conduit, rigid nonmetallic conduit, electrical metallic tubing, nonmetallic-sheathed cable).

6.3.4 Interior Lighting Fixture Catalog Cuts. Provide a single catalog cut sheet for each fixture type. This cut sheet shall be correlated to the Concept Lighting Schedule and shall establish the aesthetic, physical, functional and photometric characteristics of the fixture and shall establish a level of quality.

6.3.5 Interior Electrical Equipment Catalog Cuts. Provide catalog cuts of electrical devices and equipment.

6.3.6 Interior Electrical Drawings. Provide lighting, power and signal plans for the proposed Barracks Typical Module Plan. The plans shall indicate locations of devices and fixtures only; no wiring shall be shown. Fixtures shall be marked to correlate to the Interior Concept Lighting Schedule.

6.3.7 Exterior Electrical Distribution System Design Narrative. Provide an overview of the exterior electrical design describing the major features of the power, lighting and communication systems.

6.3.8 Exterior Lighting System. Provide an Exterior Concept Lighting Schedule tabulating areas (e.g., roadway, walkway, parking, security), fixture types, pole heights, lighting intensities, and basis of design (e.g., IES criteria, RFP requirement).

6.3.9 Exterior Lighting Fixture Catalog Cuts. Provide a single catalog cut sheet for each fixture type and pole. This cut sheet shall be correlated to the Exterior Concept Lighting Schedule and shall establish the aesthetic, physical, functional and photometric characteristics of the fixture and shall establish a level of quality.

6.3.10 Exterior Electrical Equipment Catalog Cuts. Provide catalog cuts of electrical distribution equipment.

6.3.11 Exterior Electrical Drawings. Provide a separate electrical site plan indicating all existing to be removed, existing to remain, and new utility lines and equipment required to serve the project. Utility lines shown shall include electrical power lines, telephone and other communication lines. The plan shall also show all buildings, trees, roads and driveways, parking areas, and any other items necessary for functional and operating adequacy. Indicate the connection points and the approximate routing of lines through the site. Indicate the locations of transformers, switches and cable termination cabinets. Also indicate on the drawings the lighting fixture type proposed within each area (no layout is required).

6.3.12 Specifications. Provide a list of specifications proposed for use in the design but not included in the RFP.

6.3.13 Energy Conservation Design Narrative. Energy conservation measures shall be indicated. The narrative shall describe measures and techniques that are proposed in the electrical design that conserve energy.

6.4 FIRE PROTECTION DESIGN SUBMITTAL REQUIREMENTS.

6.4.1. Fire Protection Narrative. A narrative be provided addressing the following items for each building type in this project:

6.4.1.1 Automatic fire extinguishing systems and hose standpipe systems: Identification of all areas provided with sprinkler protection and the type of sprinkler system provided, sprinkler hazard classification for these areas, areas protected by other automatic suppression systems and the type system provided, and buildings provided with hose standpipe systems and the type of standpipe system provided and indication if a fire pump is required and where the pump be located.

6.4.1.2 The type of alarm and detection system, location of the fire alarm and detection equipment including fire alarm control panel, and catalog data sheets of major components

6.4.2 Life Safety Certification. Provide certification by the fire protection engineer that the building design shall comply with the life safety/fire protection provisions of the applicable criteria indicated in Section 01020.

6.4.3 Credentials of Fire Protection Engineer. Provide the credentials of the fire protection engineer in the proposal submittal. The design of the fire protection features shall be by a qualified fire protection engineer meeting one of the following conditions: a.) An engineer with a Bachelor of Science or Masters of Science Degree in fire protection engineering from an accredited university engineering program, plus a minimum of 5 years' work experience in fire protection engineering. b.) A registered professional engineer who has passed the National Council of Examiners for Engineering and Surveys (NCEE) fire protection engineering written examination. c.) A registered P.E. in a related engineering discipline with a minimum of 5 years' experience dedicated to fire protection engineering.

6.4.4 Specifications. Provide a list of all UFGS guide specifications to be used.

7. TAB D – FACTOR 2-3 : BUILDING FUNCTION AND AESTHETICS

7.1 Architectural Narrative. State the proposed image or design theme of this proposal. Describe interior design theme. Describe any special features or finishes that contribute to the proposed design theme. Describe construction of typical interior partitions. List all architectural deviations included in the proposal.

7.2 Certifications.

7.2.1 "U" Value Certification. Provide signed and dated certification that the final design shall meet "U" values required in the RFP for each exterior wall assembly and roof assemblies.

7.2.2 Mechanical Room Certification. Provide signed and dated certification that the mechanical room is of sufficient size to accommodate and serve all mechanical equipment shown and specified by the mechanical design.

7.3 List of Specifications. Provide a list of titles of specifications proposed to use in the design. It is not necessary to include sections required in this RFP.

7.4 Architectural Drawings. Drawings shall be provided in sufficient detail for reviewers to visualize how the designer has interpreted the RFP functional and operational requirements in his proposal. Drawings shall include, but not be limited to, the following:

7.4.1 Floor Plan(s). Floor plans for each floor shall be drawn accurately to scale and shall be shown at 1/8 " = 1'-0" minimum scale unless otherwise noted. Show gross floor area tabulations on lower portion of plate. Label all spaces. Indicate net area of all spaces. Show all doors, windows, plumbing fixtures, toilet partitions and built-in casework. Show required workstations as dashed-line blocks to demonstrate that the spaces accommodate the required workstations. Show overall building dimensions. If the floor plan(s) must be drawn in segments in order to comply with the requirements on the proper scale, provide a separate 1/16"=1'-0" or smaller scale composite floor plan showing exterior walls, interior partitions, circulation elements and cross referencing for enlarged floor plans.

7.4.2 Building Elevations. Exterior elevations shall be drawn to 1/8"=1'-0" scale for all four major building elevations. If elevations must be drawn in segments in order to comply with the requirements on proper scale, provide separate 1/16"=1'-0" or smaller composite elevations as required to fit on one sheet. Elevations shall show all windows, doors, canopies, and platforms. All building exterior materials and roof pitches shall be noted clearly.

7.4.3 Typical Wall Section. Provide one exterior wall section indicating the predominant exterior wall and wall/roof intersection condition. Show overall wall thickness and eave height. Note all materials. Wall section shall be unbroken where practical and drawn at ¾"= 1'-0" scale.

7.4.4 Room Finish Schedule. Provide a room finish schedule indicating the following for all spaces: floor, wall base, wainscot, wall and ceiling finishes; wainscot height, wall base height and ceiling height.

8. TAB E – FACTOR 2-4. .SITE DEVELOPMENT SUBMITTAL REQUIREMENTS. The site development portion of the proposal must outline the proposed site demolition, layout, grading, storm drainage, and erosion control practices of design and construction. A topographic survey be provided at Phase II to the Offerors in English units. The proposal shall include the following:

8.1 General Site Development Narrative. State the purpose, functional layout of all major structures in relation to parking and access drives, the extent of grading and drainage system, as well as erosion control measures in sufficient detail to delineate and characterize functional features and the desired image or visual appearance of this project. The narrative shall reflect setbacks requirements as indicated in Section 01020, as well as the visual characteristics of the surrounding topography. Include a statement addressing Force Protection Compliance, as well as a statement addressing Storm Water Management such that post development runoff does not exceed pre development runoff flows. Also include a statement of any requirements for traffic control signals and signage plans. Provide a brief statement of the exterior construction materials to be used in the project.

8.2 Erosion Control Narrative. Provide a narrative of the erosion control measures to be used in this project.

8.3 Landscape Narrative. The landscape design narrative shall include an analysis of existing site conditions, including an indication of existing trees and plant materials that are to be saved and remain on the project site. The narrative shall indicate specific site problems related to proposed development and the rationale for proposed plant selection and locations. The narrative shall also include a list of suggested types and sizes of plant materials to be used (use native plants as much as possible). It shall also discuss type of irrigation to be provided, type, quantity and location of site furniture, per Fort Bragg Installation Design Guide's (IDG). The narrative shall discuss what materials are being included in the project that comes from recycled materials and renewable resources. It shall also indicate coordination with AT/FP requirements.

8.4 Site Utilities Narrative. Design Narrative shall include Description of the utility systems chosen.

8.5 Design Calculations. Submit calculations for the following:

8.5.1 Storm drainage pipe design calculations shall not be required for the proposal submittal. Storm drainage pipe design calculations for the final design submittal shall show that the pipes are adequately sized using the Rational Method in accordance with technical instructions.

8.5.2 Storm water detention pond calculation shall show that the pond is adequately sized such that post development runoff does not exceed pre-development runoff in accordance with Fort Bragg Installation Design Guide requirements. Storm water detention can be designed as an underground system.

8.6 Outline Specifications. Provide a list of titles of specifications proposed for use in the design, if the section is not provided in this RFP.

8.7 Site Development Drawings. Drawings shall be shown at 1 in = 30ft scale (or 1:400 in metric units). All drawings shall have a Legend, North Arrow, and graphic bar scales. Drawings shall be provided in sufficient detail and annotated so that Government may visualize how the designer has interpreted the user's functional and operational requirements in his proposal for final design. Drawings shall include, the following:

8.7.1 Demolition Plan and Tree Removal Plan. The demolition plan shall also show the limits of tree removal.

8.7.2 Layout Plan. This plan should show the building layout in relation to parking areas, access drives, and pedestrian walkways. This plan should show overall dimensions of parking lots, minimum building setbacks (in compliance with Force Protection), minimum setback from Streets or Roads, utility pad locations (this includes dumpster, electrical and mechanical equipment pads). The Layout Plan also show location of sidewalks, access drives, retaining walls, fencing, site steps, service vehicle drives, pedestrian bridges, sports fields, handicap parking spaces, and curb and gutter. The use of patterning shall be required to distinguish between concrete pavement and bituminous asphalt pavement. The submitted layout plan shall also show dimensions of major items such as building, parking lot rather than coordinates of corner points.

8.7.3 Grading and Drainage Plan. This Plan should show contour elevations at 1-foot (250mm) minimum interval and critical spot elevations, as well as finish floor elevations. This plan should also show the locations of storm inlets, curb inlets, manholes, storm drainage pipes, culverts, headwalls, storm water control structure, detention pond area, and drainage ditches. Drainage ditches shall be kept to a minimum due to the highly erodable soil. Curb cuts for drainage of parking lots and access drives are prohibited.

8.7.4 Landscape Design Plan. This plan shall include existing trees and under story to be saved, new trees to be planted, screens, buffers, lawns, and mulched area for the project. Both large shade trees and small under story and ornamental trees shall be shown. Plant labels shall be provided for the plans. Also to be provided is a drawing at a larger scale of the building entrance of the project site to indicate the Landscape Architect's ideas or intent for a more detailed planting plan as used in foundation plantings including plant labels.

8.7.5 Site Utility Plan. Indicate locations of outside utilities where required to support the project. Show same scale as other site work drawings. The plan shall include a general utility layout with connection points, valve fittings and requirements for pneumatic ejector, sewage pumps and sump pumps and the relative placement of water and sanitary sewer systems. The layout plans should take into account the ease of maintenance and utility corridors.

9. TAB F – FACTOR 2-5 SUSTAINABLE DESIGN SUBMITTAL REQUIREMENTS.

9.1 SPIRIT Summary Table. Submit Appendix H of Section 01010 DESIGN REQUIREMENTS, “SPIRIT Requirements and Summary Table” with the “Proposal Points” column filled in to reflect the points contained in your proposal, including the total. A “SPIRIT Requirements and Summary Table” shall be provided for each individual occupied building type in project. The requirement is to achieve a minimum of 35 points with a goal of achieving at least 50 points in each summary table using the SPIRIT Project Rating Tool for Sustainable Design. NOTE: The points indicated on this summary be considered contract requirements upon award. Do not modify any of the spaces in this column that were filled in on the solicitation.

9.2 Sustainable Design Narrative. Organize the narrative in the same order as SPIRIT summary table with one paragraph devoted to each proposed item on the chart. Briefly describe the activities and/or features proposed to earn each point indicated on your proposal. For mandatory points and requirements the narrative may be limited to repeating the statement found in the “Remarks” column of the SPIRIT summary table.

10. TAB G – FACTOR 2-6 PROJECT MANAGEMENT PLAN. The offeror shall provide a Management Plan. This is an overall plan showing how the offeror control the job. The term "management plan" is defined as a plan that includes the following subplans:

10.1 SUBFACTOR 2-6(a) Project Key Personnel.

10.1.1 Provide the number and types of personnel proposed, the names, resumes, and levels of responsibility of the principal managers and technical personnel who be directly responsible for the day-to-day design and construction activities. Include, as a minimum the following:

68 Project Manager

69 Project Architect(s)

70 Construction Manager(s)

71 Construction Quality Control Manager(s)

72 Design Quality control Manager(s)

10.1.2 Indicate whether each individual has had a significant part in any of the project examples cited. If reassignment of personnel is considered possible, provide the names and resumes of the alternative professionals in each assignment.

10.1.3 Provide a narrative and/or diagram that outlines the relationships and interaction between each of the key personnel above.

10.1.4 Project key personnel shall include the key construction subcontractors and the extent of their role with respect to the design phases of this project. For each subcontractor, the prime contractor's experience working with that sub should be indicated and the subs past experience in work similar in nature to the project being evaluated should be submitted. Key subcontractors shall include, but are not limited to:

72.2219 Masonry subcontractor(s)

72.2220 Mechanical subcontractor(s)

72.2221 Site Development subcontractor(s).

10.2 SUBFACTOR 2-6(b) Small and Small Disadvantaged Business Utilization.

10.2.1 ALL OFFERORS are required to provide a narrative discussion of their plan for utilization of small and small disadvantaged businesses. At a minimum, the narrative shall discuss:

73 Goals for subcontracting with small and small disadvantaged businesses in sufficient detail to allow Government evaluators to determine that these goals are realistic, justifiable, positive, and in accordance with the Government's policy to maximize opportunities for these types of businesses.

74 The extent to which small disadvantaged businesses, and where appropriate, historically black colleges and universities/minority institutions (HBCU/MI) have been identified for participation as part of the Offeror's team.

75 The Offeror's past and present commitment to providing subcontracting opportunities and encouragement to small and small disadvantaged businesses.

10.2.2 For Offerors information the following are the U.S. Army Corps of Engineers Subcontracting Targets for FY03:

See FAR Clause 52.219-4001

PROPOSAL DATA SHEET – PHASE 1

NOTE TO OFFERORS
This OFFEROR PERFORMANCE CAPABILITY PROPOSAL DATA SHEET must be completed and attached as the first page of the body of your proposal. The information required by this data sheet may be completed directly on this form or attached to the form as supplemental data sheets.

1. NAME OF OFFEROR.

Name of Offeror(s):

If a joint venture or contractor-subcontractor association of firms, list the individual firms and briefly describe the nature of the association.

Firm 1:

Firm 2:

Nature of Association:

2. DUNS NUMBER, EMAIL ADDRESS, FAX NUMBER,& CAGE CODE FOR OFFEROR
(If more than one DUNS number is to be considered explain affiliation to offeror)

3. ACASS identification number for design firm

4. AUTHORIZED NEGOTIATORS. FAR 52.215-11

The offeror represents that the following persons are authorized to negotiate on its behalf with the Government in connection with this Request for Proposals (RFP).

[List names, titles, and telephone number of the authorized negotiator.]

Name of Person Authorized to Negotiate:

Negotiator's Address:

Negotiator's Telephone:

5. PAST PERFORMANCE PROJECTS.

5.1 Provide information for three completed or substantially completed projects, that are being or have been constructed by the Offeror to be used for reference and evaluation purposes. These should be the same projects for which Past Performance Questionnaires have been provided to the Procurement Point of Contact.

5.2 If the offeror is made up of separate design and construction companies that have combined for this project, then this item must be completed twice (once for each company), for a total of six projects.

5.3 For each project provide the information shown. Failure to provide this minimum information may result in lower ratings.

6. LIQUIDATED DAMAGES. On an attached sheet, list any projects within the last three years that have been assessed liquidated damages. Provide an explanation.

7. TERMINATED PROJECTS. On an attached sheet, list any projects within the last five years that have been terminated. Provide an explanation.

8. GOVERNMENT PROJECTS. On an attached sheet, list all contracts with the Government within the last three years. Indicate Government contract number and contracting agency (with contact names and telephone numbers).

9. CADD CAPABILITIES. On an attached sheet, describe your office capabilities for using CADD (Computer Aided Design and Drafting) and other forms of automation on this project. This information shall be limited to two 8 ½ by 11 sheets of paper, double spaced, 12 pitch font.

SAMPLE

FACTOR 1-1 PAST PERFORMANCE INFORMATION
(Offerors should submit for at least three projects)

Project Title:

Location:

Contract number:

Procuring activity (e.g. Air Force, USACE, City, Name of Private Entity, etc.):

Procurement point of contact and telephone number:

List date of construction completion or percent completion if construction is underway:

Address of building(s):

Address and telephone number of owner:

Indicate type of project (private sector, Government, planned unit development, etc.):

General character:

Total cost:

Total cost of all modifications:

SAMPLE

FACTOR 1-2 CORPORATE RELEVANT SPECIALIZED EXPERIENCE.

Project Title:

Location:

Contract number:

Nature of involvement in this project, i.e. General Contractor, subcontractor, designer:

Procuring activity:

Procurement point of contact and telephone number:

List date of construction completion or percent completion if construction is underway:

Address of building(s):

Address and telephone number of owner:

Indicate type of project (private sector, Government, planned unit development, etc.):

General character:

Total cost:

SAMPLE

FACTOR 1-4 SUSTAINABLE DESIGN EXPERIENCE.

On an attached sheet, provide information for in-progress or completed projects that include sustainable design features, that have been done by the offeror to be used for reference and evaluation purposes. For each project provide the following information:

Project Title:

Location:

Contract number:

Nature of involvement in this project, i.e. General Contractor, subcontractor, designer:

Procuring activity:

Procurement point of contact and telephone number:

List date of construction completion or percent completion if construction is underway:

Address of building(s):

Address and telephone number of owner:

Indicate type of project (private sector, Government, planned unit development, etc.):

General character:

Total cost:

Sustainable design features in project - for each provide the following:

52 Brief description of SDD feature.

53 Quantified SDD accomplishment or goals

54 Nature of involvement in this SDD feature, i.e. General Contractor, subcontractor, designer:

SAMPLE TRANSMITTAL LETTER
AND
PAST PERFORMANCE EVALUATION QUESTIONNAIRE

Date: _____

To: _____
_____
_____

We have listed your firm as a reference for work we have performed for you as listed below. Our firm has submitted a proposal under a project advertised by the U.S. Army Corps of Engineers, Savannah District: **SOF Renovate Bryant Hall, Fort Bragg, North Carolina** . In accordance with Federal Acquisition Regulations (FAR), an evaluation of our firm's past performance be completed by the Corps of Engineers. Your candid response to the attached questionnaire assist the evaluation team in this process.

We understand that you have a busy schedule and your participation in this evaluation is greatly appreciated. Please complete the enclosed questionnaire as thoroughly as possible. Space is provided for comments. Understand that while the responses to this questionnaire may be released to the offeror, FAR 15.306 (e)(4) prohibits the release of the names of the persons providing the responses. Complete confidentiality be maintained. Furthermore, a questionnaire has also been sent to _____ of your organization. Only one response from each office is required. If at all possible, we suggest that you individually answer this questionnaire and then coordinate your responses with that of _____, to forge a consensus on one overall response from your organization.

Please send your completed questionnaire to the following address to arrive NOT LATER THAN *(edit with the date and time set for receipt of Phase I proposals)* to:

U.S. Army Engineer District, Savannah
Contracting Division (CESAS-CT-C)
ATTN: Nora Louise Jarrell, DACA21-03-R-0009
100 W. Oglethorpe Ave.
Savannah, GA 31402

The questionnaires can also be emailed (*THIS IS PREFERRED METHOD*) to; nora.l.jarrell@sas02.usace.army.mil or faxed to; 912-652-5828, ATTN: Nora Louise Jarrell. If you have questions regarding the attached questionnaire, or require assistance, please contact Elliott Williamson at 912-652-5705. Thank you for your assistance.

PAST PERFORMANCE EVALUATION QUESTIONNAIRE

DACA21-03-R-0009

Upon completion of this form, please send directly (EMAIL PREFERRED) to the U.S. Army Corps of Engineers in the enclosed addressed envelope or fax to 912-652-5828, ATTN: Nora Louise Jarrell or e-mail to nora.l.jarrell@sas02.usace.army.mil . Do not return this form to our offices. Thank you.

1. Contractor/Name & Address (City and State):

2. Type of Contract: Fixed Price _____ Cost Reimbursement _____
Other (Specify) _____

3. Title of Project/Contract Number:
_____
_____
_____

4. Description of Work: (Attach additional pages as necessary)

5. Complexity of Work: High _____ Mid _____ Routine _____

6. Location of Work:_____

7. Date of Award: _____

8. Status: Active _____ (provide percent complete)

Complete _____ (provide completion date)

9. Name, address and telephone number of person completing this questionnaire:

10. QUALITY OF CONSTRUCTION:

Evaluate the contractor's performance in complying with contract requirements, quality achieved and overall technical expertise demonstrated.

Outstanding Quality	
Above Average Quality	
Satisfactory Quality	
Marginal Quality	
Unsatisfactory or Experienced Significant Quality Problems	

Remarks: _____

_____

_____

_____

11. TIMELINESS OF PERFORMANCE:

To what extent did the contractor meet the contract and/or individual task order schedules if the contract was an indefinite delivery type contract?

Completed Substantially Ahead of Schedule (Outstanding)	
Completed Ahead of Schedule (Above Average)	
Completed on Schedule with Minor Delays Under Extenuating Circumstances (Satisfactory)	
Completed Behind Schedule (Marginal)	
Experienced Significant Delays without Justification (Unstaisfactory)	

Remarks: _____

_____

_____

12. DOCUMENTATION:

Did the contractor submit required documentation, reports, and other written materials in a timely fashion? Were you satisfied with the quality of the data submitted?

	Timely?	**Quality?**
Exceptionally Satisfied (Outstanding)		
Highly Satisfied (Above Average)		
Satisfied (Satisfactory)		
Somewhat Dissatisfied (Marginal)		
Highly Dissatisfied (Unsatisfactory)		

Remarks:

_____

_____

_____

13. CUSTOMER SATISFACTION:

To what extent were the end users satisfied with:

	Quality?	**Cost?**	**Schedule?**
Exceptionally Satisfied (Outstanding)			
Highly Satisfied (Above Average)			
Satisfied (Satisfactory)			
Somewhat Dissatisfied (Marginal)			
Highly Dissatisfied (Unsatisfactory)			

Remarks:

_____

_____

_____

14. SUBCONTRACTOR MANAGEMENT:

To what extent were you satisfied with the contractor's management of their subcontractors:

	Quality?	Cost?	Schedule?
Exceptionally Satisfied (Outstanding)			
Highly Satisfied (Above Average)			
Satisfied (Satisfactory)			
Somewhat Dissatisfied (Marginal)			
Highly Dissatisfied (Unsatisfactory)			

Remarks:

_____

_____

_____

15. If given the opportunity, would you work with this contractor again?

Yes _____ No _____ Not Sure _____

Remarks:

_____

_____

_____

_____

_____

14. OTHER REMARKS:

Use the space below to provide other information related to the contractor's performance. This may include the contractor's flexibility in dealing with contract challenges, their overall concern for the Government's interest (if applicable), project awards received, etc.

_____

_____

_____

_____

_____

_____

_____

_____

Section 00120 – PART 1
PHASE 1 EVALUATION MANUAL

1. GENERAL

The purpose of this document is to establish a uniform evaluation procedure for Phase 1 of the solicitation based on contractually defined criteria. The Evaluation Team will evaluate each proposal individually using the qualitative/quantitative procedures which follow. Each proposal will be reviewed and rated by each of the evaluators. During this process, discrepancies between evaluations will be discussed and resolved within the team. Following the completion of the individual evaluations, a consensus evaluation will be derived. The results of this consensus evaluation will be documented and presented to the Contracting Officer/Source Selection Authority for determination of which proposals proceed into Phase 2 of the solicitation process.

2. PROPOSAL REQUIREMENTS

2.1 Section 00110, Proposal Submission Requirements and Instructions identifies all the necessary submittal information to be included in the proposals. Proposals which reach the evaluation stage have passed an initial Contracting Division review to assure that they are complete and responsive. All proposals which are provided to the evaluation team will be evaluated and rated.

2.2 Past Performance Questionnaires. Each Offeror has been requested to have at least three questionnaires from previous projects completed and forwarded directly to the Savannah District for use by the evaluation team in past performance evaluation and risk analysis. The Government may contact the points of contact indicated on these questionnaires for additional information and to assure validity of the information received. The Government may contact sources other than those provided by the Offeror for information with respect to past performance. These other sources may include ACASS (Architect-Engineer Contract Administration Support System), CCASS (Construction Contractor Appraisal Support System), telephone interviews, and Government personnel with personal knowledge of the Offeror's performance capability. If more than three questionnaires are returned, the evaluation team will evaluate all questionnaires. If less than three questionnaires are returned, the proposal will receive a rating commensurate with the contractor's performance risk as determined by the evaluation team.

3. INDIVIDUAL PROPOSAL RATING WORKSHEETS

3.1 Worksheets are provided on the following pages that the evaluators will use to review and rate the individual proposals.

3.2 Comments are required to support all ratings.

4. RATING METHODOLOGY

4.1 Proposals will be evaluated in each Evaluation Factor based on the following rating scheme:

RATING	EXPLANATION
Outstanding/Very Low Performance Risk	Based on the Offeror's Phase One Submittal, no doubt exists that the Offeror will successfully perform the required effort.
Above Average/Low Performance Risk	Based on the Offeror's Phase One Submittal, little doubt exists that the Offeror will successfully perform the required effort.
Satisfactory/Moderate Performance Risk	Based on the Offeror's Phase One Submittal, some doubt exists that the Offeror will successfully perform the required effort. Normal contractor emphasis should preclude any problems.
Marginal/High Performance Risk	Based on the Offeror's Phase One Submittal, substantial doubt exists that the Offeror will successfully perform the required effort.
Unsatisfactory/Unacceptable Performance Risk	Based on the Offeror's Phase One Submittal, extreme doubt exists that the Offeror will successfully perform the required effort.

4.2 Yes - No Ratings. Where the specific evaluation sheets indicate a YES – NO Rating these items will be treated as information items. They are included in the evaluation worksheets to assure a similar focus among the evaluators and to ensure that individual evaluators do not overlook proposal information provided.

4.3 Weighting of Factors. Relative Importance Definitions: For the purpose of this evaluation, the following terms will be used to establish the relative importance of the factors and subfactors:

52 Significantly More Important: The criterion is at least two times greater in value than another criterion.

53 More Important: The criterion is greater in value than another criterion but less than two times greater.

54 Equal: The criterion is of the same value or nearly the same as another criterion.

5. EVALUATION FACTORS.

5.1 Factor Relative Weights. The following factors will be evaluated and rated for each proposal:

FACTOR 1-1: OFFEROR PAST PERFORMANCE: This factor is significantly more important than Factors 1-2,1-3, and 1-4.

FACTOR 1-2: RELEVANT SPECIALIZED EXPERIENCE: This factor is more important htan Factors 1-3 and 1-4.

FACTOR 1-3: TECHNICAL APPROACH NARRATIVE: This factor is equal in importance to Factor 1-4.

FACTOR 1-4: OFFEROR SUSTAINABLE DESIGN EXPERIENCE: This factor is equal in importance to Factors 1-3.

5.2 FACTOR 1-1: OFFEROR PAST PERFORMANCE. The Government will evaluate the Offeror's past performance using the sources available to it including, the example projects identified by the Offeror, Past Performance Evaluation Questionnaires received, ACASS, and CCASS. Offerors may be provided an opportunity to address any negative past performance information about which the Offeror has not previously had an opportunity to respond. The Government treats an Offeror's lack of past performance as having no positive or negative evaluation significance. The experience of individuals will not be credited under this factor but will be evaluated under "key personnel." The Government will evaluate past performance based on the elements listed below:

5.2.1 Quality of Construction. Based on information provided in the questionnaire and other information, the Government will assess the quality of the actual construction undertaken and the standards of workmanship exhibited by the Offeror’s team.

5.2.2 Timeliness of Performance. The Government will evaluate all information available with respect to the Offeror completing past projects within the scheduled completion times.

5.2.3 Documentation. The Government will evaluate all information available with respect to the Offeror’s level of meeting customer satisfaction on timeliness and quality of the documentation, reports, and other written materials completed by the Offeror on past projects.

5.2.4 Customer Satisfaction. The Government will evaluate all information available with respect to the Offeror’s past customer satisfaction, cooperation with customers, and interaction on past projects.

5.2.5 Subcontractor Management. The Government will evaluate all information available with respect to the Offeror’s management of subcontractors on past projects.

5.3 FACTOR 1-2: RELEVANT SPECIALIZED EXPERIENCE. The Government will review the example projects provided by the Offeror to evaluate and rate the recent experience of the Offeror in similar projects. The example projects which most closely resemble the project identified in this solicitation will receive the highest consideration. If the Offeror cannot provide suitable relevant experience and the evaluators consider that the information provided indicates that the Offeror has no relevant experience, a determination will be made as to the risk this lack of corporate experience presents to the Government and the proposal will be evaluated accordingly. Experience will be evaluated using the elements listed below. The experience of individuals will not be credited under this factor but will be evaluated under "key personnel” in Phase 2.

5.3.1 Similar construction projects completed: The Government will evaluate the number and size of contracts completed, or substantially complete, by the Offeror of similar scope and complexity in the past three (3) years.

5.3.2 Phased renovation construction projects completed: The Government will evaluate overall corporate experience in performing construction contracts in which phasing and renovating facilities in operation was involved in the past three (3) years.

5.3.3 Military construction projects completed: The Government will evaluate the number and size of large military construction projects undertaken by the Offeror in the past three (3) years.

5.4 FACTOR 1-3: TECHNICAL APPROACH NARRATIVE. The Government will evaluate the overall understanding of the two phase design-build process being used in this solicitation including the following:

55 Does the Offeror demonstrate a suitable understanding of the process to enable it to adequately address and anticipate the risks associated with Design/Build processes?

56 The roles and responsibilities of the various sub-contractors for both design and construction will be addressed.

57 How does the Offeror continue the design phase of the project and incorporate User comments and reviews into the process?

58 The Offeror's Design Quality Control Program will be briefly described.

59 What is the design team's involvement throughout the construction period?

60 How does the Offeror integrate construction subcontractors into the design process?

61 What are the Offeror's processes for handling construction and design problems.

62 Offeror's implementation plans to utilize "fast track" procedures on this project whereby preliminary site construction activities can begin prior to 100% completion of the design documents.

5.5 FACTOR 1-4: OFFEROR SUSTAINABLE DESIGN EXPERIENCE. The Government will evaluate the example projects provided by the Offeror to evaluate and rate the recent experience of the Offeror in similar construction and/or design projects that contain sustainable features. The example projects which most closely resemble the project requirements identified in this solicitation will receive the highest consideration. If the Offeror cannot provide suitable sustainable design experience and the evaluators consider that the information provided indicates that the Offeror has no sustainable design experience, a determination will be made as to the risk this lack of sustainable design experience presents to the Government and the proposal will be evaluated accordingly.

6. OVERALL PROPOSAL RATING

6.1 Each member of the Government evaluation team will independently consider all information provided in the Phase 1 proposal. Once these individual analyses are completed, the team will meet and determine a rating for each of the evaluation factors for Phase 1 by consensus decision.

6.2 Following completion of the consensus rating, each proposal will be assigned a single overall adjectival rating. This final overall rating, along with ratings on individual factors, will be provided to the Contracting Officer/Source Selection Authority and used in making the determination of which Offerors will proceed to Phase 2 of the solicitation. In no case will more than five (5) proposals be included in the Phase 2 process.

6.3 No proposals which receive an overall rating of Unsatisfactory or Marginal will be forwarded to Phase 2 regardless of the total number of proposals received.

6.4 It is the responsibility of the evaluation team to provide and document sufficient strengths, weaknesses, and omissions to support the assigned rating for each factor as well as the overall Phase 1 rating. Comments are required for all ratings.

Offeror: _____

Evaluator:_____

Factor 1-1 Past Performance
Summary and Overall Rating

Item No.	Description	Rating
1.	Were three Past Performance Questionnaires Received?	YES/NO
2.	Do All the Questionnaires Received Reflect Projects Completed Within the Last 3 Years?	YES/NO
3.	Were ACASS/CCASS Ratings available?	YES/NO
4.	Do you have any Personal Experience with the Offeror?	YES/NO
5.	PAST PERFORMANCE	Outstanding, Above Avg, Satisfactory, Below Avg, Unsatisfactory
OVERALL FACTOR 1-1 RATING		

52 Quality of Construction.

53 Timeliness of Construction.

54 Documentation.

55 Customer satisfaction.

56 Subcontractor management.

57 Other.

Offeror: _____

Evaluator:_____

Factor 1-2 Summary and Overall Rating

OFFEROR RELEVANT EXPERIENCE

Item No.	Description	Rating
1.	Does the Proposal Include an Example Project Listing with Suitable Explanation?	YES – NO
2.	Offeror's Relevant Experience	Outstanding, Above Avg, Satisfactory, Below Avg, Unsatisfactory
OVERALL FACTOR 1-2 RATING		

52 Strengths.

53 Weaknesses.

54 Other.

Offeror: _____

Evaluator:_____

Factor 1-3 Technical Approach
Summary and Overall Rating

Item No.	Description	Rating
1.	Technical Approach Narrative Included in Proposal?	YES – NO
2.	Understanding of the Design/Build Process	Outstanding, Above Avg, Satisfactory, Below Avg, Unsatisfactory
OVERALL FACTOR 1-2 RATING		

52 Strengths.

53 Weaknesses.

54 Other.

Offeror: _____

Evaluator:_____

Factor 1-4 Summary and Overall Rating

OFFEROR SUSTAINABLE DESIGN EXPERIENCE

Item No.	Description	Rating
1.	Does the Proposal Include an Example Project Listing with Suitable Explanation?	YES – NO
2.	Offeror's Sustainable Design Experience	Outstanding, Above Avg, Satisfactory, Below Avg, Unsatisfactory
OVERALL FACTOR 1-4 RATING		

52 Strengths.

53 Weaknesses.

54 Other.

Offeror: _____

Evaluator:_____

Phase 1 Summary and Overall Rating

Item No.	Description	Rating
1.	Factor 1-1 Offeror Past Performance	
2.	Factor 1-2 Offeror Relevant Experience	
3.	Factor 1-3 Technical Approach Narrative	
4.	Factor 1-4 Offeror Sustainable Design Experience	
OVERALL PHASE 1 RATING		

_____
Board Member

Offeror: _____

PHASE 1 SOURCE SELECTION BOARD SUMMARY RATINGS							
FACTOR No.	Description	Board Member 1	Board Member 2	Board Member 3	Board Member 4	Board Member 5	CONSENSUS
1-1	Offeror Past Performance						
1-2	Technical Approach Narrative						
1-3	Offeror Relevant Experience						
1-4	Offeror Sustainable Design Experience						
OVERALL PHASE 1 RATING							

_____
Board Member 1

_____
Board Member 2

_____
Board Member 3

_____
Board Member 4

_____
Board Member 5

_____
Board Chairperson

Offeror: _____

PHASE 1 CONSENSUS SUMMARY RATING

FACTOR 1-1 OFFEROR PAST PERFORMANCE

STRENGTHS:

WEAKNESSES:

OTHER COMMENTS:

Offeror: _____

PHASE 1 CONSENSUS SUMMARY RATING
(Continued)

FACTOR 1-2 OFFEROR TECHNICAL APPROACH NARRATIVE

STRENGTHS:

WEAKNESSES:

OTHER COMMENTS:

Offeror: _____

PHASE 1 CONSENSUS SUMMARY RATING
(Continued)

FACTOR 1-3 OFFEROR RELEVANT EXPERIENCE

STRENGTHS:

WEAKNESSES:

OTHER COMMENTS:

Offeror: _____

PHASE 1 CONSENSUS SUMMARY RATING
(Continued)

FACTOR 1-4 OFFEROR SUSTAINABLE DESIGN EXPERIENCE

STRENGTHS:

WEAKNESSES:

OTHER COMMENTS:

Section 00120 – PART 2
PHASE 2 EVALUATION MANUAL

1. GENERAL. This document establishes a uniform evaluation procedure for Phase 2 of the solicitation based on contractually defined criteria. This process will be an extension of the Phase 1 evaluation process. The Evaluation Team will evaluate each proposal individually using the qualitative/quantitative procedures that follow. Each proposal will be reviewed and rated by each of the evaluators. During this process, discrepancies between evaluations will be discussed and resolved within the team. Following the completion of the individual evaluations, a consensus evaluation will be derived. The results of this consensus evaluation will be used to set the competitive range for the purposes of discussions and as the basis for the best value decision by the Contracting Officer/ Source Selection Authority.

2. PROPOSAL REQUIREMENTS. Section 0110, Proposal Submission Requirements and Instructions identifies all the necessary submittal information to be included in the proposals. Proposals that reach the evaluation stage have passed an initial Contracting Division review to assure that they are complete and responsive. All proposals that are provided to the evaluation team will be evaluated and rated.

3. INDIVIDUAL PROPOSAL RATING WORKSHEETS

3.1 Worksheets are provided on the following pages that the evaluators will use to review and rate the individual proposals.

3.2 Comments are required to support all ratings.

4. RATING METHODOLOGY

4.1 General. The proposals from the Offerors who reach Phase 2 will be evaluated by a team to determine compliance with this solicitation (as a minimum), and to evaluate the quality of the proposed materials, methods, and procedures. Each of the evaluation Factors for Phase 2 will be evaluated by the Government and a final overall rating for the proposals will be determined by consensus of the Government evaluation team. Evaluation criteria (factors and subfactors) will be rated using the following adjectival descriptions. Evaluators will apply the appropriate adjective to each criterion rated. The evaluator's narrative explanation must clearly establish that the Offeror's submittal meets the definitions established below:

> **OUTSTANDING:** Information submitted in the proposal demonstrates the Offeror's potential to significantly exceed performance or capability standards identified in the solicitation. The Offeror has clearly demonstrated an understanding of all aspects of the requirements to the extent that timely and highest quality performance is anticipated and risk to the Government is very low. The Offeror has convincingly demonstrated that the RFP requirements have been analyzed, evaluated, and synthesized into approaches, plans, and techniques that, when implemented, should result in outstanding, effective, efficient, and economical performance under the contract. An assigned rating within "outstanding" indicates that, in terms of the specific factor (or subfactor), the submittal contains essentially no significant weaknesses, deficiencies or disadvantages. The proposal has exceptional strengths that will significantly benefit the Government. The proposal exceeds an "Above Average" rating. **The proposal significantly exceeds most or all solicitation requirements. The proposal presents very low risk to the Government.**
>
> **ABOVE AVERAGE -** Information submitted in the proposal demonstrates the Offeror's potential to exceed performance or capability standards. The proposal has one or more strengths that will benefit the Government. The areas in which the Offeror exceeds the requirements are anticipated to result in a high level of efficiency or productivity or quality. An assigned rating within "Above Average" indicates that, in

terms of the specific factor (or subfactor), any deficiencies noted are of a minor nature that should not seriously affect the Offeror's performance. The submittal demonstrates that the requirements of the RFP are well understood and the approach will likely result in a high quality of performance which represents low risk to the Government. A rating within "Above Average" is used when there are no indications of exceptional features or innovations that could prove to be beneficial, or contrarily, weaknesses that could diminish the quality of the effort or increase the risk of failure. Disadvantages are minimal. The submittal contains excellent features that will likely produce results very beneficial to the Government. Response exceeds a "Satisfactory" rating. **The proposal fully meets all RFP requirements and significantly exceeds many of the RFP requirements. The proposal presents low risk to the Government.**

SATISFACTORY - Information submitted in the proposal demonstrates the Offeror's potential to meet performance or capability standards. The proposal presents an acceptable solution to the Government's requirements. The proposal meets minimum RFP requirements. Few or no advantages or strengths are presented. The Offeror's proposal contain weaknesses in several areas that are not offset by strengths in other areas. Complete and comprehensive proposal; exemplifies an understanding of the scope and depth of the task requirements and the Offeror's understanding of the Government's requirements. A rating of "Satisfactory" indicates that, in terms of the specific factor (or subfactor), there is sufficient confidence that a fully compliant level of performance will be achieved with moderate risk to the Government. Response exceeds a "Marginal" rating. **No significant advantages or disadvantages. The proposal presents moderate risk to the Government.**

MARGINAL - Information submitted in the proposal demonstrates the Offeror's potential to marginally meet performance or capability standards necessary for minimal, but still acceptable contract performance. The proposal is not adequately responsive or does not address the specific factor(s) (or subfactor(s)). The Offeror's interpretation of the Government's requirements is so superficial, incomplete, vague, incompatible, incomprehensible, or incorrect as to be unacceptable. The assignment of a rating within the bounds of "Marginal" indicates that the evaluator feels that mandatory corrective action would be required to prevent significant deficiencies from affecting the overall project. The Offeror's qualifications demonstrate an acceptable understanding of the requirements of the RFP and the approach will likely result in an adequate quality of performance, which represents a high level of risk to the Government. Low probability of success, although the proposal has a reasonable chance of becoming at least acceptable. Response exceeds an "Unsatisfactory" rating. **Significant disadvantages. Substantial doubt exists that the Offeror will successfully perform the required effort. The proposal presents high risk to the Government.**

UNSATISFACTORY - The proposal fails to demonstrate that it meets performance or capability standards required in the RFP. The proposal is unacceptable. Requirements can only be met with major changes to the proposal. The proposal does not meet the minimum requirements of the RFP. There is no reasonable expectation that acceptable performance would be achieved. The Offeror's proposal has many deficiencies and/or gross omissions; fails to provide a reasonable, logical approach to fulfilling much of the Government's requirements; or, fails to meet many of the minimum requirements. The Offeror's proposal is so unacceptable that they would have to be completely revised in order to make it acceptable. **Very significant disadvantages. Extreme doubt that the Offeror will perform the required effort. The proposal presents unacceptably high risk to the Government.**

4.7 YES – NO Ratings. Where the specific evaluation sheets indicate a YES – NO Rating these items will be treated as information items. They are included in the evaluation worksheets to assure a similar focus among the evaluators and to ensure individual evaluators do not overlook proposal information provided.

4.8 Weighting of Factors. Relative Importance Definitions: For the purpose of this evaluation, the following terms will be used to establish the relative importance of the factors and subfactors:

52 **Significantly More Important*:*** The criterion is at least two times greater in value than another criterion.

53 **More Important:** The criterion is greater in value than another criterion but less than two times greater.

54 **Equal:** The criterion is of the same value or nearly the same as another criterion.

5. EVALUATION FACTORS

5.1 Factor Relative Weights. The following factors will be evaluated and rated for each proposal:

5.1.1 PRICE is equal in importance to TECHNICAL FACTORS.

5.1.2 Weight among technical factors:

52 **FACTOR 1-1: OFFEROR PAST PERFORMANCE:** This factor is more important than Factor 1-2 and significantly more important than Factors 1-3, and 1-4.

53 **FACTOR 1-2: RELEVANT SPECIALIZED EXPERIENCE:** This factor is significantly more important than Factors 1-3 and 1-4.

54 **FACTOR 1-3 TECHNICAL APPROACH NARRATIVE:** This factor is equal in importance to Factor 1-4.

55 **FACTOR 1-4: OFFEROR SUSTAINABLE DESIGN EXPERIENCE:** This factor is equal in importance to Factors 1-3.

56 **FACTORS 1-1, 1-2, 1-3, 1-4 together are equal in importance to Factors 2-1, 2-2, 2-3, 2-4, & 2-5 together.**

57 **FACTOR 2-1: OFFEROR SCHEDULE:** This factor is equal in importance to Factors 2-2 and 2-3, more important that Factor 2-4, and significantly more important than Factors 2-5 & 2-6.

58 **FACTOR 2-2: BUILDING SYSTEMS:** This factor is equal in importance to Factor 2-3, more important than Factor 2-4, and significantly more important that Factors 2-5 & 2-6.

59 **FACTOR 2-3: BUILDING FUNCTION AND AESTHETICS:** This factor is equal in importance to Factors 2-2, more important than Factor 2-4, and significantly more important than factors 2-5 and 2-6.

60 **FACTOR 2-4: SITE DESIGN:** This factor is significantly more important than Factors 2-5 and 2-6.

61 **FACTOR 2-5: SUSTAINABLE DESIGN CONSIDERATIONS:** This factor is equal in importance to Factor 2-6.

62 **FACTOR 2-6: OFFEROR MANAGEMENT PLAN:** This factor is equal in importance to Factor 2-5.

6. OVERALL PROPOSAL RATING

6.1 The intent of the evaluation worksheets that follow is to focus the evaluators on the key issues and concerns with respect to construction, operation, and function of the facilities. These worksheets are meant to stimulate thought and analysis and provide a framework in which to document concerns, strengths, weaknesses, and omissions. Evaluators are encouraged to document all observations and analyses when analyzing the individual proposals, and to share that analysis with the team during the consensus discussions.

6.2 It is the responsibility of the evaluation team to provide and document strengths, weaknesses, and omissions to support the assigned rating in each Factor as well as the overall Phase 2 rating. Comments are required for all ratings.

6.3 The Chairperson will provide a copy of the Phase 1 ratings for each Offeror. The evaluation team, will then weigh the assigned ratings from Phase 1 and Phase 2, take into account the assembled strengths and weaknesses, and provide an overall proposal rating for each Offeror. During the consensus evaluation, a single "consensus rating" worksheet will be completed for each proposal and signed by all the evaluators. It is imperative that all comments and supporting rational for the rating assigned be included on this consensus sheet. This final combined rating will be used for comparison and in the trade off process as applicable.

6.4 Following the completion of the consensus discussions and rating assignments, the individual rating worksheets from each of the evaluators will be collected by the Chairperson and provided to the Contracting Officer. Each evaluator will sign the final consensus rating sheet.

7. BASIS OF AWARD

7.1 In order to determine which proposal represents the best overall value, the Government will compare proposals to one another. The Government will award a firm fixed-price contract to that responsible Offeror whose submittal and price proposal contain the combination of those criteria described in this document offering the best overall value to the Government. Best value will be determined by a comparative assessment of proposals against all source selection criteria in this RFP.

7.2 The Government is concerned with striking the most advantageous balance between technical features and cost to the Government.

7.3 As technical ratings and relative advantages and disadvantages become less distinct, differences in price between proposals are of increased importance in determining the most advantageous proposal. Conversely, as differences in price become less distinct, differences in scoring and relative advantages and disadvantages between proposals are of increased importance to the determination.

7.4 The Government reserves the right to accept other than the lowest priced offer. The right is also reserved to reject any and all offers. The basis of award will be a conforming offer, the price or cost of which may or may not be the lowest. If other than the lowest offer, it must be sufficiently more advantageous than the lowest offer to justify the payment of additional amounts.

52.2219 Offerors are reminded to include their best technical and price terms in their initial offer and not to automatically assume that they will have an opportunity to participate in discussions or be asked to submit a revised offer. The Government may make award of a conforming proposal without discussions, if deemed to be within the best interests of the Government.

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –

(i) Those prices,

(ii) The intention to submit an offer, or

(iii) The methods of factors used to calculate the prices offered:

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provison _____ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence

Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of $100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than $10,000, and not more than $100,000, for each such failure.

(End of provision)

52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

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

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

(End of provision)

52.204-4003 TAXPAYER IDENTIFICATION

Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(a) Taxpayer Identification Number (TIN).

___ TIN:._____

___ TIN has been applied for.

___ TIN is not required because:

___ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

___ Offeror is an agency or instrumentality of a foreign government;

___ Offeror is an agency or instrumentality of the Federal Government.

(b) Type of organization.

___ Sole proprietorship;

___ Partnership;

___ Corporate entity (not tax-exempt);

___ Corporate entity (tax-exempt);

___ Government entity (Federal, State, or local);

___ Foreign government;

___ International organization per 26 CFR 1.6049-4;

___ Other _____

(c) Common parent.

___ Offeror is not owned or controlled by a common parent

___ Name and TIN of common parent:

Name _____

TIN _____

(End of provision)

52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (DEC 2001)

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

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

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

(B) Have ( ) have not ( ), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

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

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

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

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

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

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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

(End of provision)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2002) - ALTERNATE I (APR 2002)

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

(2) The small business size standard is 28.5 million.

(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) Representations. (1) The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it ( ) is, ( ) is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.

(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a veteran-owned small business concern.

(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a service-disabled veteran-owned small business concern.

(6) [Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.] The offeror represents, as part of its offer, that--

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

(ii) It ( ) is, ( ) is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture:_____.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(7) (Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.) The offeror shall check the category in which its ownership falls:

____ Black American.

____ Hispanic American.

____ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

____ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

____ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

____ Individual/concern, other than one of the preceding.

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

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern --

(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; or

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice.

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

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

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (OCT 2000)

(a) Definition.

"Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the North American Industry Classification System (NAICS) code assigned to a contracting opportunity.

(b) [Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.] The Offeror [ ] is, [ ] is not an emerging small business.

(c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees	Avg. Annual Gross Revenues
____ 50 or fewer	____ $1 million or less
____ 51 - 100	____ $1,000,001 - $2 million
____ 101 - 250	____ $2,000,001 - $3.5 million
____ 251 - 500	____ $3,500,001 - $5 million
____ 501 - 750	____ $5,000,001 - $10 million
____ 751 - 1,000	____ $10,000,001 - $17 million
____ Over 1,000	____ Over $17 million

(End of provision)

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

(a) ( ) It has, ( ) has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;

(b) ( ) It has, ( ) has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (DEC 2001)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e., if it has any contract containing Federal Acquisition Regulation clause 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

(End of provision)

52.223-4 RECOVERED MATERIAL CERTIFICATION (OCT 1997)

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

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

( ) (i) The facility does not manufacture, process or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

( ) (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);

( ) (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

( ) (iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

( ) (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(End of clause)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(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 include: Cuba, Iran, Iraq, Libya, North Korea, 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)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

(a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) Representation. The Offeror represents that it:

____ (1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (MAY 2001) --ALTERNATE I (MAR 2001)

(a) Agency head or head of the agency means the Secretary (Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, unless otherwise indicated, including any deputy or assistant chief official of the executive agency.

(b) Commercial component means any component that is a commercial item.

(c) Component means any item supplied to the Government as part of an end item or of another component, except that for use in 52.225-9, and 52.225-11 see the definitions in 52.225-9(a) and 52.225-11(a).

(d) Contracting Officer means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(e) Nondevelopmental item means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (f)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (f)(1) or (f)(2) solely because the item is not yet in use.

(f) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(g) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

(End of clause)

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed $100,000.

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an

inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed $100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27(a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

(End of clause)

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may--

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

(1) The awarding of any Federal contract.

(2) The making of any Federal grant.

(3) The making of any Federal loan.

(4) The entering into of any cooperative agreement.

(5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.

(2) A member of the uniformed services, as defined in subsection 101(3),Title 37, United States Code.

(3) A special Government employee, as defined in section 202, Title 18, United States Code.

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed

to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of $25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding $100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

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

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.” For paper and paper products, postconsumer material means “postconsumer fiber” defined by the U.S. Environmental Protection Agency (EPA) as--

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

“Printed or copied double-sided” means printing or reproducing a document so that information is on both sides of a sheet of paper.

“Recovered material,” for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as “recovered fiber” and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as--

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)

(a) The Government suspends or debars Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the $25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed $25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.211-15 DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEP 1990)

This is a rated order certified for national defense use, and the Contractor shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).

(End of clause)

52.215-2 AUDIT AND RECORDS--NEGOTIATION (JUN 1999)

(a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

(1) The proposal for the contract, subcontract, or modification;

(2) The discussions conducted on the proposal(s), including those related to negotiating;

(3) Pricing of the contract, subcontract, or modification; or

(4) Performance of the contract, subcontract or modification.

(d) Comptroller General--(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition--

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and--

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its

Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the “as of” date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the “as of” date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the “as of” date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-13 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) The requirements of paragraphs (b) and (c) of this clause shall--

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1 applies.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4 on the date of agreement on price or the date of award, whichever is later.

(End of clause)

52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) Exceptions from cost or pricing data. (1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts or subcontracts for commercial items. (A) If--

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation , access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of clause)

52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 1999)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

___ Offeror elects to waive the evaluation preference.

(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2002)--ALTERNATE II (OCT 2001).

(a) This clause does not apply to small business concerns.

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

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) Proposals submitted in response to this solicitation shall include a subcontracting plan that separately addresses subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the

resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate a subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to HUBZone small business concerns;

(v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and

(vi) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror in included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled ``Utilization of Small Business Concerns'' in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of $500,000 ($1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will--

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than $100,000, indicating--

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether HUBZone small business concerns were solicited and, if not, why not;

(D) Whether small disadvantaged business concerns were solicited and, if not, why not;

(E) Whether women-owned small business concerns were solicited and, if not, why not; and

(F) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact--

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all ``make-or-buy'' decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--
(1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled

“Small Business Subcontracting Plan,” the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

(a)(1) The worker is paid or is in an approved work training program on a voluntary basis;

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

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

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

(b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of $10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding $100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular

contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or

program.

(End of clause)

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(End of clause)

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(End of clause)

52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of

Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(End of clause)

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

(End of clause)

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988)

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and

dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

(End of clause)

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

(End of clause)

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

(End of clause)

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(End of clause)

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-26 EQUAL OPPORTUNITY (APR 2002)

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of $10,000, the Contractor shall comply with paragraphs (b)(1) through (b)(11) of this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective

bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

(End of clause)

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the

employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of $10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each

construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such

as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

(End of clause)

52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)

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

All employment openings means all positions except executive and top management, those positions that will be filled from within the Contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days duration, and part-time employment.

Executive and top management means any employee--

(1) Whose primary duty consists of the management of the enterprise in which the individual is employed or of a customarily recognized department or subdivision thereof;

(2) Who customarily and regularly directs the work of two or more other employees;

(3) Who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring or firing and as to the advancement and promotion or any other change of status of other employees will be given particular weight;

(4) Who customarily and regularly exercises discretionary powers; and

(5) Who does not devote more than 20 percent or, in the case of an employee of a retail or service establishment, who does not devote more than 40 percent of total hours of work in the work week to activities that are not directly and closely related to the performance of the work described in paragraphs (1) through (4) of this definition. This paragraph (5) does not apply in the case of an employee who is in sole charge of an establishment or a physically separated branch establishment, or who owns at least a 20 percent interest in the enterprise in which the individual is employed.

Other eligible veteran means any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

Positions that will be filled from within the Contractor's organization means employment openings for which the Contractor will give no consideration to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings the Contractor proposes to fill from regularly established “recall” lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Qualified special disabled veteran means a special disabled veteran who satisfies the requisite skill, experience, education, and other job-related requirements of the employment position such veteran holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

Special disabled veteran means--

(1) A veteran who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Department of Veterans Affairs for a disability--

(i) Rated at 30 percent or more; or

(ii) Rated at 10 or 20 percent in the case of a veteran who has been determined under 38 U.S.C. 3106 to have a serious employment handicap (i.e., a significant impairment of the veteran's ability to prepare for, obtain, or retain employment consistent with the veteran's abilities, aptitudes, and interests); or

(2) A person who was discharged or released from active duty because of a service-connected disability.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days and was discharged or released from active duty with other than a dishonorable discharge, if any part of such active duty occurred--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases; or

(2) Was discharged or released from active duty for a service-connected disability if any part of the active duty was performed--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases.

(b) General. (1) The Contractor shall not discriminate against the individual because the individual is a special disabled veteran, a veteran of the Vietnam era, or other eligible veteran, regarding any position for which the employee or applicant for employment is qualified. The Contractor shall take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans without discrimination based upon their disability or veterans' status in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;

(iii) Rate of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeship, and on-the-job training under 38 U.S.C. 3687, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor shall comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended (38 U.S.C. 4211 and 4212).

(c) Listing openings. (1) The Contractor shall immediately list all employment openings that exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract, and including those occurring at an establishment of the Contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, at an appropriate local public employment service office of the State wherein the opening occurs. Listing employment openings with the U.S. Department of Labor's America's Job Bank shall satisfy the requirement to list jobs with the local employment service office.

(2) The Contractor shall make the listing of employment openings with the local employment service office at least concurrently with using any other recruitment source or effort and shall involve the normal obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing of employment openings does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(3) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State public employment agency in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State agency, it need not advise the State agency of subsequent contracts. The Contractor may advise the State agency when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands of the United States, and Wake Island.

(e) Postings. (1) The Contractor shall post employment notices in conspicuous places that are available to employees and applicants for employment.

(2) The employment notices shall--

(i) State the rights of applicants and employees as well as the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are special disabled veterans, veterans of the Vietnam era, and other eligible veterans; and

(ii) Be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary of Labor), and provided by or through the Contracting Officer.

(3) The Contractor shall ensure that applicants or employees who are special disabled veterans are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled veteran, or may lower the posted notice so that it can be read by a person in a wheelchair).

(4) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement, or other contract understanding, that the Contractor is bound by the terms of the Act and is committed to take affirmative action to employ, and advance in employment, qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, the Government may take appropriate actions under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(g) Subcontracts. The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of $25,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Deputy Assistant Secretary of Labor to enforce the terms, including action for noncompliance.

(End of clause)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating--

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--

(1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of $10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

52.222-41 SERVICE CONTRACT ACT OF 1965, AS AMENDED (MAY 1989)

(a) Definitions. "Act," as used in this clause, means the Service Contract Act of 1965, as amended (41 U.S.C. 351, et seq.).

"Contractor," as used in this clause or in any subcontract, shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

"Service employee," as used in this clause, means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) Applicability. This contract is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 356, as interpreted in Subpart C of 29 CFR Part 4.

(c) Compensation. (1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)(i) If a wage determination is attached to this con- tract, the Contractor shall classify any class of service

employee which is not listed therein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent informa-tion to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determina- tions issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (i.e., adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c)(2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract.

(vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) Adjustment of Compensation. If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or fur- nished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) Obligation to Furnish Fringe Benefits. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) Minimum Wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

(f) Successor Contracts. If this contract succeeds a contract subject to the Act under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts 6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Board of Service Contract Appeals, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) Notification to Employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the worksite. Failure to comply with this requirement is a violation of section 2(a)(4) of the Act and of this contract.

(h) Safe and Sanitary Working Conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(i) Records. (1) The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, Employment Standards Administration, a record of the following:

(i) For each employee subject to the Act--

(A) Name and address and social security number;

(B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation;

(C) Daily and weekly hours worked by each employee; and

(D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.

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

(j) Pay Periods. The Contractor shall unconditionally pay to each employee subject to the Act all wages due free and clear and without subsequent deduction (except as otherwise provided by law or regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this Act may not be of any duration longer than semi-monthly.

(k) Withholding of Payments and Termination of Contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Act all or part of the wages or fringe benefits due under the Act, the Contracting Officer may, after authorization or by direction of the Department of Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(l) Subcontracts. The Contractor agrees to insert this clause in all subcontracts subject to the Act.

(m) Collective Bargaining Agreements Applicable to Service Employees. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(n) Seniority List. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) Rulings and Interpretations. Rulings and interpretations of the Act are contained in Regulations, 29 CFR Part 4.

(p) Contractor's Certification. (1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it (nor he or she) nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under section 5 of the Act.

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under section 5 of the Act.

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(q) Variations, Tolerances, and Exemptions Involving Employment. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 4(b) of the Act prior to its amendment by Pub. L. 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(1) of the Act without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of the Act, in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of sheltered workshops under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR Parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the Act for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR Parts 525 and 528.

(r) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, Employment and Training Administration, U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(s) Tips. An employee engaged in an occupation in which the employee customarily and regularly receives more than $30 a month in tips may have the amount of these tips credited by the employer against the minimum wage required by section 2(a)(1) or section 2(b)(1) of the Act, in accordance with section 3(m) of the Fair Labor Standards Act and Regulations, 29 CFR Part 531. However, the amount of credit shall not exceed $1.34 per hour beginning January 1, 1981. To use this provision--

(1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized;

(2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received);

(3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Act minimum wage through the combination of direct wages and tip credit; and

(4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of section 4(c) of the Act.

Disputes Concerning Labor Standards. The U.S. Department of Labor has set forth in 29 CFR Parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

Employee Class	Monetary Wage-Fringe Benefits
General Clerk IV	$9.58
Secretary V	$15.97
Civil Engineer Technician	$14.83
Engineering Technician I	$11.86

(End of clause)

52.222-44 FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT--PRICE ADJUSTMENT (FEB 2002)

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to Contractor collective bargaining agreements.

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

(c) The contract price or contract unit price labor rates will be adjusted to reflect increases or decreases by the Contractor in wages and fringe benefits to the extent that these increases or decreases are made to comply with--

(1) An increased or decreased wage determination applied to this contract by operation of law; or

(2) An amendment to the Fair Labor Standards Act of 1938 that is enacted subsequent to award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(d) Any such adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (c) of this clause, and to the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance; it shall not otherwise include any amount for general and administrative costs, overhead, or profit.

(e) The Contractor shall notify the Contracting Officer of any increase claimed under this clause within 30 days after the effective date of the wage change, unless this period is extended by the Contracting Officer in writing. The Contractor shall promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice shall contain a statement of the amount claimed and any relevant supporting data that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price or contract unit price labor rates shall be modified in writing. The Contractor shall continue performance pending agreement on or determination of any such adjustment and its effective date.

(f) The Contracting Officer or an authorized representative shall, until the expiration of 3 years after final payment under the contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor.

(End of clause)

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA,

which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

(End of clause)

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

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

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to deter- mine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) though (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

(End of clause)

52.225-11 BUY AMERICAN ACT--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (JUL 2002)

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

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

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

Cost of components means--

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

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

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark.

Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Ireland, Israel, Italy, Japan.

Kiribati, Korea, Republic of, Lesotho, Liechtenstein, Luxembourg, Malawi, Maldives, Mali, Mozambique, Nepal, Netherlands, Niger, Norway, Portugal, Rwanda.

Sao Tome and Principe, Sierra Leone, Singapore, Somalia, Spain, Sweden, Switzerland, Tanzania U.R., Togo, Tuvalu, Uganda, United Kingdom, Vanuatu, Western Samoa, Yemen.

Designated country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

Domestic construction material means--

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

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

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

North American Free Trade Agreement country means Canada or Mexico.

North American Free Trade Agreement country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA)

apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country and NAFTA country construction materials.

(2) The Contractor shall use only domestic, designated country, or NAFTA country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: (Contracting Officer to list applicable excepted materials or indicate “none”)

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

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

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

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

(c) Request for determination of inapplicability of the Buy American Act.

(1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

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

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

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

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

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

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

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

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

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

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

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1:			
Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....
Item 2:			
Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

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

Include other applicable supporting information.

(End of clause)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUL 2000)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

(End of clause)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101.to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

(End of clause)

52.228-1 BID GUARANTEE (SEP 1996)

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

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.-

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

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

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

(End of clause)

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

(End of clause)

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) “Irrevocable letter of credit” (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than $25 million in the past year, ILCs over $5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than $25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

_____

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____(for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States $_____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

_____

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

_____
[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars _____/U.S. $_____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

_____

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

_____

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States $_____.
This draft is drawn under Irrevocable Letter of Credit No. _____.

_____

[Beneficiary Agency]

By: _____

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-

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

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

(b) Amount of required bonds. Unless the resulting contract price is $100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

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

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

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

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-2 NORTH CAROLINA STATE AND LOCAL SALES AND USE TAX (APR 1984)

(a) "Materials," as used in this clause, means building materials, supplies, fixtures, and equipment that become a part of or are annexed to any building or structure erected, altered, or repaired under this contract.

(b) If this is a fixed-price contract, the contract price includes North Carolina State and local sales and use taxes to be paid on materials, notwithstanding any other provision of this contract. If this is a cost-reimbursement contract, any North Carolina State and local sales and use taxes paid by the Contractor on materials shall constitute an allowable cost under this contract.

(c) At the time specified in paragraph (d) below, the Contractor shall furnish the Contracting Officer certified statements setting forth the cost of the materials purchased from each vendor and the amount of North Carolina State and local sales and use taxes paid. In the event the Contractor makes several purchases from the same vendor, the certified statement shall indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, and the North Carolina State and local sales and use taxes paid. The statement shall also include the cost of any tangible personal property withdrawn from the Contractor's warehouse stock and the amount of North Carolina State and local sales or use tax paid on this property by the Contractor. Any local sales or use taxes included in the Contractor's statements must be shown separately from the State sales or use taxes. The Contractor shall furnish any additional information the Commissioner of Revenue of the State of North Carolina may require to substantiate a refund claim for sales or use taxes. The Contractor shall also obtain and furnish to the Contracting Officer similar certified statements by its subcontractors.

(d) If this contract is completed before the next October 1, the certified statements to be furnished pursuant to paragraph (c) above shall be submitted within 60 days after completion. If this contract is not completed before the next October 1, the certified statements shall be submitted on or before November 30 of each year and shall cover taxes paid during the 12-month period that ended the preceding September 30.

(e) The certified statements to be furnished pursuant to paragraph (c) above shall be in the following form: I hereby certify that during the period . . . . to . . . .[insert dates], ... [insert name of Contractor or subcontractor] paid North Carolina State and local sales and use taxes aggregating $ . . . . (State) and $ . . . . (local), with respect to building materials, supplies, fixtures, and equipment that have become a part of or annexed to a building or structure erected, altered, or repaired by . . . . [insert name of Contractor or subcontractor] for the United States of America, and that the vendors from whom the property was purchased, the dates and numbers of the invoices covering the purchases, the total amount of the invoices of each vendor, the North Carolina State and local sales and use taxes paid on the property (shown separately), and the cost of property withdrawn from warehouse stock and North Carolina State and local sales or use taxes paid on this property are as set forth in the attachments.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.
"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds $250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-5 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984)

The term "local taxes," as used in the Federal, State, and local taxes clause of this contract, includes taxes imposed by a possession of the United States or by Puerto Rico.

(End of clause)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

_____

(Name)

_____

(Title)

_____

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against
the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has

specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

(End of clause)

52.232-10 PAYMENTS UNDER FIXED-PRICE ARCHITECT-ENGINEER CONTRACTS (AUG 1987)

(a) Estimates shall be made monthly of the amount and value of the work and services performed by the Contractor under this contract which meet the standards of quality established under this contract. The estimates shall be prepared by the Contractor and accompanied by any supporting data required by the Contracting Officer.

(b) Upon approval of the estimate by the Contracting Officer, payment upon properly executed vouchers shall be made to the Contractor, as soon as practicable, of 90 percent of the approved amount, less all previous payments; provided, that payment may be made in full during any months in which the Contracting Officer determines that performance has been satisfactory. Also, whenever the Contracting Officer determines that the work is substantially complete and that the amount retained is in excess of the amount adequate for the protection of the Government, the Contracting Officer may release the excess amount to the Contractor.

(c) Upon satisfactory completion by the Contractor and acceptance by the Contracting Officer of the work done by the Contractor under the "Statement of Architect-Engineer Services", the Contractor will be paid the unpaid balance of any money due for work under the statement, including retained percentages relating to this portion of the work. Upon satisfactory completion and final acceptance of the construction work, the Contractor shall be paid any unpaid balance of money due under this contract.

(d) Before final payment under the contract, or before settlement upon termination of the contract, and as a condition precedent thereto, the Contractor shall execute and deliver to the Contracting Officer a release of all claims against the Government arising under or by virtue of this contract, other than any claims that are specifically excepted by the Contractor from the operation of the release in amounts stated in the release.

(e) Notwithstanding any other provision in this contract, and specifically paragraph (b) of this clause, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(End of clause)

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(End of clause)

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986) - ALTERNATE I (APR 1984)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence. Unless otherwise stated in this contract, payments to an assignee of any amounts due or to become due under this contract shall not, to the extent specified in the Act, be subject to reduction or setoff.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

52.232-26 PROMPT PAYMENT FOR FIXED-PRICE ARCHITECT-ENGINEER CONTRACTS (FEB 2002)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Due date. The due date for making invoice payments is--

(i) For work or services completed by the Contractor, the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(iii) of this clause).

(B) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice, when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the settlement.

(ii) The due date for progress payments is the 30th day after Government approval of Contractor estimates of work or services accomplished.

(iii) If the designated billing office fails to annotate the invoice or payment request with the actual date of receipt at the time of receipt, the payment due date is the 30th day after the date of the Contractor's invoice or payment request, provided the designated billing office receives a proper invoice or payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(ix) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34,Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(x) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance or approval is deemed to occur constructively as shown in paragraphs (a)(4)(i)(A) and (B) of this clause. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, Contractor compliance with a contract provision, or requested progress payment amounts. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(A) For work or services completed by the Contractor, Government acceptance is deemed to occur constructively on the 7th day after the Contractor completes the work or services in accordance with the terms and conditions of the contract.

(B) For progress payments, Government approval is deemed to occur on the 7th day after the designated billing office receives the Contractor estimates.

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or

other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with 5 CFR part 1315.

(6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315, in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest is due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(iii) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Overpayments. If the Contractor becomes aware of a duplicate payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (FEB 2002)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.

(A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).

(A) The due date for making such payments is the later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the Contractor.

(2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.

(B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(xi) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to use:

(i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and

(ii) Require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph
(e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under paragraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.

(f) Third-party deficiency reports--(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a “second-tier subcontractor”) a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--

(i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts DisputesAct of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying--

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

(l) Overpayments. If the Contractor becomes aware of a duplicate payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(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) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) 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.

(g) 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.

(h) 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 in the CCR database and shall be paid by EFT in accordance with the terms of this clause. 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.

(i) 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.

(j) 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)

52.233-1 DISPUTES. (JUL 2002)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) Claim, as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding $100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative disput resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

(End of clause)

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions

do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

(End of clause)

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(1) conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) the availability of labor, water, electric power, and roads;

(3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(End of clause)

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

(End of clause)

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(End of clause)

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to

take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

(End of clause)

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

(1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) avoid interruptions of Government operations and delays in project completion dates; and

(3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

52 If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(1) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation

of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(f) Before commencing the work, the Contractor shall-

(1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and

(2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(End of clause)

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(End of clause)

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown," as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".

(d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

(End of clause)

52.236-22 DESIGN WITHIN FUNDING LIMITATIONS (APR 1984)

(a) The Contractor shall accomplish the design services required under this contract so as to permit the award of a contract, using standard Federal Acquisition Regulation procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in paragraph (c) below. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this contract. However, the Contractor shall not be required to perform such additional services at no cost to the Government if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.

(b) The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Government may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in paragraph (c) below, or the Government may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Government shall prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

(c) The estimated construction contract price for the project described in this contract is $10,471,000.00

(End of clause)

52.236-24 WORK OVERSIGHT IN ARCHITECT-ENGINEER CONTRACTS (APR 1984)

The extent and character of the work to be done by the Contractor shall be subject to the general oversight, supervision, direction, control, and approval of the Contracting Officer.

(End of clause)

52.236-25 REQUIREMENTS FOR REGISTRATION OF DESIGNERS (APR 1984)

The design of architectural, structural, mechanical, electrical, civil, or other engineering features of the work shall be

accomplished or reviewed and approved by architects or engineers registered to practice in the particular professional field involved in a State or possession of the United States, in Puerto Rico, or in the District of Columbia.

(End of clause)

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

(End of clause)

52.239-4001 Year 2000 Compliance

The contractor shall ensure products provided under this contract, to include hardware, software, firmware, and middleware, whether acting alone or combined as a system, are Year 2000 compliant as defined as follows: Year 2000 compliant means with respect to information technology, that the information technology accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information, used in combination with the information technology being acquired, properly exchanges date/time data with it.

52.239-4005 Year 2000 Compliance - Construction Contracts

a. In accordance with FAR 39.106, the contractor shall ensure that with respect to any design, construction, goods, or services under this contract as well as any subsequent task/delivery orders issued under this contract (if applicable), all information technology contained therein shall be Year 2000 compliant. Specifically:

The contractor shall:

(1) Perform, maintain, and provide an inventory of all major components to include structures, equipment, items, parts, and furnishings under this contract and each task/delivery order which may be affected by the Y2K compliance requirement.

(2) Indicate whether each component is currently Year 2000 compliant or requires an upgrade for compliance prior to government acceptance.

(End of Clause)

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 SUSPENSION OF WORK (APR 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

52.243-1 CHANGES--FIXED-PRICE (AUG 1987) - ALTERNATE III (APR 1984)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in the services to be performed.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(f) No services for which an additional cost or fee will be charged by the Contractor shall be furnished without the prior written authorization of the Contracting Officer.

(End of clause)

52.243-4 CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) In the Government-furnished facilities, equipment, materials, services, or site; or

(4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under

this contract.

(End of clause)

52.244-5 COMPETITION IN SUBCONTRACTING (DEC 1996)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protege Program (Pub. L. 101–510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its proteges.

(End of clause)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (MAY 2002)

(a) Definitions.

"Commercial item", has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c) (1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (OCT 2000) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $500,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212(a)).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

(v) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (JUN 2000) (46 U.S.C. Appx 1241) (flowdown not required for subcontracts awarded beginning May 1, 1996).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996) - ALTERNATE I (SEP 1996)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

(End of clause)

52.249-7 TERMINATION (FIXED-PRICE ARCHITECT-ENGINEER) (APR 1984)

(a) The Government may terminate this contract in whole or, from time to time, in part, for the Government's convenience or because of the failure of the Contractor to fulfill the contract obligations. The Contracting Officer

shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

(b) If the termination is for the convenience of the Government, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

(c) If the termination is for failure of the Contractor to fulfill the contract obligations, the Government may complete the work by contract or otherwise and the Contractor shall be liable for any additional cost incurred by the Government.

(d) If, after termination for failure to fulfill contract obligations, it is determined that the Contractor had not failed, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

53 The rights and remedies of the Government provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(i) acts of God or of the public enemy,

(ii) acts of the Government in either its sovereign or contractual capacity,

(iii) acts of another Contractor in the performance of a contract with the Government,

(iv) fires,

(v) floods,

(vi) epidemics,

(vii) quarantine restrictions,

(viii) strikes,

(ix) freight embargoes,

(x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

(End of clause)

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting

officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause—

(1) "Arising out of a contract with the DoD" means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.

(3) "Date of conviction" means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than $500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and

(4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)

(a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DoD) contracts, DoD Hotline Posters prepared by the DoD Office of the Inspector General.

(b) DoD Hotline Posters may be obtained from the DoD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.

(c) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--

(1) The Contracting Officer has given prior written approval; or

(2) The information is otherwise in the public domain before the date of release.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION (NOV 2001)

(a) Definitions.

As used in this clause--

(1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at http://www.ccr.gov.

(End of clause)

252.205-7000 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)

(a) Definition.

"Cooperative agreement holder" means a State or local government; a private, nonprofit organization; a tribal organization (as defined in section 4(c) of the Indian Self-Determination and Education Assistance Act (Pub. L. 93-268; 25 U.S.C. 450 (c))); or an economic enterprise (as defined in section 3(e) of the Indian Financing Act of 1974 (Pub. L. 93-362; 25 U.S.C. 1452(e))) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Defense Logistics Agency to furnish procurement technical assistance to business entities.

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995)

(a) The Contractor shall not deny consideration for a subcontract award under this contract to a potential subcontractor subject to on-site inspection under the INF Treaty, or a similar treaty, solely or in part because of the actual or potential presence of Soviet inspectors at the subcontractor's facility, unless the decision is approved by the Contracting Officer.

(b) The Contractor shall incorporate this clause, including this paragraph (b), in all solicitations and contracts exceeding the simplified acquisition threshold in part 13 of the Federal Acquisition Regulation, except those for commercial items.

(End of clause)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of $25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

(End of clause)

252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data - Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data - Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

(End of clause)

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) *Definitions. Historically black colleges and universities,* as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

(b) Except for company or division-wide commercial items subcontracting plans, the term *small disadvantaged business,* when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(End of clause)

252.223-7001 HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")	ACT
_____	_____
_____	_____

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

(1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

(2) "Toxic or hazardous materials" means:

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

(End of clause)

252.225-7012 PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (FEB 2003)

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

(1) Component means any item supplied to the Government as part of an end product or of another component.

(2) End product means supplies delivered under a line item of this contract.

(b) The Contractor shall deliver under this contract only such of the following items, either as end products or components, that have been grown, reprocessed, reused, or produced in the United States, its possessions, or Puerto Rico:

(1) Food.

(2) Clothing.

(3) Tents, tarpaulins, or covers.

(4) Cotton and other natural fiber products.

(5) Woven silk or woven silk blends.

(6) Spun silk yarn for cartridge cloth.

(7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics.

(8) Canvas products.

(9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles).

(10) Any item of individual equipment (Federal Supply Class 8465) manufactured from or containing fibers, yarns, fabrics, or materials listed in this paragraph (b).

(c) This clause does not apply--

(1) To items listed in section 25.104(a) of the Federal Acquisition Regulation (FAR), or other items for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;

(2) To end products incidentally incorporating cotton, other natural fibers, or wool, for which the estimated value of the cotton, other natural fibers, or wool--

(i) Is not more than 10 percent of the total price of the end product; and (ii) Does not exceed the simplified acquisition threshold in FAR part 2;

(3) To foods that have been manufactured or processed in the United States, its possessions, or Puerto Rico, regardless of where the foods (and any component if applicable) were grown or produced, except that this clause does apply to fish, shellfish, or seafood manufactured or processed in the United States and fish, shellfish, or seafood contained in foods manufactured or processed in the United States;

(4) To chemical warfare protective clothing produced in the countries listed in subsection 225.872-1 of the Defense FAR Supplement; or

(5) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if--

(i) The fabric is to be used as a component of an end product that is not a textile product. Examples of textile products, made in whole or in part of fabric, include--

(A) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);

(B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs/apparel/findings/ tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;

(C) Upholstered seats (whether for household, office, or other use); and

(D) Parachutes (Federal Supply Class 1670); or

(ii) The fibers and yarns are para-aramid fibers and yarns manufactured in the Netherlands.

(End of clause)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

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

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).

(2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.

(b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies 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. Sec 2407(a) prohibits a United States person from taking.

(End of clause)

252.226-7001 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES-DOD CONTRACTS (SEP 2001)

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

“Indian” means any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any “Native” as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

“Indian organization” means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C. Chapter 17.

“Indian-owned economic enterprise” means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

“Indian tribe” means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1452 (c).

“Interested party” means a contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contract shall use its best efforts to give Indian organizations and Indian-owned economic enterprises the maximum practicable opportunity to participate in the subcontracts it awards, to the fullest extent consistent with efficient performance of the contract.

(c) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless and interested party challenges its status or the Contracting Officer has independent reason to question that status.

(d) In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs, Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street NW, MS-2626-MIB, Washington, DC 20240-4000. The BIA will determine the eligibility and will notify the Contracting Officer. No incentive payment will be made--

(1) Within 59 working days of subcontract award;

(2) While a challenge is pending; or

(3) If a subcontractor is determined to be an ineligible participant.

(e)(1) The Contractor, on its own behalf or on behalf of a subcontractor at any tier, may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee contract.

(iii) The target cost and ceiling price of a fixed-price incentive contract.

(iv) The price of a firm-fixed-price contract.

(2) The amount of the adjustment that may be made to the contract is 5 percent of the estimated cost, target cost, or firm-fixed price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(3) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(4) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor.

(5) If the Contractor requests and receives an adjustment on behalf of a subcontractor, the Contractor is obligated to pay the subcontractor the adjustment.

(f) The Contractor shall insert the substance of this clause, including this paragraph (f), in all subcontracts that--

(1) Are for other than commercial items; and

(2) Are expected to exceed the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation.

(End of clause)

252.227-7022 GOVERNMENT RIGHTS (UNLIMITED) (MAR 1979)

The Government shall have unlimited rights, in all drawings, designs, specifications, notes and other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Contractor. The Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works on the request of the Contracting Officer.

(End of clause)

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

(a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

(End of clause)

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.242-7004 MATERIAL MANAGEMENT AND ACCOUNTING SYSTEM (SEP 1996)

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

(1) Material management and accounting system means the Contractor's system or systems for planning, controlling, and accounting for the acquisition, use, issuing, and disposition of material. Material management and accounting systems may be manual or automated. They may be stand-alone systems or they may be integrated with planning, engineering, estimating, purchasing, inventory, accounting, or other systems.

(2) Valid time-phased requirements means material which is--

Needed to fulfill the production plan, including reasonable quantities for scrap, shrinkage, yield, etc.; and

(ii) Charged/billed to contracts or other cost objectives in a manner consistent with the need to fulfill the production plan.

(3) Contractor means a business unit as defined in section 31.001 of the Federal Acquisition Regulation (FAR).

(b) General. The Contractor agrees to--

(1) Maintain a material management and accounting system (MMAS) that--

(i) Reasonably forecasts material requirements;

(ii) Ensures that costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements; and

(iii) Maintains a consistent, equitable, and unbiased logic for costing of material transactions.

(2) Assess its MMAS and take reasonable action to comply with the MMAS standards in paragraph (f) of this clause.

(c) Applicability. Paragraphs (d) and (e) of this clause apply only if the Contractor--

(1) Is a large business; and

(2) Received, in its fiscal year preceding award of this contract, Department of Defense prime contracts or subcontracts, and their modifications totaling--

(i) $70 million or more; or

(ii) $30 million or more (but less than $70 million), and is notified in writing by the Contracting Officer that paragraphs (d) and (e) apply.

(d) Disclosure, demonstration, and maintenance requirements. (1) The Contractor shall--

Disclose its MMAS to the Administrative Contracting Officer in writing; and

(ii) If requested by the Administrative Contracting Officer, demonstrate that the MMAS conforms to the standards in paragraph (f) of this clause.

(2) An MMAS disclosure is adequate when the Contractor has provided the Administrative Contracting Officer with documentation which--

(i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in its MMAS; and

(ii) Provides sufficient detail for the Government to reasonably make an informed judgment regarding the adequacy of the MMAS.

(3) An MMAS demonstration is adequate when the Contractor has provided the Administrative Contracting Officer--

(i) Sufficient evidence to demonstrate the degree of compliance of its MMAS with the standards at paragraph (f) of this clause; and

(ii) Identification of any significant deficiencies, the estimated cost impact of the deficiency, and a comprehensive corrective action plan.

(4) The Contractor shall disclose significant changes in its MMAS to the Administrative Contracting Officer within 30 days of implementation.

(5) If the contractor desires the Government to protect such information as privileged or confidential, the Contractor shall--

(i) Notify the Government representative to whom the information is submitted, i.e., the ACO, or the auditor; and

(ii) Ensure an appropriate legend is on the face of the document(s) at the time of submission.

(e) Deficiencies. (1) If the Contractor receives a report which identifies deficiencies in its MMAS, the Contractor agrees to respond as follows--

(i) If the Contractor agrees with the report findings and recommendations, the Contractor shall--

(A) Within 30 days, state its agreement in writing; and

(B) Within 60 days, correct the deficiencies or submit a corrective action plan.

(ii) If the Contractor disagrees with the report findings and recommendations, the Contractor shall, within 30 days, state its rationale for each area of disagreement.

(2) The Administrative Contracting Officer shall evaluate the Contractor's response and notify the Contractor of the--

(i) Determination concerning remaining deficiencies;

(ii) Adequacy of any proposed or completed corrective action plan; and

(iii) Need for any new or revised corrective action plan.

(f) MMAS standards. MMAS systems shall have adequate internal accounting and administrative controls to ensure system and data integrity, and comply with the following:

(1) Have an adequate system description including policies, procedures, and operating instructions which comply with the Federal Acquisition Regulation and Defense FAR Supplement;

(2) Ensure that costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements as impacted by minimum/economic order quantity restrictions--

(i) A 98 percent bill of material accuracy and a 95 percent master production schedule accuracy are desirable as a goal in order to ensure that requirements are both valid and appropriately time-phased.

(ii) If systems have accuracy levels below these, the Contractor shall demonstrate that--

(A) There is no material harm to the Government due to lower accuracy levels; and

(B) The cost to meet the accuracy goals is excessive in relation to the impact on the Government;

(3) Provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions such as excess/residual inventory as soon as known;

(4) Provide audit trails and maintain records (manual and those in machine readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired;

(5) Establish and maintain adequate levels of record accuracy, and include reconciliation of recorded inventory quantities to physical inventory by part number on a periodic basis. A 95 percent accuracy level is desirable. If systems have an accuracy level below 95 percent, the Contractor shall demonstrate that--

(i) There is no material harm to the Government due to lower accuracy levels; and

(ii) The cost to meet the accuracy goal is excessive in relation to the impact on the Government;

(6) Provide detailed descriptions of circumstances which will result in manual or system generated transfers of parts;

(7) Maintain a consistent, equitable, and unbiased logic for costing of material transactions--

(i) The Contractor shall maintain and disclose written policies describing the transfer methodology and the loan/pay-back technique.

(ii) The costing methodology may be standard or actual cost, or any of the inventory costing methods in 48 CFR 9904.411-50(b). Consistency shall be maintained across all contract and customer types, and from accounting period to accounting period for initial charging and transfer charging.

(iii) The system should transfer parts and associated costs within the same billing period. In the few instances where this may not be appropriate, the Contractor may accomplish the material transaction using a loan/pay-back technique. The “loan/pay-back technique” means that the physical part is moved temporarily from the contract, but the cost of the part remains on the contract. The procedures for the loan/pay-back technique must be approved by the Administrative Contracting Officer. When the technique is used, the Contractor shall have controls to ensure--

(A) Parts are paid back expeditiously;

(B) Procedures and controls are in place to correct any overbilling that might occur;

(C) Monthly, at a minimum, identification of the borrowing contract and the date the part was borrowed; and

(D) The cost of the replacement part is charged to the borrowing contract;

(8) Where allocations from common inventory accounts are used, have controls (in addition to those in paragraphs (b)(2) and (7) of this clause) to ensure that--

(i) Reallocations and any credit due are processed no less frequently than the routine billing cycle;

(ii) Inventories retained for requirements which are not under contract are not allocated to contracts; and

(iii) Algorithms are maintained based on valid and current data;

(9) Notwithstanding FAR 45.505-3(f)(1)(ii), have adequate controls to ensure that physically commingled inventories that may include material for which costs are charged or allocated to fixed-price, cost-reimbursement, and commercial contracts do not compromise requirements of any of the standards in paragraphs (f)(1) through (8) of this clause. Government furnished material shall not be--

(i) Physically commingled with other material; or

(ii) Used on commercial work; and

(10) Be subjected to periodic internal audits to ensure compliance with established policies and procedures.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

252.244-7000 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DOD) (MAR 2000)

In addition to the clauses listed in paragraph (c) of the Subcontracts for Commercial Items and Commercial Components clause of this contract (Federal Acquisition Regulation 52.244-6), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014 Preference for Domestic Specialty Metals, Alternate I (10 U.S.C. 2241 note).

252.247-7023 Transportation of Supplies by Sea (10 U.S.C. 2631).

252.247-7024 Notification of Transportation of Supplies by Sea (10 U.S.C. 2631).

(End of clause)

252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (MAY 2002)

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

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information:

(1) Prime contract number;

(2) Name of vessel;

(3) Vessel flag of registry;

(4) Date of loading;

(5) Port of loading;

(6) Port of final discharge;

(7) Description of commodity;

(8) Gross weight in pounds and cubic feet if available;

(9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor shall provide with its final invoice under this contract a representation that to the best of its knowledge and belief--

(1) No ocean transportation was used in the performance of this contract;

(2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY

_____
TOTAL_____

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:

(1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

Section 00800 - Special Contract Requirements

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 five (5) 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 *** **See construction time per Section 00010, Bid Schedule**. **Construction time will be determined at time of award between the Government and the awardee.*** * 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 $981.00 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)

52.211-13 TIME EXTENSIONS (SEP 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor anytime during construction within 30 days of contract completion. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.219-4002 REPORTING REQUIREMENTS--SUBCONTRACTING PLAN (CESAD-CT JUL 1993)

(a) Retainage will be withheld from progress payments in an amount sufficient to protect the Government's ability to assess Liquidated Damages in accordance with FAR clause 52.219-0016 for failure to submit timely SF 294 and SF 295 Reports. The amount of retainage will be determined in accordance with the following formula:
(b) Total dollar amount proposed for subcontracting to small business multiplied by percentage of actual progress on the contract, up to a maximum of 10% of the given progress payment, shall be withheld from the next progress payment due after a contractor fails to submit a required report. If one or more reports have been submitted before such failure, formula for determining the amount of retainage will be adjusted by deducting any amounts reported as subcontracted to small business from the total dollar amount proposed to be subcontracted and the difference multiplied by the percent of actual progress, up to a maximum of 10% of the given progress payment.
(End of clause)

52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (AUG 2000)

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

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

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

(b) The Contractor, on completion of this contract, shall--

(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of postconsumer material content; and

(2) Submit this estimate to __the district:

US Army Corps of Engineers, CESAS-CT-C
ATTN: Nora Louise Jarrell, Contract Specialist
100 West Oglethorpe Ave.
Savannah, GA 31402

(End of clause)

52.223-4002 U.S. ARMY CORPS OF ENGINEERS SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1

This paragraph applies to contracts and purchase orders that require the contractor to comply with EM 385-1-1 (e.g., contracts that include the Accident Prevention clause at FAR 52.236-13 and/or other safety provisions). EM 385-1-1 and its changes are available at http://www.hq.usace.army.mil. (At the HQ homepage, select Safety and Occupational Health.) The Contractor shall be responsible for complying with the current edition and all changes posted on the web through the date that is 10 calendar days prior to the date offers are due. If the solicitation is amended to extend the time set for receipt of offers, the 10 calendar days rule stated above shall be applied against

the amended date. (For example, if offers are due on 10 April, all changes posted on or before 31 March shall apply to the contract. If the time for receipt of offers is extended from 10 April to 20 April, all changes posted on or before 10 April shall apply to the contract.)

52.228-4001 RECOMMENDED INSURANCE COVERAGE – MAY 2000

The Design-Build Contractor's attention is invited to the contract requirements concerning "RESPONSIBILITY OF THE CONTRACTOR FOR DESIGN' and 'WARRANTY OF CONSTURCTION WORK". These requirements vest in the Contractor complete responsibility for the professional quality, technical accuracy, and coordination of all design, drawings, specifications and other work or materials furnished by his in-house or consultant forces. The Design-Build Contractor must correct and revise any errors or deficiencies in his work, notwithstanding any review, approval, acceptance or payment by the Government. The Contractor must correct and change any work resulting from his defective design at no additional cost to the Government. The requirements further stipulate that the Design-Build Contractor shall be liable to the Government for the damages to the Government caused by negligent performance. Though it is not am mandatory requirement, this is to recommend that the Design-Build Contractor investigate and obtain appropriate insurance coverage for such liability protection.

(End of Clause)

52.228-4002 REQUIRED INSURANCE (FEB 1987 SAS) (Ref. FAR 28.307)

(a) The Contractor shall procure and maintain during the entire period of his performance under this contract the following minimum insurance:

Comprehensive and Employer's Liability Insurance in the amount required by the State law in which the work is to be performed under this contract.

Comprehensive General Liability Insurance in an amount not less than $500,000 per accident.

Automobile Liability Insurance: $200,000 per person and $500,000 per accident for bodily injury liability and $20,000 property damage liability.

(b) Prior to the commencement of work hereunder, the Contractor shall furnish to the Contracting Officer a certificate or written statement of the above-required insurance. The policies evidencing required insurance shall contain an endorsement to the effect that cancellation, or any material change in the policies adversely affecting the interests of the Government in such insurance, shall not be effective for such period as may be prescribed by the laws of the State in which this contract is to be performed and in no event less than 30 days after written notice thereof to the Contracting Officer.

(c) The Contractor agrees to insert the substance of this clause, including this subparagraph (c), in all subcontracts hereunder.

(End of clause)

52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
MAR 1995)--EFARS

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and

operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region __IV__. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

52.232-4007 ACCOUNTING AND APPROPRIATION DATA (APR 1989 CESAS-RM)

9730500.5600 308 8021 1 P1000 3230 S09133

(End of clause)

52.232-4008 DESIGNATED BILLING OFFICE (APR 1989 CESAS-RM)

Invoices will be mailed to: North Carolina Air Force & Special Operations Area Office
Bldg. D-2507, Ardennes Street
Fort Bragg, NC 29307-0247

(End of Clause)

52.232-4009 DESIGNATED PAYMENT OFFICE (AUG 1998 CESAS-RM-F)

Payment will be made by:
U.S. Army Corps of Engineers Finance Center
ATTN: CEFC-AO-P
5720 Integrity Drive
Millington, TN 38054-5005

(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 (20) 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)

52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984)

(a) The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

(End of clause)

52.236-4001 DESIGN-BUILD CONTRACT-ORDER OF PRECEDENCE – AUG 1997

(a) The contract includes the standard contract clauses and schedules current at the time of award. It also entails: (1) the solicitation in its entirety, including all drawings, cuts and illustrations, and any amendments during proposal evaluation and selection, and (2) the successful Offeror's accepted proposal. The contract constitutes and defines the entire agreement between the Contractor and the Government. No documentation shall be omitted which in any ways bears upon the terms of that agreement.

(b) In the event of conflict or inconsistency between any of the provisions of the various portions of this contract, precedence shall be given in the following order:

(1) Betterments: Any portions of the Offeror's proposal which both meet and exceed the provisions of the solicitation

(2) The provisions of the solicitation. (see also Contract Clause: SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION.)

(3) All other provisions of the accepted proposal.

(4)Any design products, including but not limited to plans, specifications, engineering studies and analyses, shop drawings, equipment installation drawings, etc. These are "deliverables" under the contract and are not part of the contract itself. Design products must conform to all provisions of the contract, in the order of precedence herein.

(End of Clause)

52.236-4003 RESPONSIBILITY OF THE CONTRACTOR FOR DESIGN – FEB 2000

(ii) The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other non-construction services furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiency in its designs, drawings, specifications, and other non-construction services and perform any necessary rework or modifications, including any damage to real or personal property, resulting from the design error or omission.

(iii) Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract. The Contractor shall be and remain liable to the Government in accordance wit applicable law for all damages to the Government caused by the Contractor's negligent performance of any of these services furnished under this contract.

(iv) The rights and remedies of the Government provided for under this contract are in addition to any other rights and remedies provided by law

(v) If the Contractor is comprised of more than one legal entity shall be jointly and severally liable thereunder.

(End of Clause)

52.236-4004 SEQUENCE OF DESIGN-CONSTRUCTION – AUG 1997

(a) After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submission requirements as covered under Division 01 General Requirements, and obtain Government review of each submission. 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 Contracting Officer, the initial submission failed to meet the minimum quality requirements as set forth in the Contract.

(b) 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.

(c) No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

(End of Clause)

52.236-4005 SEQUENCE OF DESIGN- CONSTRUCTION (FAST TRACK) – AUG 1997

(1) After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submissions requirements as covered under Division 01 General 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 Contracting Officer, the initial submission failed to meet the minimum quality requirements as set forth in the Contract.

(2) If the Government allows the Contractor to proceed with the 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) No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

(End of Clause)

52.236-4006 CONSTRUCTOR'S ROLE DURING DESIGN – JUN 1998

The Contractor's construction management key personnel shall be actively involved during the design process to effectively integrate the design and construction requirements of this contract. In addition to the typical required construction activities, the constructor's involvement includes, but is not limited to actions such as: integrating the design schedule into the Master Schedule to maximize the effectiveness of fast-tracking design and construction (within the limits allowed in the contract), ensuring constructability and economy of the design, integrating the shop drawing and installation drawing process into the design, executing the material and equipment acquisition programs to meet critical schedules, effectively interfacing the construction QC program with the design QC program, and maintaining and providing the design team with accurate, up-to-date redline and as-built documentation. The Contractor shall require and manage the active involvement of key trade subcontractors in the above activities.

(End of Clause)

52.236-4007 TRAINING – FEB 2000

The Contractor shall provide operational and maintenance training for all systems furnished under this contract for the operating and maintenance personnel. The system manufacturer shall conduct the training, where feasible. All operation and maintenance manuals shall be submitted and approved prior to conducting the training, where feasible. All operation and maintenance manuals shall be submitted and approved prior to conducting the training and shall be used during training. The Contractor shall video tape the training session on VHS tapes and provide the tapes to the Government.

(End of Clause)

52.236-4008 DESIGN CONFERENCES – AUG 1997

(a) Pre-Work: As part of the Pre-Work Conference conducted after contract award, key representatives of the Government and the Contractor will review the design submission and procedures specified herein, discuss the preliminary design schedule and provisions for phase completion of the D-B documents with construction activities (fast tracking), as appropriate, meet with Corps of Engineers Design Review personnel and key Using Agency points of contract and any other appropriate pre-design discussion items.

(b) Design Charette: After award of the contract, the Contractor shall visit the site and conduct extensive interviews, and problem solving discussions with the individual users, base personnel, Corps of Engineers personnel to acquire

all necessary site information, review user options, and discuss user needs. The Contractor shall document all discussions. The design shall be finalized as direct result of these meetings.

(c) Design Review Conferences: Review conferences will be held on base for each design submittal. The Contractor will bring the personnel that developed the design submittal to the review conference. The conferences will take place the week after the review is complete.

(End of Clause)

52.236-4009 PARTNERING – FEB 2000

In order to most effectively accomplish this contract, the Government proposes to form a partnership with the Contractor to develop a cohesive building team. It is anticipated that this partnership would involve the user, Ft Bragg PWBC, the Contractor, primary subcontractors and designers and the Corps of Engineers. This partnership would strive to develop a cooperative management team drawing on the strengths of each team member in an effort to achieve quality project within budget and on schedule. This partnership would be bilateral in membership and participation will be totally voluntary. Any cost associated with effectuating this partnership, excluding travel and lodging cost of Government personnel, will be borne by <<SELECT AN OPTION TO SPECIFY: The Contractor/each party/the Government>>, The partnering meetings shall be held in Fayettevill, NC.

52.236-4013 CONTRACTOR-PREPARED NETWORK ANALYSIS SYSTEM
(January 2002 SAS) (Ref. DFARS 236.273)

The progress chart to be prepared by the contractor pursuant to FAR 52.236-15, Schedules for Construction Contracts, shall utilize the Critical Path Method (CPM) of network calculation. (See Attachment 1 to Section 00800).

52.236-4015 PRECONSTRUCTION CONFERENCE (OCT 1988 SAS) (Ref. FAR 36.305)

(a) A preconstruction conference will be arranged by the Area/Resident Engineer after award of contract and before commencement of work. The Area/Resident Engineer will notify the Contractor of the time and date set for the meeting. At this conference, the Contractor shall be oriented with respect to Government procedures and line of authority, contractual, administrative, and construction matters.

(b) The Contractor shall bring to this conference, in completed form, a Certificate of Insurance, plus the following items in either completed or draft form:

Accident Prevention Plan (5 copies)
(use format shown in Attachment 1 to SECTION 00800)
Quality Control Plan (5 copies)
Letter Appointing Superintendent
Transmittal Register
Power of Attorney and Certified Copy of Resolution
Network Analysis System, when applicable
List of Subcontractors

(c) A letter of record will be written documenting all items discussed at the conference, and a copy will be furnished by the Area/Resident Engineer to all in attendance.

(End of clause)

52.236-4016 VIDEO TAPING OPERATING AND MAINTENANCE INSTRUCTIONS (MAR 1987 SASCD-SQ)

For all of the operating and maintenance instructions which are required in the contract specifications, the Contractor shall video tape these instructions as they are presented to the Government representatives. These tapes shall provide clear and understandable detailed instructions for all items required by the contract specifications. The tapes shall be prepared by an experienced video director/cameraman using good quality half-inch VHS color tape with correct sound equipment, lighting, and backdrop. The sound and picture quality shall be high and subject to approval by the Contracting Officer. The tapes are intended as followup training for other Government representatives at a later date. They must be suitable for this purpose. The Contractor shall be responsible for the contents of the instructions and shall verify that they are correct prior to taping. The Contractor may submit individual equipment manufacturer's instructional tape(s), provided they meet the above qualifications and cover the actual equipment that is installed. The tape(s) shall be for specific equipment identified by contents and contract name and number. The Contractor shall submit one copy of the tape(s) to the Contracting Officer for review and approval. Unacceptable tapes are to be corrected by the Contractor as indicated by the Contracting Officer at no additional cost to the Government.

(End of clause)

52.236-4017 SUBMITTAL OF MODIFICATION COST ESTIMATE PROPOSALS (MAR 1992 SAS)
(Ref. DFARS 52.236-7000)

When submittals of Cost Estimate Proposals are required for additions or deletions to work under this contract by modification, the Contractor shall use DA Form 5418-R titled "Cost Estimate Analysis" (see Attachment 1 to SECTION 00800). A separate assemblage will be prepared for submittal by each trade affected by the proposed work.
(End of clause)

52.244-4001 KEY PERSONNEL, SUBCONTRACTORS AND OUTSIDE ASSOCIATES OR CONSULTANTS – AUG 1997

In connection with the services covered by this contract, any in-house personnel, subcontractors, and outside associates or consultants will be limited to the individuals or firms that were specifically identified and agreed to during negotiations. The contractor shall obtain the Contracting Officer’s written consent before making any substitution for these designated in-house personnel, subcontractors, associates, or consultants.

(End of Clause)

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

(End of clause)

52.246-4001 WARRANTY OF CONSTRUCTION WORK – AUG 1997

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (1) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall contain for a period of year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of –

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, or workmanship.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall –

(1) Obtain all warranties that would be given in normal commercial practice:

(2) Require all warranties to be executed, in writing for the benefit of the Government, if directed by the Contracting Officer; and

(3)Enforce warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of Clause)

52.248-4003 VALUE ENGINEERING AFTER AWARD

54 In reference to Contract Clause 52.248-3, "Value Engineering – Construction", the Government may refuse to entertain a "Value Engineering Change Proposal" (VECP) for those "performance oriented" aspects of the Solicitation documents which were addressed in the Contractor's accepted contract proposal and which were evaluated in competition with other offerors for award of this contract.

55 The Government may consider a VECP for those "prescriptive" aspects of the Solicitation documents, not addressed in the Contractor's accepted contract proposal or addressed but evaluated only for minimum conformance with the Solicitation requirements.

56 For purposes of this clause, the term "performance oriented" refers to those aspects of the design criteria or other contract requirements which allow the Offeror or Contractor certain latitude, choice of and flexibility to propose in its accepted contract offer a choice of design, technical approach, design solution, construction approach or other approach to fulfil the contract requirements. Such requirements generally tend to be expressed in terms of functions to be performed, performance required or essential physical characteristics, without dictating a specific process or specific design solution for achieving the desired result.

57 In contrast, for purposes of this clause, the term "prescriptive" refers to those aspects of the design criteria or other Solicitation requirements wherein the Government expressed the design solution or other requirements in terms of specific materials, approaches, systems and/or processes to be used. Prescriptive aspects typically allow the Offerors little or no freedom in the choice of design approach, materials, fabrication techniques, methods of installation or other approach to fulfill the contract requirements.

(End of Clause)

52.249-4001 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (APR 1991 OCE)
(Ref. FAR 52.249-10)

(a) This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the contract clause entitled DEFAULT (FIXED-PRICE CONSTRUCTION). In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

(1) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

(2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

(b) The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORKDAYS BASED ON 5-DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
10	9	6	4	4	6	8	7	4	4	5	9

(c) Upon acknowledgment of the Notice to Proceed and continuing through-out the contract, the Contractor will record on the daily Contractor Quality Control report the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled workday. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day in each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph (b) above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather workdays, and issue a modification in accordance with the contract clause entitled DEFAULT (FIXED PRICE CONSTRUCTION).
(End of clause)

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS - EFARS

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:
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. 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)

ATTACHMENT 1 TO SECTION 00800

LIST OF ATTACHMENTS

1. Contract Drawings:

   File No. 610-11-01, Sheets 1 through 13

2. Rates of Wages:

3. Formats:

   Sign

   Corps of Engineers Logo

   Accident Prevention Plan (Ref. FAR 52.236-13 and EM 385-1-1)

   Construction Quality Control Report

   Small and Disadvantaged Business Subcontracting Plan

   Weekly Temporary Electrical Inspection

4. Minimum Standard for Temporary Electrical Service (Ref. FAR 52.236-14)

5. Forms:

   SAS Form 9 - Activity Hazard Analysis

   SAD Form 1666a-R - Safety Checklist for Crawler, Truck & Wheel Mounted Cranes

   SAD Form 1666b-R - Safety Checklist for Portal, Tower, and Pillar Cranes

   SAD Form 1666c-R - Safety Checklist for Rigging

   SAD Form 1666d-R - Safety Checklist for Motor Vehicles, Trailers and Trucks

   SAD Form 1666e-R - Safety Checklist for Crawler Tractors and Dozers

   SAD Form 1666f-R - Safety Checklist for Scrapers, Motor Graders, and Other Mobile Equipment

   SAD Form 1666g-R - Safety Checklist for Material Hoists

   SAD Form 1666h-R - Safety Checklist for Earth Drilling Equipment

   ENG Form 4025 - Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificates of Compliance

DA Form 5418-R - Cost Estimate Analysis

DD Form 1354 - Transfer and Acceptance of Military Real Property
[Applicable to Fort Benning projects when referenced in Construction Schedule Restraints, Section 01501.]

Standard Form LLL-A - Disclosure of Lobbying Activities

FB (ENG) Form 51 - Real Property Inventory and BIS Worksheet

FB Form 1605 - Directorate of Engineering and Housing Excavation Permits

Landfill Permit Application

Ft. Bragg Asbestos Removal, Transportation, and Disposal

Real Property Inventory

-- - --

General Decision Number NC020032

General Decision Number **NC020032**
Superseded General Decision No. NC010032
State: **North Carolina**
Construction Type:
BUILDING
County(ies):
CUMBERLAND
BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories).

Modification Number	Publication Date
0	03/01/2002

COUNTY(ies):
CUMBERLAND
SUNC1027A 10/24/1994

	Rates	Fringes
BRICKLAYERS/BLOCKLAYERS	12.50	
CARPENTERS (Including drywall hanging, acoustical tile installation and batt insulation	9.08	
CEMENT MASONS/CONCRETE FINISHERS	8.43	
ELECTRICIANS	9.71	
GLAZIERS	8.77	
HVAC MECHANIC (HVAC pipe only)	9.26	
INSULATORS (pipe)	10.42	.63
IRONWORKERS, STRUCTURAL	10.76	
LABORERS:		
Unskilled	6.23	
PAINTERS (Brush)	7.90	.04
PLUMBERS	10.28	
ROOFERS	6.75	
SHEET METAL WORKERS (Including HVAC Duct Work)	9.36	
SOFT FLOOR LAYERS/CARPET LAYERS	12.00	
TRUCK DRIVERS	7.10	

WELDERS - receive rate prescribed for craft performing operation to which welding is incidential.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:
* an existing published wage determination

* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

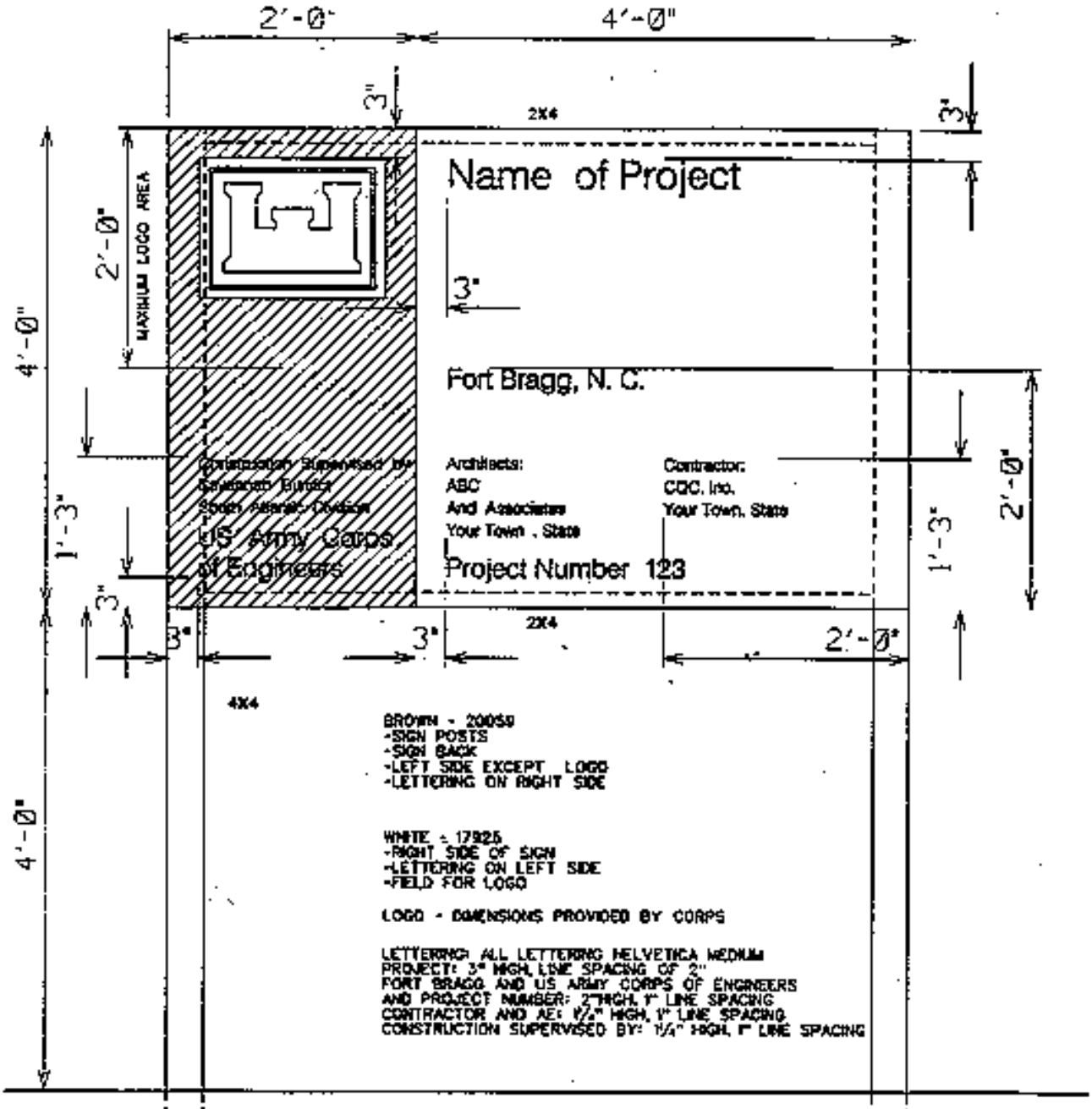
The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

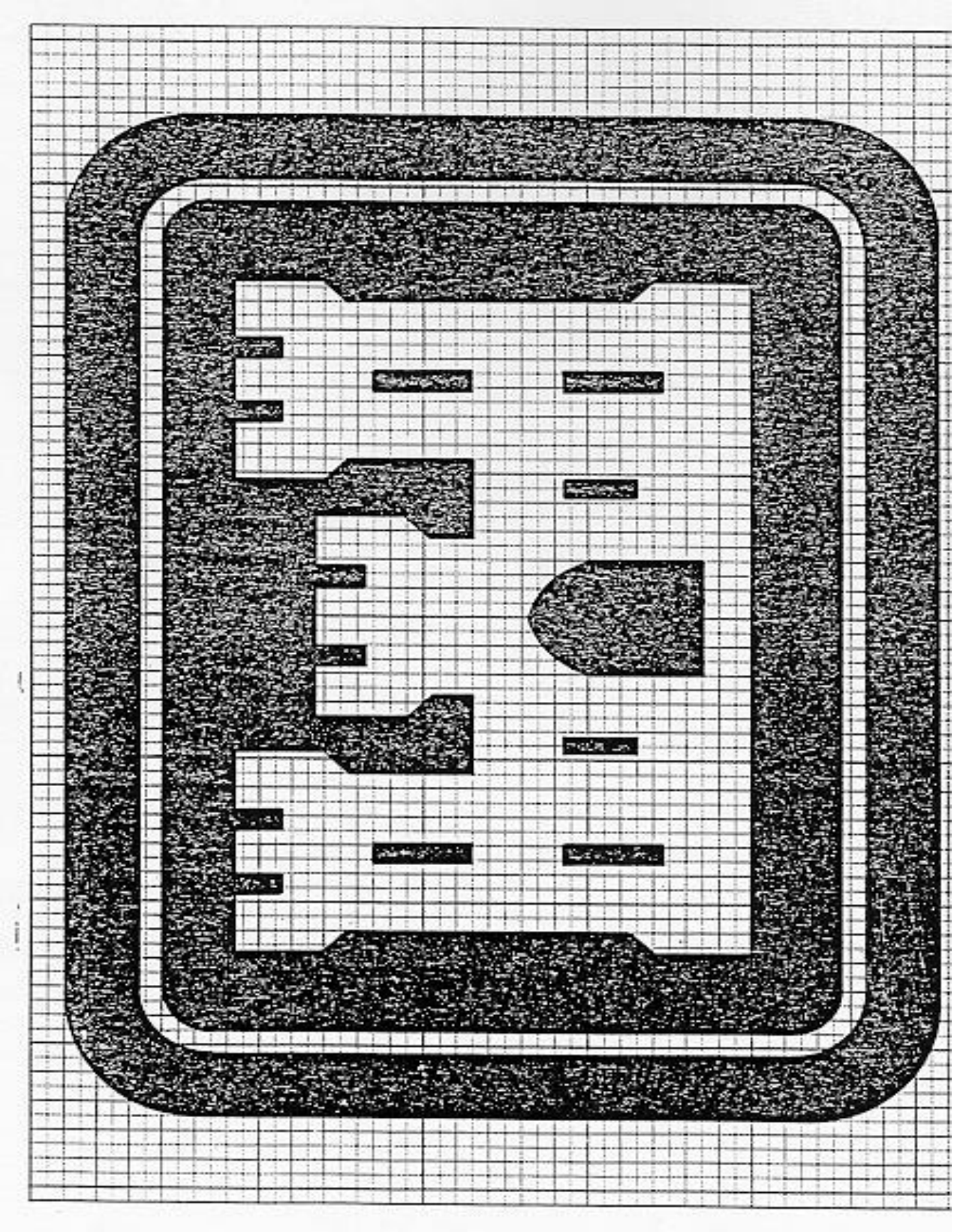
Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION



PROJECT SIGN FOR SAVANNAH MANAGED DESIGNS



CORPS OF ENGINEERS LOGO
HALF SIZE

Last revised 9 May 97

FORMAT
(Ref. FAR 52.236-13 and EM 385-1-1 dated 3 Sep 96)
ACCIDENT PREVENTION PLAN

MINIMUM BASIC OUTLINE FOR ACCIDENT PREVENTION PLAN

An accident prevention plan is, in essence, a safety and health policy and program document. The following areas are typically addressed in an accident prevention plan, but a plan shall be job specific and shall also address any unusual or unique aspects of the project or activity for which it is written. The accident prevention plan shall interface with the employer's overall safety and health program. Any portions of the overall safety and health program that are referenced in the accident prevention plan shall be included as appropriate.

1. SIGNATURE SHEET. Title, signature, and phone number of the following:

a. Plan preparer (corporate safety staff person, QC);

b. Plan approval, e.g., owner, company president, regional vice president (HTRW activities require approval of a Certified Industrial Hygienist (or qualified Industrial Hygiene personnel for in-house USACE activities; a Certified Safety Professional (or qualified USACE safety personnel for in-house work) may approve the plan for operations involving UST removal where contaminants are known to be petroleum, oils, or lubricants);

c. Plan concurrence (provide concurrence of other applicable corporate and project personnel (contractor)), e.g., Corporate Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional, project QC. The plan will be developed by qualified personnel (plan preparer) and will be signed by a competent person (plan concurrence) and a representative of the prime contractor's project management team (plan approval).

2. BACKGROUND INFORMATION. List the following:

a. Contractor;

b. Contract number;

c. Project name;

d. Brief project description, description of work to be performed, and location (map);

e. Contractor accident experience (provide information such as EMR, OSHA 200 Forms, corporate safety trend analyses);

f. Listing of phases of work and hazardous activities requiring activity hazards analyses.

3. STATEMENT OF SAFETY AND HEALTH POLICY. (In addition to the corporate policy statement, a copy of the corporate safety program may provide a

significant portion of the information required by the accident prevention plan.)

4. RESPONSIBILITIES AND LINES OF AUTHORITIES.

a. Identification and accountability of personnel responsible for safety - at both corporate and project level (contracts specifically requiring safety or industrial hygiene personnel should include a copy of their resume - the District Safety and Occupational Health Office will review the qualifications for acceptance). For items in EM 385-1-1 which require the use of a competent person or a qualified person, the contractor is to maintain documentation demonstrating the competence or qualification of that individual.

b. Lines of authority

5. SUBCONTRACTORS AND SUPPLIERS. Provide the following:

a. Identification of subcontractors and suppliers (if known);

b. Means for controlling and coordinating subcontractors and suppliers;

c. Safety responsibilities of subcontractors and suppliers.

6. TRAINING.

a. List subjects to be discussed with employees in safety indoctrination.

b. List mandatory training and certifications which are applicable to this project (e. g., explosive actuated tools, confined space entry, crane operator, diver, vehicle operator, HAZWOPER training and certification, personal protective equipment) and any requirements for periodic retraining/recertification.

c. Identify requirements for emergency response training.

d. Outline requirements (who attends, when given, who will conduct etc.) for supervisory and employee safety meetings.

e. Identify location at the project site where the records will be maintained.

7. SAFETY AND HEALTH INSPECTIONS. Provide details on:

a. Who will conduct safety inspections (e.g., project manager, safety professional, QC, supervisors, employees, etc.), when inspections will be conducted, how the inspections will be recorded, deficiency tracking system, follow-up procedures, etc;

b. Any external inspections/certifications which may be required (e.g., Coast Guard).

8. SAFETY AND HEALTH EXPECTATIONS, INCENTIVE PROGRAMS, AND COMPLIANCE.

a. The company's written safety program goals, objectives, and accident experience goals for this contract should be provided.

b. A brief description of the company's safety incentive programs (if any) should be provided.

c. Policies and procedures regarding noncompliance with safety requirements (to include disciplinary actions for violation of safety requirements) should be identified.

d. Provide written company procedures for holding managers and supervisors accountable for safety.

9. ACCIDENT REPORTING. The contractor shall identify who shall complete the following, how, and when:

a. Exposure data (man-hours worked);

b. Accident investigations, reports and logs;

c. Immediate notification of major accidents.

10. MEDICAL SUPPORT. Outline on-site medical support and off-site medical arrangements.

11. PERSONAL PROTECTIVE EQUIPMENT. Outline procedures (who, when, how) for conducting hazard assessments and written certifications for use of personal protective equipment.

12. PLANS (PROGRAMS, PROCEDURES) REQUIRED BY THE SAFETY MANUAL (as applicable).

a. Hazard communication program (01.B.04);

b. Emergency response plans:
- procedures and tests (01.E.01)
- spill plans (01.E.01, 06.A.02)
- fire fighting plan (01.E.01, 19.A.04)
- posting of emergency telephone numbers (01.E.04)
- wildfire prevention plan (09.K.01)
- man overboard/abandon ship (19.A.04)

c. Layout plans (04.A.01);

d. Respiratory protection plan (05.E.01);

e. Health hazard control program (06.A.02);

f. Lead abatement plan (06.B.05 & specifications);

g. Asbestos abatement plan (06.B.05 & specifications);

h. Abrasive blasting (06.H.01);

i. Confined space (06.1);

j. Hazardous energy control plan (12.A.07);

k. Critical lift procedures (16.C.17);

l. Contingency plan for severe weather (19.A.03);

m. Access and haul road plan (22.1.10);

n. Demolition plan (engineering and asbestos surveys) (23.A.01);

o. Emergency rescue (tunneling) (26.A.05);

p. Underground construction fire prevention and protection plan (26.D.01);

q. Compressed air plan (26.1.01);

r. Formwork and shoring erection and removal plans (27.B.02);

s. Lift slab plans (27.D.01);

t. SHP and SSHP (for HTRW work an SSHP must be submitted and shall contain all information required by the accident prevention plan - two documents are not required (28.B.01);

u. Blasting plan (29.A.01);

v. Diving plan (30.A.13);

w. Plan for prevention of alcohol and drug abuse (Defense Federal Acquisition Regulation Supplement Subpart 252.223-7004, Drug-Free Work Force).

13. The Contractor shall provide information on how they will meet the requirements of major sections of EM 385-1-1 in the accident prevention plan. Particular attention shall be paid to excavations, scaffolding, medical and first aid requirements, sanitation, personal protective equipment, fire prevention, machinery and mechanized equipment, electrical safety, public safety requirements, and chemical, physical agent, and biological occupational exposure prevention requirements. Detailed site-specific hazards and controls shall be provided in the activity hazard analysis for each phase of the operation. Site-specific hazards are those hazards which would be reasonably be anticipated to occur on the construction site of concern and will be identified through analysis of the activities to be performed. The controls are measures which will be implemented by the contractor to eliminate or reduce each hazard to an acceptable level.

F O R M A T

CONTRACTOR'S NAME
(Address)

CONSTRUCTION QUALITY CONTROL REPORT

Date: _____ Report No. _____

Contract No.: _____

Description and Location of Work: _____

WEATHER: (Clear)(P. Cloudy)(Cloudy); Temperature:___Min,___Max;
Rainfall ___Inches

Contractor/Subcontractors and Area of Responsibility
a._____
b._____
c._____
d._____
e._____
f._____
g._____
h._____

1. Work Performed Today:

(Indicate location and description of work performed. Refer to work performed by prime and/or subcontractors by letter in table above.)

_____

2. Results of Control Activities:

(Indicate whether: P-Preparatory, I-Initial, or F-Followup and include satisfactory work completed or deficiencies with action to be taken.)

_____

3. Test Required by Plans and/or Specifications Performed and Results of Tests:

_____

4. Monitoring of Materials and Equipment:

---

5. Offsite Surveillance Activities:

---

6. Job Safety:

(Daily comment required.)

---

7. Remarks:

a. (Cover any conflicts in plans, specifications or instructions.)

b. (Action taken in review of submittal.)

c. (Verbal instructions received.)

_____
Inspector

CONTRACTOR'S VERIFICATION:

The above report is complete and correct and all material and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

_____
Contractor's Approved
Authorized Representative

SAMPLE

SMALL AND DISADVANTAGED BUSINESS SUBCONTRACTING PLAN

BETTER BUILDERS, INC.

DATE: February 11, 2003

SOLICITATION NO. DACA21-0X-X-XXXX

TITLE: Barracks Complex, Fort Swampy, Georgia

Type of Work: Design and Construction

In accordance with applicable contract clauses of the solicitation noted above, Better Builders, Inc. submits the following Small Business Subcontracting Plan (includes small, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns).

It is company policy to follow all public laws including P.L. 99-661, Section 1207, P.L. 100-180, Section 806, P.L. 105-135 and P.L. 106-50. We have informed all purchasers to follow these laws in hiring subcontractors and buying materials.

1. The following goals (expressed in terms of percentages of the total dollars available for subcontract/purchase order award) would be applicable to a contract awarded under the cited solicitation. You must also provide the dollar amounts for each of the goals listed below.

    a. Total Proposed Contract Amount: $26,961,000

    b. Total amount available for Subcontract award: $18,300,000

    c. Large Business: $7,832,400 – 42.8%

    d. Total amount to be subcontracted to all small business: $10,467,600 - 57.2%

    e. Small Disadvantaged Business: $1,628,700 – 8.9%

    f. Women-Owned Small Business: $1,482,300 – 8.1%

    g. Service-Disabled Veteran-Owned Small Business: $549,000 - 3%

    h. HUBZone Small Business: $549,000 – 3%

i. There are no options in this solicitation. ***(NOTE: If there are options in the solicitation you must provide the same information as listed in paragraph 1 a-h for each option year/period.)***

j. Indirect and overhead costs have not been included in the goals specified in this section for amounts available for subcontract/purchase order award.

k. Consideration was given to HCBU/MI's but no opportunities were found to be included in the small disadvantaged business goals.

NOTE: While Savannah District does not have a specific goal for subcontracting with Veteran-Owned small business, it must be addressed in any subcontracting plan. However, FAR 52.219-9 requires a goal in your subcontracting plan for Veteran-Owned small business concerns.

2. The following principal products and/or services will be subcontracted under this contract, and the distribution among all small business concerns are as follows:

Large Business - Earthwork
Small Business - Windows and Storm Doors, Recreation, Site Utilities Plumbing
Veteran Owned Small Business – Materials, Equipment
Service Disabled Veteran Owned Small Business – Asphalt, Electrical, Doors
HUBZone Small Business - Window Treatment, HVAC, Concrete
Small Disadvantaged Business - Vinyl Siding, Insulation, Gutters
Women Owned Small Business – Carpentry, Ceramic Tile, Fencing

NOTE: Company names should be provided for each product and/or service listed.

The following method was used in developing our subcontracting goals: (1) all areas of potential subcontract work were determined to be available for subcontract award to all types of small business concerns, and (2) will be actively recruited for participation through the many sources described hereinafter.

3. The following individual will administer this Subcontract Plan on behalf of Better Builders, Inc.:

Name: Freddie Better Title: Executive Vice President

Address and Telephone Number: 4845 Tonka Drive
Fair Haven, CT 27413
800-621-4845

The individual's specific duties with regard to the conduct of our firm's Subcontracting Plan will include, but will not be limited to the following:

a. Developing and maintaining bidders lists of all types of small business concerns using sources such as the Pronet System developed by the Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, Local Minority Business Development Centers and Minority Contractor Associations, and the General Business Services Center in the project's Standard Metropolitan Statistical Area.

b. Assuring the inclusion of all types of small business concerns in all solicitations for products or services which they are capable of providing; and ensuring that all solicitations are structured to permit the maximum possible participation by all types of small business concerns.

c. Establishing and maintaining records of all solicitations and subcontract awards to all types of small business concerns to ensure that the members of the firm who review bidders proposals document their reasons for selecting or not selecting a bid.

d. Preparing and submitting the Subcontracting Report for Individual Contracts (SF 294) and the Summary Subcontract Report (SF 295) in accordance with the instructions provided on the forms, and coordinating and preparing for all compliance reviews by Federal agencies.

e. Conducting or arranging for all other activities necessary to further the intent and attainment of goals of the Plan to include motivational training of the firm's purchasing personnel attendance at workshop, seminars and trade fairs conducted by or on behalf of all types of small business concerns, and general cooperation with members of these concerns or their representatives.

4. The following steps will be taken to ensure that all types of small business concerns receive notice and have an equitable opportunity to compete for intended awards of subcontracts and/or purchase orders for the products and/or services described in paragraph 2 above:

a. Sources will be requested through the SBA's ProNet system, business development organizations, small business trade associations and at small business procurement conferences; sources will be contacted and bidding materials will be provided to all respond ing parties with interest.

b. Internally, motivational training will be conducted to guide and encourage purchasing personnel; source lists and guides to all types of small business concerns will be maintained and utilized by purchasing personnel while soliciting subcontracts and purchase orders; activities will be monitored to ensure sufficient time is allowed for interested bidders to prepare their bids and to evaluate continuing compliance with this Subcontracting Plan.

5. Better Builders, Inc. agrees that the clause entitled "Utilization of Small Business Concerns" will be included in all subcontracts which offer further subcontracting opportunities. All subcontractors, except small business concerns, who receive subcontracts in excess of $500,000 ($1,000,000 in the case of construction) will be required to adopt and comply with a subcontracting plan similar to this one. Such plans will be reviewed to assure that all minimum requirements of an acceptable subcontracting plan have been satisfied.

The acceptability of goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of all potential small business and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports or, as time and availability of funds permit, periodic visits to subcontractor's facilities to review applicable records and subcontracting program progress.

6. Better Builders, Inc. agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the Contracting agency or the Small Business Administration in order to determine the extent of compliance by the offeror with the subcontracting plan and with the clause entitled "Utilization of Small Business Concerns" contained in the solicitation.

7. Better Builders, Inc. agrees to maintain at least the following types of records to document compliance with this Subcontracting Plan:

a. The names of all organizations, agencies, and associations contacted for all small business sources, along with records of attendance at conferences, seminars and trade fairs where additional sources were developed.

b. Source lists, guides, and other data identifying all types of small business concerns

c. Records on all subcontract solicitations, on a contract-by-contract basis, indicating (1) whether all types of small business concerns were solicited, and if not, why not; and (2) the reasons for the failure of all solicited small businesses to receive a subcontract award.

d. Records of all subcontract award data, to include subcontractor's name and address, to be kept on a contract-by-contract basis.

e. Minutes of internal motivational and training meetings held for the guidance and encouragement of purchasing personnel, and records of all monitoring activities performed for compliance evaluation.

f. Copies of SF 294 and SF 295 showing date and place of filing and copies of all other reports or results of reviews conducted by the contracting agency or other interested agencies of the Federal government to monitor our compliance with this Subcontracting Plan.

In closing Better Builders, Inc. states that it will be the policy of Better Builders, Inc. to afford every practicable opportunity to all types of small business concerns to participate in construction contracts awarded to Better Builders, Inc. by the Federal Government to ensure that equitable opportunity is provided to all types of small business concerns to compete for award of subcontracts and purchase orders, and to diligently pursue the achievement of our goals by participation of all types of small business concerns in the dollars available for subcontract/purchase order award under the solicitation.

BY_____ DATE _____

_____
Signature

_____
Title, and Company Name

_____ DATE _____
Contract Specialist

Approval Recommended

_____ DATE _____
SADBU

Approve/Disapprove

_____ DATE _____
Contracting Officer

Approve/Disapprove

_____ DATE _____
Procurement Center Representative
Small Business Administration

WEEKLY TEMPORARY ELECTRICAL INSPECTION

Week ending _____

Contract No. _____

Contract Description _____

The following items were inspected in accordance with requirements in National Electrical Code and Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1.

1. Wire (size, type, condition).

2. Systems and devices (polarity, continuity of ground, resistance to ground).

3. Resistance of ground rods (25 OHMS) measured and recorded.

4. Check GFI for 15/20 amp 120 volt circuits.

5. Plugs and receptacles (type, NEMA rating).

6. Circuit breakers and disconnect (size, type, weatherproof).

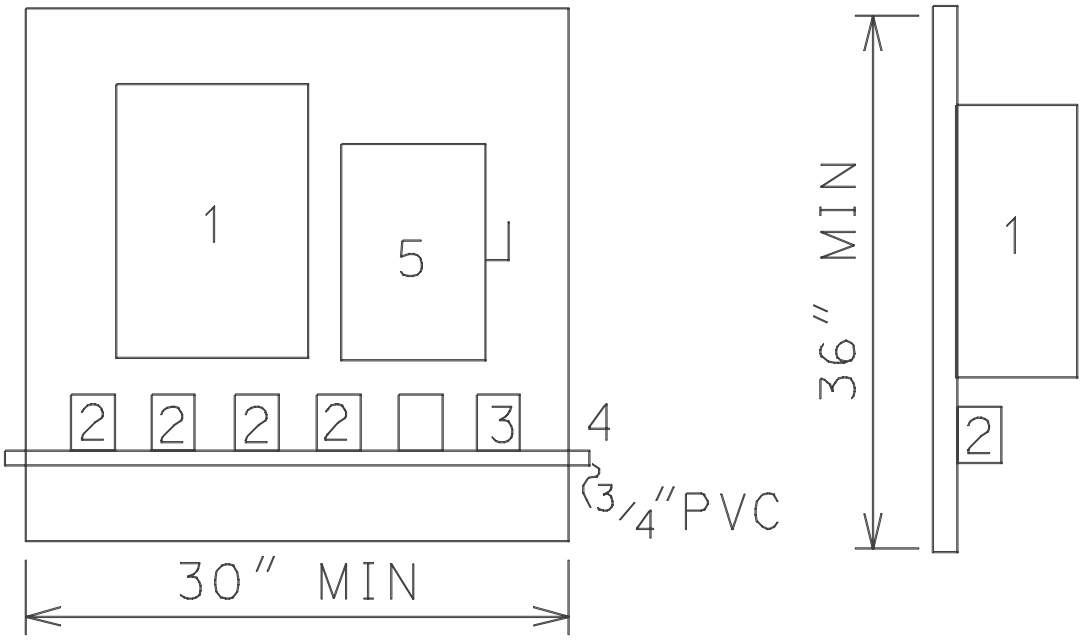
7. Extension cords (type, UL listed, insulation condition, splices, location).

8. Open wiring on insulators, nonmetallic sheathed cable, outside clearance (600 volts or less), Festoon lighting (as applicable).

_____

Signature Electrician/Electrical Engineer

MINIMUM STANDARD FOR TEMPORARY ELECTRICAL SERVICE



(DIMENSIONS ARE APPROXIMATE)

A. The backboard for temporary service shall consist of not less than 1/2 inch plywood of exterior grade.

B. Numbers above correspond to the item below:

Item 1 - NEMA 3R circuit breaker type panelboard. This panelboard shall consist of 1 two-pole 60 amp main circuit breaker, 4* one pole 20 AMP branch circuit breakers, and 1* two pole 20 AMP branch circuit breaker. Breakers shall meet Federal Specifications Standards for Class 1A breakers and shall be plug-in type. (*Number of breakers to be adjusted to suit the job requirements.)

Item 2 - Duplex grounding type convenience outlets in standard utility type outlet boxes with covers, meeting the NEC and NEMA requirements for wet locations. Connections to the branch circuit breakers shall be grounded by two conductors #12 NMC cable.

Item 3 – (Optional) A single three-conductor grounding type outlet rated for 250 volt service meeting the NEC and NEMA requirements for wet locations. Connections from this outlet to the two pole breaker shall be by two conductor grounded type NMC cable.

Item 4 - 3/4 inch PVC. This shall be used to support extension cords.

Item 5 – NEMA 3R service disconnect safety switch – 60 amp minimum.

C. The panelboard shall be grounded by #6 copper wire connected to a 3/4 inch by 10-foot long ground rod.

D. Service to the panel shall consist of three copper conductor #6 minimum service entrance cable. This cable may enter the top or side of the panelboard.

E. Periodic inspections of systems and devices will be made by the Contractor at intervals not to exceed 1 week, and a report will be submitted indicating the results.

F. All receptacle outlets that provide temporary electrical power during construction, remodeling, maintenance, repair, or demolition shall have ground-fault circuit-interrupter (CFCI) protection for personnel. GFCI protection shall be provided on all circuits serving portable electric hand tools or semi-portable electric power tools (such as block/brick saws, table saws, air compressors, welding machines, and drill presses). See EM 385-1-1 for exceptions.

G. Per EM 385-1-1 all temporary power distribution systems shall be submitted to the field office before installation.

ACTIVITY HAZARD ANALYSIS

1. Phase of Construction		
2. Location	3. Contract No.	4. Project
5. Prime Contractor	6. Date of Preparatory	7. Estimated Start Date
Potential Safety Hazard	Procedure to Control Hazard	
8. Contractor's Representative (signature)	9.	

SAS Form 9
1 Jan 82

SAFETY CHECKLIST FOR CRAWLER, TRUCK & WHEEL MOUNTED CRANES

Contract # and title:	
Equipment name & number: owned or leased?	
Contractor:	Subcontractor:
Contract Inspector:	Date inspected:

	Yes	No	N/A
1. Unless the manufacture has specified an on-rubber rating, outriggers will be fully extended and down? (16.D.10)			
2. Are lattice boom cranes equipped with a boom angle indicator, load indicating device, or a load moment indicator? (16.D.01)			
3. Are lattice boom and hydraulic cranes equipped with a means for the operator to visually determine levelness? (16.D.02)			
4. Are lattice boom and hydraulic cranes, except articulating booms cranes, equipped with drum rotation indicators located for use for the operator? (16.D.03)			
5. Are lattice boom and hydraulic mobile cranes equipped with a boom angle or radius indicator within the operator’s view? (16.D.04)			
6. Are lattice boom cranes, with exception of duty cycle cranes, equipped with an anti-two blocking device? (16.D.05)			
7. When duty cycle machines are required to make a non-duty lift, is the crane equipped with an international orange warning device and is a signal person present? (16.D 05)			
8. Are the following with the crane at all times: (16.C.02) a. the manufacturer’s operating manual? b. the load rating chart? c. the crane’s log book documenting use, maintenance, inspections and tests? d. operating manual for crane operator aids used on the crane.			

	Yes	No	N/A
9. Are the following on the project site: a. completed periodic inspection report prior to initial work? (16.C.12) b. pre-operational checklist used for daily inspection? (16.C.12) c. written reports of the operational performance test? (16.C.13) d. written reports of the load performance test? (16.C.13)			
10. Are all operators physically qualified to perform work? (16.C.05)			
11. Are all operators qualified by written and practical exam or by appropriate licensing agency for the type crane they are to operate? (16.C.05)			
12. Is the crane designed and constructed IAW the standards listed in Table 16-1? (16.C.06)			
13. Is a hazard analysis for set-up and set-down available? (16.C.08)			
14. Are accessible areas within the swing radius of the rear of the crane barricaded? (16.C.09)			
15. Are there at least 3 wraps of cable on the drum? (16.C.10)			
16. Are the hoisting ropes installed IAW the manufacturer’s recommendations? (16.C.10)			
17. Are critical lift plans available? (16.C.18)			
18. Are minimum clearance distance for high voltage lines posted at the operator’s position? (11.E.04)			
19. Do older lattice boom cranes with anti-two block warning devices in lieu of anti-two block prevention devices have a written exemption? (16.D.05)			
20. Is the slow moving emblem used on all vehicles which by design move at 25 MPH or less on public roads? (08.A.04)			
21. Are all vehicles which will be parked or moving slower than normal traffic on haul roads equipped with a yellow flashing light or flasher visible from all directions? (16.A.13)			

	Yes	No	N/A
22. Is all equipment to be operated on public roads provided with: (16A.07) a. headlights? b. brake lights? c. taillights? d. back-up lights? e. front and rear turn signals?			
23. Are seat and seat belts provided for the operator and each rider on equipment? (16.A.07 and 16.B.08)			
24. Is all equipment with windshields equipped with powered wipers and defogging or defrosting devices? (16.A.07)			
25. Is the glass in the windshield or other windows clear and unbroken to provide adequate protection and visiblity for the operator? (16.A.07, 16.B.10)			
26. Is all equipment equipped with adequate service brake system and emergency brake system? (16.A.18)			
27. Are areas on equipment where employees walk or climb equipped with platforms, footwalks, steps, handholds, guardrails, toeboards and non-slip surfaces? (16.B.03)			
28. Is all self propelled equipment equipped with automatic, audible, reverse signal alarms? (16.B.01)			
29. Is there a record of manufacturer’s approval of any modification of equipment which affects its capacity or safe operation? (16.A.18)			
30. Are truck and crawler cranes attached to a barge or pontoon by a slack tiedown system? (16.F.06)			
31. Have the following conditions been met for land cranes mounted on barges or pontoons: (16.F.04) a. Have load ratings been modified to reflect the increased loading from list, trim, wave, and wind action? b. Are all deck surfaces above the water? c. Is the entire bottom area of the barge or pontoon submerged? d. Are tie downs available? e. Are cranes blocked and secured?			
32. Are all belts, gears, shafts, spindles, drums, flywheels, or other rotating parts of equipment guarded where is a potential for exposure to workers? (16.B.03)			

	Yes	No	N/A
33. Is the area where the crane is to work level, firm and secured? (16.A.10)			
34. Is a dry chemical or carbon dioxide fire extinguisher rated at least 5-B:C on the crane? (16.A.26)			
35. Are trucks, for truck mounted cranes, equipped with a working reverse signal alarm? (16.B.01)			
36. Is a signal person provided where there is danger from swinging loads, buckets, booms, etc.? (16.B.13)			
37. Is there adequate clearance from overhead structures and electrical sources for the crane to be operated safely? (16.C.09)			
38. Is there adequate lighting for night operations? (16.C.19)			
39. Has the the boom stop test on cable-supported booms been performed? (16.D.06)			
40. Is the boom disenaging device functioning as required? (16.D.06)			
41. Has all rigging and wire rope been inspected? (Section 15)			
Remarks:(Enter actions taken for all “no” answers.)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR PORTAL, TOWER, AND PILLAR CRANES

Contract # and Title:			
Equipment name & number: owned or leased?			
Contractor:	Subcontractor:		
Contract Inspector:	Date Inspected:		
	Yes	No	N/A
1. Are the following available: (16.E.02) a. written erection instructions? b. listing of the weight of each component? c. an activity hazard analysis for the erection? d. does the activity hazard analysis contain (1.) location of crane and adjacent structures? (2.) foundation design and construction requirements? (3.) clearance and bracing requirements?			
2. Is there a boom angle indicator within the operator's view? (16.E.04)			
3. Are luffing jib cranes equipped with: (16.E.05) a. shock absorbing jib stops? b. jib hoist limit switch? c. jib angle indicator visible to operator?			
4. If used, do rail clamps have slack between the point of attachment to the rail and the end fastened to the crane? (16E.06)			
5. Are the following with the crane at all times: (16.C.02) a. the manufacturer's operating manual? b. the load rating chart? c. the crane's log book documenting use, maintenance, inspections and tests? d. the operating manual for crane operational aids used on the crane?			

	Yes	No	N/A
6. Are the following on the project site: a. completed periodic inspection report prior to initial work? (16.C.12) b. pre-operational checklist used for daily inspections? (16.C.12) c. written reports of the operational performance tests? (16.C.13) d. written reports of the load performance tests? (16.C.13)			
7. Is every crane operator certified by a physician to be physically qualified to perform work? (16.C.05)			
8. Are all operators qualified by written and practical exam or by appropriate licensing agency for the type crane they are to operate? (16.C.05)			
9. Is the crane designed and constructed IAW the standards listed in Table 16-1? (16.C.05)			
10. Is a hazard analysis for set-up and set-down available? (16.C.08)			
11. Are there at least 3 wraps of cable on the drum? (16.C.10)			
12. Are the hoisting ropes installed IAW the manufacturer’s recommendations? (16.C.10)			
13. Is the a record of manufacturer’s approval of any modification of equipment which affects its capacity or safe operation? (16.A.07)			
5. Remarks: (Enter actions taken)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR RIGGING

Contract # and title:			
Equipment name & number: owned or leased?			
Contractor	Subcontractor:		
Contractor inspector:	Date inspected:		
	Yes	No	N/A
1. Has all defective rigging been removed? (15.A.01)			
2. Is rigging stored properly? (15.A.01)			
3. Are running lines within 6.5’ of the ground or working level guarded? (15.A.03)			
4. Are all eye splices made in an approved manner with rope thimbles? (sling eyes excepted) (15.A.04)			
5. Are positive latching devices used to secure loads? (15.A.05)			
6. Are all custom lifting accessories marked to indicate their safe working loads? (15A.07)			
7. Are all custom designed lifting accessories proof-tested to 125% of their rated load? (15.A.07)			
8. Are the following conditions met for wire rope: (15.B.01-09) a. Are they free of rust or broken wires? b. Are defective ropes cut up or marked as unusable? c. Do rope clips attached with U-bolts have the U-bolts on the dead end or short end of the rope? d. Are protruding ends of strands in splices on slings and bridles covered or blunted? e. Except for eye splices in the end of wires and for all endless wire rope slings, are all wire ropes used in hoisting, lowering, or pulling loads one continuous piece, free of knots or splices?			

	Yes	No	N/A
f. Do all eye splices have at least 5 full tucks? g. If used, are wedge sockets fastening attached without attached the dead end of the wire rope to the live rope? h. Are they free of eyes or splices formed by wire rope clips or knots?			
9. Are the following conditions met for chain? (15.C.01-04) a. Are all chains alloyed? b. Do all coupling links or other attachments have rated capacities at least equal to that of the chain. c. Are makeshift fasteners restricted from use?			
10. Are the following conditions met for fiber rope:(15.D.01-07) a. Are all ropes protected from freezing, excessive heat or corrosive materials? b. Are all ropes protected from abrasion? c. Are splices made IAW manufacture's recommendations? d. Do all eye splices in manila rope contain at least 3 full tucks and do all short splices contain at least 6 full tucks(3 on each side of the centerline of the splice)? e. Do all splices in layed synthetic fiber rope contain at least 4 full tucks and do short splices contain at least 8 full tucks (4 on each side of the centerline of the splice)? f. Do the tails of fiber rope splices extend at least 6 rope diameters (for rope 1" diameter or greater) past the last full tuck? g. Are all eye splices large enough to provide an included angle of not greater than 60* at the splice when the eye is placed over the load or support?			
11. Are the following conditions met for all slings:(15.E.01-06) a. Is protection provided between the sling and sharp surfaces? b. Do all rope slings have minimum clear length of 40 times the diameter of component ropes between each end fitting or eye splice? c. Do all braided slings have a minimum clear length of 40 times the diameter of component ropes between each end fitting or eye splice?			

	Yes	No	N/A
d. Do all welded alloy steel chain slings have affixed permanent identification stating size, grade, rated capacity and manufacturer? e. Is each synthetic web sling marked or coded to identify its manufacturer, rated capacities for each type hitch and the type material?			
12. Are drums, sheaves, and pulley smooth and free of surface defects? (15.F.01)			
13. Is the ratio of the diameter of the rigging and the drum, block sheave or pulley thread diameter such that the rigging will adjust without excessive wear, deformation, or damage? (15F.02)			
14. Have all damaged drums, sheaves and pulleys been removed from service? (15.F.04)			
15. Are all connections, fittings, fastenings, and attachments of good quality, proper size and strength, and installed IAW manufacturer's recommendations? (15.F.05)			
16. Are all shackles and hooks sized properly? (15.F.06 & .07)			
17. Are hoisting hooks rated at 10 tons or greater provided with safe handling means? (15.F.07)			
18. Do all drums have sufficient rope capacity? (15.F.08)			
19. Is the drum end of the rope anchored by a clamp securely attached to the drum in a manner approved by the manufacturer? (15.F.08)			
20. Do grooved drums have the correct groove pitch for the diameter of the rope and is the groove depth correct? (15.F.08)			
21. Do the flanges on grooved drums project beyond the last layer of rope at a distance of either 2″ or twice the diameter of the rope, whichever is greater? (15.F.08)			
22. Do the flanges on ungrooved drums project beyond the last layer of rope a distance of either 2.5″ or twice the diameter of the rope, which ever is greater.			

	Yes	No	N/A
23. Are the sheaves compatible with the size of rope used and as specified by the manufacture? (15F.09)			
24. Are sheaves properly aligned, lubricated, and in good condition? (15.F.09)			
25. When rope is subject to riding or jumping off a sheave, are sheaves equipped with cablekeepers? 915.F.09)			
26. Are eye bolts loaded in the plane of the eye and at angles less than 45* to the horizontal? (15.F.10)			
27. Remarks: (Enter actions taken for “no” answers.)			
Contractor inspector signature			
Contractor QC/safety/project manager signature			

SAFETY CHECKLIST FOR MOTOR VEHICLES , TRAILERS AND TRUCKS

Contract # and title: owned or leased?	
Equipment name & number:	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Are records of safety inspections of all vehicles available? (18.A.02)			
2. Are all vehicles to be operated between sunset and sunrise equipped with: (18.A.04) a. 2 headlights? b. taillights and brake lights? c. front and back turn signals? d. 3 emergency flares, reflective markers, or equivalent portable warning devices?			
3. Are vehicles, except trailers or semi-trailers having a gross weight of 5000 lbs or less, equipped with service brakes and manually operated parking brakes? (18.A.05)			
4. Are service brakes on trailers and semitrailers controlled from the driver’s seat of the prime mover? (18A.06)			
5. Does the vehicle have: (18.A.06) a. a speedometer? b. a fuel gage? c. an audible warning device (horn)? d. a windshield & adequate windshield wiper? e. an operable defroster and defogging device? f. an adequate rearview mirror? g. a cab, cab shield, and other protection to protect the driver from the elements and falling or shifting materials? h. non-slip surfaces on steps? I. a power-operated starting device?			

	Yes	No	N/A
6. Is all the glass safety glass and is all broken or cracked glass replace? (18.A.07)			
7. Do trailers meet the following: (18A.08) a. Are all towing devices adequate for the weight drawn? b. Are all towing devices properly mounted? c. Are locking devices or a double safety system provided on every 5th wheel mechanism and tow bar arrangement to prevent accidental separation? d. Are trailers coupled with safety chains or cables to the towing vehicle? e. Are trailers equipped with the power brakes equipped with a break-away device which will lock-up the brakes in the event the trailer separates from the towing vehicle?			
8. Are all dump trucks:(18.A.10) a. equipped with a holding device to prevent accidental lowering of the body? b. equipped with a hoist lever secured to prevent accidental starting or tipping? c. equipped with means to determine (from the operator’s position) if the dump box is lowered? d. equipped with trip handles for tailgates that allow the operator to be clear?			
9. Are all buses, trucks and combination of vehicles with a carrying capacity of 1.5 tons or more, to be operated on public roads equipped with: (18.A.11) a. 3 reflective markers? b. 2 wheel chocks for each vehicle? c. at least one 2A:10B:C fire extinguisher? d. at least two properly rated fire extinguishers (for vehicles carrying flammable cargo)? e. a red flag not less than 1 foot square.			
10. Is vehicle exhaust controlled so as not to present a hazard to personnel? (18.A.13)			
11. Are all rubber tired motor vehicles equipped with fenders or with mud flaps if the vehicle is not designed for fenders? (18.A.14)			

	Yes	No	N/A
12. Are all vehicles, except buses, equipped with seat belts? (18.B.02)			
13. Does all self-propelled construction and industrial equipment have a working reverse signal alarm? (16.B.01)			
14. Are all hot surfaces of equipment, including exhaust pipes or other lines, guarded or insulated to prevent injury or fire? (16.B.03)			
15. If an off the road vehicle, is it equipped with rollover protective structures? (16.B.12)			
16. Remarks: (Enter actions taken for “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR CRAWLER TRACTORS AND DOZERS

Contract # and title:	
Equipment name & number: owned or leased?	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Are initial and daily/shift inspection records available? (16.A.01& .02)			
2. Are only qualified operators assigned to operate mechanized equipment? (16.A.04)			
3. Are sufficient lights provided for night operations? (16.A.11)			
4. Is the unit shut down before refueling? (16.A.14)			
5. Does the unit have as a minimum a 5-B:C fire extinguisher? (16.A.26)			
6. Is there an effective, working reverse alarm? (16.B.01)			
7. Are moving parts, shafts, sprockets, belts, etc., guarded? (16.B.03 ,07, and 13)			
8. Is protections against hot surfaces, exhausts, etc., provided? (16.B.03 and .13)			
9. Are fuel tanks located in a manner to prevent spills or overflows from running onto engine exhaust or electrical equipment?			

	Yes	No	N/A
10. Are exhaust discharges directed so they do not endanger person of obstruct operator vision?(16.B.05)			
11. Are seat belts provided? (16B.08)			
12. Is protection (grills, canopies, screens) provided to shield operator from falling or flying objects? (16.B.10 and .11)			
13. Is roll over protection provided? (16.B.12)			
14. Remarks: (Enter actions taken for “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR SCRAPERS, MOTOR GRADERS , AND OTHER MOBILE EQUIPMENT

Contract # and title:	
Equipment name and number: owned or leased?	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Are initial and daily/shift inspection records available? (16.A.01 & .02)			
2. Are only qualified operators assigned to operate equipment? (16.A.04)			
3. Are sufficient lights provided for night operations? (16.A.11)			
4. Does the unit have as a minimum a 5-B:C fire extinguisher? (16.A.26)			
5. Is there an effective working reverse alarm? (16.B.01)			
6. Is the unit shut down for refueling? (16.A.14)			
7. Are moving parts, shafts, sprockets, belts, etc., guarded? (16.B.03, .07 and .13)			
8. Is protection against hot surfaces, exhausts, etc., provided? (16.B.03 and .13)			
9. Are fuel tanks located in a manner to prevent spills or overflow from running onto engine exhaust or electrical equipment? (16.B.04)			
10. Are exhaust discharges directed so they do not endanger persons or obstruct operator vision? (16.B.05)			

	Yes	No	N/A
11. Are seat belts provided for each person required to ride on the equipment? (16.B.08)			
12. Is protection (grills, canopies, screens) provided to shield operators from falling or flying objects? (16.B.10 and .11)			
13. Is roll over protection provided? (16.B.12)			
14. Is a safe means of access to the cab provided (steps, grab bars, non-slip surfaces)? (16.B.03)_			
15. Are adequate head and tail lights provided? (16.A.07)			
16. Have brakes been tested and found satisfactory? (16.A.07)			
17. Does the unit have an emergency brake which will automatically stop the equipment upon brake failure? Is this system manually operable from the drivers position? (16.A.07)			
18. Is all equipment with windshields equipped with powered wipers and defogging or defrosting system? (16.A.07)			
19. Are all vehicles which will be parked or moving slower than normal traffic on haul roads equipped with a yellow flashing light or flasher visible from all directions? (16.A.13)			
20. Is the slow moving emblem used on all vehicles which by design move at 25 MPH or less on public roads? (08A.04)			

	Yes	No	N/A
21. Have air tanks been tested and certified? (20.A.01)			
22. Is an air pressure gage in working condition installed on the unit? (20.A.12)			
23. Does the air tank have an accessible drain valve? (20.B.17)			
24. Remarks: (Enter action taken for all “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager			

SAFETY CHECKLIST FOR MATERIAL HOISTS

Contract # and title:	
Equipment name & number:	
Contractor:	Subcontractor:
Contract Inspector:	Date inspected:

	Yes	No	N/A
1. Are all hoist towers, masts, guys or braces, counterweights, drive machinery supports, sheave supports, platforms, supporting structures, and accessories designed by a licensed engineer? (16.K.02)			
2. Is a copy of the hoist operating manual available? (16.K.04)			
3. Do all floors and platforms have slip-resistant surfaces? (16.K.08)			
4. Are landings and runways adequately barricaded and is overhead protection provided where needed? (16.K.08)			
5. Are hoisting ropes installed IAW manufacturer's instructions? (16.K.10)			
6. Are operating rules posted at the hoist operator's station? (16.K.14)			
7. Are air powered hoists connected to an air supply of sufficient capacity and pressure to safely operate the hoist? (16.K.15)			
8. Are pneumatic hoses secured by some positive means to prevent accidental disconnection? (16.K.15)			
9. Remarks: (Enter actions taken for all "no" answers.)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAD Form 1666g-R Mar 97 Previous editions may be used for contracts referencing the 1992 edition of EM 385-1-1.

SAFETY CHECKLIST FOR EARTH DRILLING EQUIPMENT

Contract # and title:	
Equipment name & number:	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Is a copy of the manual for all drilling equipment available? (16.M.01)			
2. Have all overhead electrical hazards and potential ground hazards been identified in a site layout plan and addressed in an activity hazard analysis? (16.M.02)			
3. Are MSDSs for all drilling fluids available? (16.M.05)			
4. Does the drilling equipment have 2 easily accessible emergency shut down devices (one for the operator and one for the helper)? (16.M.06)			
5. Is the equipment posted with a warning of electrical hazards? (16.M.06)			
6. Is there a spotter or an electrical proximity warning device available to ensure safe distances from power lines are maintained? (16.M.06)			
7. Remarks: (Enter actions taken for “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager			

SAD Form 1666h-R Mar 97 Previous editions may be used for contracts referencing the 1992 edition of EM 385-1-1.

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.

B -- Approved, except as noted on drawings.

C -- Approved, except as noted on drawings.
Refer to attached sheet resubmission required.

D -- Will be returned by separate correspondence.

E -- Disapproved (See attached).

F -- Receipt acknowledged.

FX -- Receipt acknowledged, does not comply as noted with contract requirements.

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)

COST ESTIMATE ANALYSIS

For use of this form, see TM 5-800-2; the proponent agency is USACE.

PROJECT	INVITATION/CONTRACTOR	EFFECTIVE PRICING DATE	DATE PREPARED
LOCATION	CODE (Check one) ☐ A ☐ B ☐ C ☐ OTHER	DRAWING NO.	SHEET OF SHEETS
		ESTIMATOR	CHECKED BY

TASK DESCRIPTION	QUANTITY		LABOR				EQUIPMENT		MATERIAL		TOTAL	SHIPPING	
	NO. OF UNITS	UNIT MEAS	MH UNIT	TOTAL HRS	UNIT PRICE	COST	UNIT PRICE	COST	UNIT PRICE	COST		UNIT WT	TOTAL WT
TOTAL THIS SHEET													

DA FORM 5418-R, Apr 85

TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY

Form Approved
OMB No. 0704-0188

PAGE OF PAGES

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, Va 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. **FROM** *(Installation/Activity/Service and Zip code)*	2. OPERATING UNIT	3. DISTRICT CODE	4. OPERATING AGENCY	5. DATE	6. JOB NUMBER	7. SERIAL NUMBER	8. CONTRACT NUMBER

9. **TO** *(Installation/Activity/Service and Zip code)*	10. OPERATING UNIT	11. DISTRICT CODE	12. OPERATING AGENCY	13. ACCOUNTING NUMBER	14. ACCOUNTABLE OFFICE NUMBER	15. TYPE OF TRANSACTION		16. PROJECT NUMBER
						A. ☐ NEW CONSTR. ☐ EXISTING FAC. ☐ CAPITAL IMP. ☐ OTHER *(Specify)*	B. ☐ BENF/O ☐ PHYSICAL COM. ☐ FINAN. COM. ☐ OTHER *(Specify)*	

ITEM NO. 17	CATEGORY CODE 18	FACILITY *(Category description)* 19	NO. OF UNITS 20	TYPE 21	UNIT OF MEAS. 22	TOTAL QUANTITY 23	COST 24	DRAWING NUMBERS 25	REMARKS 26

27.		28. ACCEPTED BY *(Signature)*	DATE
TRANSFERRED BY *(Signature)*	DATE	TITLE *(Post Engr./Base Civ. Engr./Navy Rep.)*	29. PROPERTY VOUCHER NUMBER
TITLE *(Area Engr./Base Engr./DPWO)*			

30. CONSTRUCTION DEFICIENCIES

31. REMARKS

INSTRUCTIONS

This form has been designed and issued for use in connection with the transfer of military real property between the military departments and to or from other government agencies. It supersedes ENG Forms 290 and 290B (formerly used by the Army and Air Force) and NAVDOCKS Form 2317 (formerly used by the Navy).

Existing instructions issued by the military departments relative to the preparation of the three superseded forms are applicable to this form to the extent that the various items and columns on the superseded forms have been retained. Additional instructions, as appropriate, will be promulgated by the military departments in connection with any new items appearing hereon.

With the issuance of this DD form, it is not intended that the departments shall revise and reprint manuals and directives simply to show the number of this DD form. Such action can be accomplished through the normal course of revision for other reasons.

Approved by OM 0348-0046

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action:

☐ a. contract
b. grant
c. cooperative agreement
d. loan
e. loan guarantee
f. loan insurance

2. Status of Federal Action:

☐ a. bid/offer/application
b. initial award
c. post-award

3. Report Type:

☐ a. initial filing
b. material change

For Material Change Only:
year _____ quarter _____
date of last report _____

4. Name and Address of Reporting Entity:

☐ Prime ☐ Subawardee
Tier _____, *if known*:

Congressional District, *if known:*

5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:

Congressional District, *if known*:

6. Federal Department/Agency:

7. Federal Program Name/Description:

CFDA Number, *if applicable*: _____

8. Federal Action Number, *if known*:

9. Award Amount, *if known*:

$

10. a. Name and Address of Lobbying Entity
(*if individual, last name, first name, MI):*

b. Individuals Performing Services *(including address if different from No. 10a)*
(last name, first name, MI):

(attach Continuation Sheet(s) SF-LLL-A, *if necessary*)

11. Amount of Payment *(check all that apply)*:

$ _____ ☐ actual ☐ planned

12. Form of Payment *(check all that apply)*:

☐ a. cash
☐ b. in-kind; specify: nature _____
value _____

13. Type of Payment *(check all that apply)*:

☐ a. retainer
☐ b. one-time fee
☐ c. commission
☐ d. contingent fee
☐ e. deferred
☐ f. other; specify: _____

14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment indicated in Item 11:

(attach Continuation Sheet(s) SF-LLL-A, *if necessary*)

15. Continuation Sheet(s) SF-LLL-A attached: ☐ Yes ☐ No

16. Information requested through this form is authorized by title 31 U.S.C section 1352. This disclosure of lobbyig activities is a materia representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352 . This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to

Signature: _____

Print Name: _____

Title: _____

Telephone No.: _____ **Date:** _____

Federal Use Only:

Authorized for Local Reproduction

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks “Subawardee”, then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., “RFP-DE-90-001.”

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individuals(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

    Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES
CONTINUATION SHEET

Approved by OM
0348-0046

Reporting Entity: _____ Page ____ of ____ ____

*U.S. G.P.O. 1990-260-708:00012

DIRECTORATE OF ENGINEERING & HOUSING
EXCAVATION PERMIT

FB Reg 420-13 DATE

1. CLEARANCE IS REQUIRED TO PROCEED WITH WORK AT
_____

ON WORK ORDER NO _____ CONTRACT NO
_____

2. METHOD OF EXCAVATION	A.HAND		B.POWER SHOVEL		C. DITCHER		D. OTHER (SPECIFY)

3. SCOPE OF WORK (DEPTH, WIDTH, LENGTH, LOCATION, AND SKETCH AS APPLICABLE)
IF CONTRACT A COPY OF APPLICABLE DRAWINGS OR SKETCHES MUST BE ATTACHED.

4. DATE CLEARANCE REQUESTED	5. TERMINATION DATE OF CLEARANCE (60 DAYS UNLESS SPECIFIED)	
6. REQUESTING ORGANIZATION OR COMPANY	7. PHONE NUMBER	8. SIGNATURE (REQUESTING OFFICIAL)

9. EXCAVATION CLEARANCE APPROVAL

UTILITY	REMARKS	SIGNATURE OF APPROVING OFFICIAL	DATE
ELECTRICAL UNDERGROUND DISTRIBUTION			
STEAM OR HTW DISTRIBUTION			
CHILLER DISTRIBUTION			
SEWER LINES			
WATER DISTRIBUTION			
NATURAL GAS DISTRIBUTION			
TELEPHONE (DOIM)			
OTHER			
TELEPHONE (CT&T)			

FB Form 1605 DIGGING WILL NOT BE PERMITTED UNLESS SIGNED
1 May 87 (AFZA-DE) Previous Edition is Obsolete.

AFZA-DE-RJ (420-10c) Date: _____

MEMORANDUM FOR DEH ENVIRONMENTAL OFFICE

SUBJECT: Landfill Permit Application

1. Fill in the following information for each Contractor vehicle:

a. Landfill to Be Used: Sanitary _____ Demolition _____ Both _____

b. Company Name: _____

c. Contract Number: _____

d. Project Title: _____

e. Project Location: _____

f. Date of Notice to Proceed: _____

g. Project Length (In Days): _____

h. Vehicle Make: _____

i. Vehicle License Plate Number: _____

j. Contract Inspector: _____

2. Note: Applications must be forwarded to the Environmental Office by a Government Official (e.g., Contracting Officer's Representative or Project Inspector). Applications delivered on any working day will be processed and available for pickup the following workday by 0830.

FORT BRAGG ASBESTOS REMOVAL, TRANSPORTATION, AND
DISPOSAL DOCUMENTATION FORM

1. REMOVAL: ON _____ _____ (SY/LF/CF/OR POUNDS) OF ASBESTOS CONTAINING MATERIAL REMOVED FROM BUILDING #_____, _____ (STREET ADDRESS), FORT BRAGG, NC, PER _____ (WORK ORDER/CONTRACT NUMBER) WAS PREPARED FOR MOVEMENT TO THE LANDFILL UNDER THE SUPERVISION OF _____ (PRINT NAME OF SUPERVISOR) REPRESENTING _____ (NAME OF FIRM/ORGANIZATION.

_____ (SIGNATURE OF SUPERVISOR)

2. TRANSPORTATION: ON _____ THE ACM MENTIONED ABOVE WAS TRANSPORTED ON THE VEHICLE AUTHORIZED BY LANDFILL VEHICLE PERMIT NUMBER _____ BY _____(PRINT NAME OF DRIVER) _____ (SIGNATURE OF DRIVER) TO THE LONGSTREET LANDFILL ON LONGSTREET ROAD, FORT BRAGG, NC.

3. DISPOSAL: THE ACM DESCRIBED IN PARAGRAPH 1 WAS DELIVERED BY THE VEHICLE IDENTIFIED ABOVE TO THE LONGSTREET LANDFILL AND RECEIVED BY _____ (PRINT NAME OF LANDFILL OPERATOR)

I CERTIFY THAT THE LANDFILL HAS BEEN APPROVED FOR THE DISPOSAL OF ASBESTOS. THE MATERIAL DELIVERED WILL BE COVERED WITH NONASBESTOS MATERIAL IN THE PRESCRIBED MANNER.

_____
(PRINT NAME OF OPERATOR)

_____
(SIGNATURE)

_____
(DATE)

REAL PROPERTY INVENTORY

ITEM	TALLY	TOTAL
COMMODES		
LAVATORIES		
URINALS		
EXHAUST FAN (9")		
EXHAUST FAN (OTHER)		
WATER COOLER		
HOTWATER HEATER		
MOP SINK		
AC PLANT	LS 5 TN. 5-25 TN. 25-100 TN. OVER 100 TN.	
AS (WINDOW TYPE)		
FIRE ALARM SYSTEM	MANUAL HALON SPRINKLER	
EMERGENCY LIGHTS		
UNIT HEATER		
STRIP HEATER		
COOLING TOWER		
WALK-IN COOLER		
AIR CURTAIN		
EYE WASH		
SHOWERS		
BOILER	GAS FIRED OIL FIRED STEAM	
FUEL TANK	UNDERGROUND OUTSIDE	

REAL PROPERTY INVENTORY

ITEM	TALLY	TOTAL
WASH BASIN		
AIR COMPRESSOR		
HOISTS		
INVENTORY BY:		DATA:
RECONCILED BY:		DATA:

REAL PROPERTY INVENTORY

ITEM	TALLY	TOTAL
INVENTORIED BY:		DATE:
RECONCILED BY:		DATE:

SECTION 01010

GENERAL PROJECT REQUIREMENTS

1. GENERAL

1.1. This section provides general scope information and design/construction requirements for this project. More explicit requirements are provided in subsequent sections. The design and construction requirements within this RFP represent the minimum quantity and quality acceptable for the proposal and project.

1.2. The site plan and floor plan provide a conceptual design that has been coordinated with and is acceptable to the User and Base Master Planning for functional relationships and working arrangements but does not imply that this is the only solution that will be considered or that would be acceptable and minor revisions will be required during final development of the site, building and office layouts.

2. GENERAL PROJECT DESCRIPTION

2.1. The scope of work for the renovation of SOF Bryant Hall, Fort Bragg, North Carolina. SOF Bryant Hall is an existing circa 1970’s, six-story concrete framed structure with a partial basement and small penthouse totaling approximately 81,600 gross square feet. The project includes the design, site preparation and construction of new building features, building systems, and interior fit-up and the selected demolition of existing site features, building interiors, building systems (mechanical, plumbing and electrical) and other miscellaneous features associated with the building and on the site. Supporting facilities will include parking, vehicular pavement, sidewalks, water, sewer, electrical service, fire alarm systems, storm drainage, erosion control measures, information systems, force protection features, and landscaping. Interior design for furniture and finishes is included in the scope of work.

2.2. The scope of work includes, but is not limited to:

Demolition of existing site features, paving, site utilities, etc. as required for new construction.

2.3. Demolition of existing mechanical, plumbing and electrical systems and associated site features.

2.4. Removal of asbestos containing materials.

2.5. Demolition of existing building interiors, including elevator equipment and toilet rooms.

2.6. Demolition of existing glazing and entrance systems.

2.7. Demolition of existing roof system to structure.

2.8. Design and construction of new building interiors, roof system elevator equipment and finishes, window glazing, and entrance systems.

2.9. Design and construction of parking areas, landscaping, curbs, islands, site signage, site furniture, and sidewalks.

2.10. Design and construction of new mechanical, plumbing and electrical systems (including communications).

2.10.1.1. Landscaping and landscape irrigation.

2.10.1.2. Phasing of work shall maintain continuous operation of selected portions of SOF Bryant Hall.

2.11. Included in the scope of work as part of Schedule 1, is the phasing and scheduling of demolition and construction activities to maintain continuous operation of selected portions of existing SOF Bryant Hall. Schedule 2 has existing SOF Bryant Hall completely empty during construction.

2.12. All work shall be in conformance with the Fort Bragg Installation Design Guide and Appendix, a copy of which may be obtained from www.Bragg.army.mil/pwbc/cmd.

2.13. Sustainable Design. This project has been chosen as a showcase for sustainable design with the goal of achieving Gold or Platinum level of sustainable design features as measured through the use of Sustainable Project Rating Tool (SPiRiT), Appendix C to Section 01020. SPiRiT is a modified version of the U.S. Green Building Council LEED Green Building Rating System. As stated in the contract clauses each offeror will complete and submit the SPiRiT Facility Points Summary with the proposal; the total points score will determine the SPiRiT Sustainable Project Certificate Level: SPiRiT Bronze, Silver, Gold or Platinum. The proposed level will be used as a proposal evaluation factor as defined in the contract clauses. A minimum of LEED CERTIFIED level rating (formerly Bronze rating) is required.

2.14. Demolition. Demolition will include asbestos abatement and selected demolition and removal of site and buildings features, building systems; conveying, mechanical, plumbing and electrical (including communications) pavement and site improvements. Underground utilities will be relocated, removed or capped as specified.

2.15. Facilities. The project facilities will consist of new entrance, office, conference and support spaces, new toilet and shower facilities, elevator equipment and finishes, new mechanical, electrical and communications systems and rooms as well as related functions. All areas and features necessary for the proper functioning of the facilities will be included.

*5

2.16. All required anti-terrorism/force protection measures will be incorporated into the facilities and site in accordance with the "~~Department of Defense Antiterrorism Construction Standards"~~

~~draft version dated 2 October 2001.~~ UFC 4-010-01 "DoD Minimum Antiterrorism Standards for Buildings" dated 7/31/02.

2.17. There are no Army Standard Designs for this project.

2.18. Project design plans and specifications may be in English inch-pound units or the Metric SI System of measurements but the units for the site or building(s) must be consistent. The site survey drawings provided are in English units, as are the Site Layout Plan and Floor Plan. The Offerors may present their plans in either English or Metric units of measure.

2.19. The Facility (including site, building, restrooms, furniture, equipment) shall be handicap accessible meeting the requirements of The International Building Code, Americans with Disabilities Act and ANSI 117.1-1997.

*6

2.20. Bid Schedule #1 has Bryant Hall continuing to be occupied during construction. The renovation project will be accomplished in phases allowing the contractor a minimum of two (2) floors for construction in each phase. Existing plumbing, HVAC, life/safety, electrical and communication systems will remain in service for occupied portions of the building. The existing SCIF on the 6th floor ~~shall~~ will remain for the duration of construction, but not be occupied and will not be accessible to the Contractor except through prior arrangements with the Government.

*5 *6

2.21. Bid Schedule #2 has Bryant Hall vacated during construction with the proposer furnishing temporary office facilities for 100 personnel for the duration of construction. The renovation project with the building unoccupied will be accomplished in a single phase. The existing SCIF on the 6th floor ~~shall~~ will remain for the duration of construction, if Schedule ~~1~~ 2 is selected but not be occupied and will not be accessible to the Contractor except through prior arrangements with the Government.

3. FUNDING CONSTRUCTION:

3.1. The funding limit for this project is stated in the notes to the bid schedule. Offerors are encouraged to provide proposals that stay within the budget.

4. DESIGN REQUIREMENTS

4.1. The proposal documents shall include adequate information in the form of narratives, drawings, calculations, catalog cuts, etc., to enable the Government to adequately review the proposal. Proposal documents shall include all requirements listed in the Contract Clauses and compliance with the format requirements is encouraged to facilitate review and award.

4.2. The design, following award, will include a 60% and final design submittal and corrected final design submittals. See Section 01030, DESIGN AFTER AWARD

4.3. The proposal drawings may be done with any CADD software. Once the contract is awarded all drawings will be initiated and done in Microstation version SE or J software (or later version) in accordance with A/E/C CADD Standards Manual which is available at: (http://tsc.wes.army.mil/).

4.4. Codes, reference documents and criteria referenced within this RFP, although not attached, are an integral part of this RFP. Each proposer shall be responsible for securing any necessary reference at his own expense and resources. Requirements of this RFP may delete, revise, add to, or substitute for criteria contained in the referenced documents and this RFP shall be deemed the controlling authority of any changes to the other referenced documents and criteria.

5. SITE/ENVIRONMENTAL

5.1. Existing Bryant Hall and the JFK Special Warfare Center and School are located on Ardennes Street between Zabitosky Road and Reilly Street, Ft. Bragg, NC.

*5 *6

5.2. The project is being designed to comply with minimum construction standards established by the ~~Draft DOD Antiterrorism/Force Protection Minimum Construction Standards.~~ UFC 4-010-01 “DoD Mininum Antiterorrism Standards for Buildings” dated 7/31/02Force Protection Requirements establish a minimum standoff distance of 82 feet from the building exterior to the parking lot, drives and adjacent streets. All parking and drives in front of Bryant Hall and the drive behind the building will be revised, removed and/or relocated to meet these requirements. Controlled access to the ~~command~~ parking lots will be via card reader. Low walls (2’) in lieu of concrete planter are a viable alternative to force protection measures. Bollards shall be used only where no other means is present.

6. PAVEMENTS

*5

6.1. Parking lots exist in front of and to the west of Bryant Hall. Additional parking west of the front parking lot will be added to replace parking lost due to Force Protection requirements. The parking lots and road will be paved with asphalt concrete. Parking lot pavement shall be designed to conform to AASHTO H-20. Typical pavement section is 6-inches of stone base course with 1.5 inches of asphalt concrete binder course and 1 inch asphalt concrete surface course. The existing parking lot in front of Bryant Hall is to be overlay paved and parking lines re-striped at 90 degrees or 60 degrees as shown on drawings C2.0 and C2.1.. Parking lot lighting will be replaced. All new landscape and parking lot lighting shall be box type to comply with the IDG.

6.2. New patterned sidewalks and entry walks will be required. Patterned concrete will only occur directly in front of the building. Sidewalks in and along the parking lot will require the use of curb and gutter. New drop inlets and storm water piping extensions to existing catch basin structures will be required. Curb and gutter will be required at existing and/or new paving

areas that are subject to water run-off. As practical, existing curb and gutter shall be utilized.

*6

6.3. ~~New access-controlled drives and Command parking will be developed behind Bryant Hall.~~ Controlled access to the service drive and new Command parking lot on the north side of the building shall be via card reader. Controlled access to the existing parking lot off of Ardennes Street shall also be by card reader, with the east access point as “entrance only” and the west access point “exit only”. These four (4) access control gates shall be provided under the base bid and option #2 under both Bid Schedule 1 and Bid Schedule 2. All control access gates shall be crash rated for 4000 lbs. at 30 m.p.h.

7. LANDSCAPE

7.1. The area where asphalt drives and parking were removed will become grassed areas between the new sidewalks and existing buildings. Raised planters and bollards will be added adjacent to and incorporated within the sidewalks. Raised planters will be either pre-cast or poured-in-place concrete. No trees are planned within this 80’ buffer. Landscaping within the 80’ buffer will consist of grass or ground cover. The area is not currently served by an irrigation system. A new irrigation system will be provided.

8. ENVIRONMENTAL

8.1. A survey has been performed to identify lead based paint materials in the existing building. See Appendix F for the Report.

8.2. A survey has been performed to identify asbestos containing materials. See Appendix F for the Report.

8.3. Removal/disposal of lead based paint and asbestos containing materials identified in the report (Appendix F) shall be included with construction cost.

9. SITE UTILITIES

9.1. Utilities are existing on site and revised as required to accommodate new plumbing, fire protection and HVAC systems.

10. WATER

Water service is currently supplied by the base to the building via a 4” below grade service and will continued to be used in the new systems. Existing water supply to the building will be tested and a domestic water booster pump installed as part of the plumbing design if required by the new systems. Water supply availability will also determine the need for a fire pump.

The flow test has not been performed as of this date, Government is to provide. Prior to design a flow test shall be obtained from the base. This flow test shall be conducted within 12 months of the projects permitting. Flow test information shall be provided to the mechanical engineer for fire protection design.

Backflow prevention measures will be incorporated into the design of the buildings for potable water and fire service. Backflow preventers will be located in the mechanical rooms.

11. SANITARY SEWER

There is existing a sanitary sewer system on the base to which this building is currently connected by a 6” gravity sanitary waste line. The new plumbing systems will be connected to the existing replacing piping where wear is evident.

12. STORMWATER
*5
Drainage for the site will remain as currently functioning being modified to accommodate any changes to parking and entrance setback. Roof storm water will continue to be transferred to the existing below grade storm water system by the existing roof leaders at the building corners. The large grassed areas required for force protection standoff shall be used to sheet flow, filter and slow runoff. This shall reduce pipe and structures. ~~Structures within the 82’ setback shall be required to have lockable covers.~~

13. OTHER CHARACTERISTICS ARE:

- No known easements or setbacks (other than Force Protection) exist within the site. Force protection modifications will be developed as part of this project.

- No ongoing environmental investigations are underway.

- A "Land Disturbing Activity Permit" will be required, by the installation, issued by the local authority having jurisdiction.

- The Government and the State of North Carolina will require a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall be submitted to the Contracting Officer’s Representative (COR). The COR will submit the documentation for permitting. Notice of Intent shall be submitted to the State at least 30 days prior to land disturbing activities.

- A Spill Prevention and Response Plan (SPRP) shall be prepared by the contractor and submitted to the Government for approval by Environmental.

- The site is not located in a wellhead protection zone.

- There are no threatened or endangered species or habitat known at the site.

- Trees to be removed need to be identified and reported to the Forestry Branch for possible sale a minimum of 60 days prior to start of site work.

- No wetlands will be impacted. No flood plains are located in the site area, nor are the site known to flood.

- A final cultural resources impact determination will be made when final plans are reviewed.

- Acoustical considerations for the project site are not significant since the site is not located near the flight line or within normal flight paths.

- This site has been evaluated for impact on historic and archeological property and complies with the National Historic Preservation Act. If during construction or demolition, a discovery is found, work shall stop and proper authorities notify for additional direction.

- Plans shall be submitted to the base environmental office when plans reach 65% review stage.

- The proposed building site is not located in any prohibited wetland or sinkhole areas, based upon maps provided by the Government or within critical radius of the existing AST or UST's or wells. No payment for materials incorporated in this project will be made if the required designers of record or required Government approvals have not been obtained.

- Backflow preventers shall be installed and tested by a State of North Carolina certified installer and tester.

*5

- Force Protection is a project requirement. Under this project removal of existing paved driveway~~,~~ and parking surfaces~~, and trees~~ within eighty-two feet (82') of existing building is required. Parking spaces lost to Force Protection requirements will be replaced as an expansion of the existing parking lot. The eighty-two foot setback will utilize standard green space design. Concrete sidewalks within the new eighty-two foot setback will be replaced and upgraded.

14. CODES AND STANDARDS- The following codes and standards shall apply to this project:

14.1. Fort Bragg Installation Design Guide and Appendix

14.2. Sediment and Erosion Controls – Storm Water:
- 14.2.1. The Federal Clean Water Act
- 14.2.2. 40 CFR 122 National Pollutant Discharge Elimination System
- 14.2.3. N.C. Department of Environmental & Natural Resources

14.3. Water Distribution Systems:
- 14.3.1. 40 CFR 141 National Primary Drinking Water Regulations
- 14.3.2. Safe Drinking Water Act, public law 95-190 as amended
- 14.3.3. American Water Works Association (AWWA) Standards
- 14.3.4. Recommended Standards for Water Works

14.3.5. National Fire Protection Association (NFPA) Standards
14.3.6. Army Technical Manuals
14.3.7. TM 5-813-5 Water Supply, Water Distribution

14.4. Sanitary Wastewater Collection Systems:
14.4.1. 40 CFR 122 National Pollutant Discharge Elimination System
14.4.2. Recommended Standards for Wastewater Facilities
14.4.3. Water Environment Federation Manual of Practice
14.4.4. No. FD-5, Gravity Sanitary Sewer Design and Construction, except asbestos and asbestos cement products shall not be allowed.
14.4.5. Army Technical Manuals
14.4.6. TM 5-814-1 Sanitary and Industrial Wastewater Collection – Gravity Sewers and Appurtenances

14.5. Pavement – Roads, Streets, Parking Lots, Sidewalks, etc.:
14.5.1. Federal Standard 595, Uniform Federal Accessibility Standards
14.5.2. A Policy on Geometric Design of Highways and Streets, AASHTO
14.5.3. Department of Transportation State of North Carolina
14.5.4. Standard Specifications Construction of Roads and Bridges, 1993
14.5.5. Supplemental Specifications Modifying the 1993 Standards Specifications for Construction of Roads and Bridges, 1997

14.6. Army Technical Manuals
14.6.1. TM 5-337 Paving & Surfacing Operations
14.6.2. TM-820-4 Drainage Areas other than Airfields
14.6.3. TM 5-822-2/ AFM 88-7, Chap. 5 General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Areas
14.6.4. TM 8-822-5/ AFM 88-7, Chap. 1 Pavement Design for Roads, Streets, Walks and Open Storage Areas
14.6.5. TM 5-822-5/ AFM 88-7, Chap. 3 Engineering and Design Flexible Pavements for Roads, Streets, Walks, and Open Storage Areas
14.6.6. TM 5-822-6/AFM 88-7, Chap. 1 Engineering and Design Rigid Pavements for Roads, Streets, Walks and Open Storage Area w/Rev
14.6.7. TM 5-822-7/AFM 88-6, Chap. 8 Standard Practice for Concrete Pavements
14.6.8. TM 5-822-8/ AFM 88-6, Chap. 9 Bituminous Pavements Standard Practice

14.7. Federal Standard 595, Uniform Federal Accessibility Standards

14.8. Military Standards
14.8.1. MIL-STD-619B -Unified Soil Classification System for Roads, Airfields, Embankments and Foundations
14.8.2. MIL-STD-620A-Test Methods for Bituminous Paving Materials
14.8.3. MIL-STD-621A – Sub-grade, Sub-base and Test Method for Pavement Base –Course Materials
14.8.4. ETL-1110-3-491-Sustainable Design for Military Facilities
*5

14.9. Force Protection

14.10. UFC 4-0101-01 “DoD Minimum Antiterrorism Standards for Buildings” dated 7/31/02.

~~14.9.1.Army Technical Manuals~~

~~14.9.2.TM 5-853-1/ AFMAN 32-1071, Vol. 1 Security Engineering Project Development~~

~~14.9.3.TM 5-853-3/ AFMAN 32-1071, Vol. 3 Security Engineering Final Design Interim Department of Defense Antiterrorism/Force Protection Construction Standards~~

~~14.10.~~14.11. Utilities are existing on site and revised as required to accommodate new plumbing, fire protection and HVAC systems.

15. OTHER CHARACTERISTICS ARE:

15.1. No known easements or setbacks (other than Force Protection) exist within the site. Force protection modifications will be developed as part of this project.

15.2. No ongoing environmental investigations are underway.

15.3. A "Land Disturbing Activity Permit" will be required, by the installation, issued by the local authority having jurisdiction.

15.4. The Government and the State of North Carolina will require a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall be submitted to the Contracting Officer’s Representative (COR). The COR will submit the documentation for permitting. Notice of Intent shall be submitted to the State at least 30 days prior to land disturbing activities.

15.5. A Spill Prevention and Response Plan (SPRP) shall be prepared by the contractor and submitted to the Government for approval by Environmental.

15.6. The site is not located in a wellhead protection zone.

15.7. There are no threatened or endangered species or habitat known at the site.

15.8. Trees to be removed need to be identified and reported to the Forestry Branch for possible sale a minimum of 60 days prior to start of site work.

15.9. No wetlands will be impacted. No flood plains are located in the site area, nor are the site known to flood.

15.10. A final cultural resources impact determination will be made when final plans are reviewed.

15.11. Acoustical considerations for the project site are not significant since the site is not located near the flight line or within normal flight paths.

15.12. This site has been evaluated for impact on historic and archeological property and complies with the National Historic Preservation Act. If during construction or demolition, a

discovery is found, work shall stop and proper authorities notify for additional direction.

15.13. Plans shall be submitted to the base environmental office when plans reach 65% review stage.

15.14. The proposed building site is not located in any prohibited wetland or sinkhole areas, based upon maps provided by the Government or within critical radius of the existing AST or UST's or wells. No payment for materials incorporated in this project will be made if the required designers of record or required Government approvals have not been obtained.

15.15. Backflow preventers shall be installed and tested by a State of North Carolina certified installer and tester.

15.16. Force Protection is a project requirement. Under this project removal of existing paved driveway, parking surfaces, and trees within eighty-two feet (82') of existing building is required. Parking spaces lost to Force Protection requirements will be replaced as an expansion of the existing parking lot. The eighty-two foot setback will utilize standard green space design. Concrete sidewalks within the new eighty-two foot setback will be replaced and upgraded.

16. STRUCTURAL

16.1. DESCRIPTION OF EXISTING STRUCTURAL FRAMING

16.1.1. The existing building, designed circa 1970, is a six story concrete structure with a partial basement and a small penthouse. The basement floor is a 5-inch thick slab-on-grade resting on a 6-inch capillary water barrier. The basement walls are typically 12-inch thick cast-in-place concrete braced at the top and bottom by the floor slabs. Like the basement, the first floor from grid lines 1 to 3 is a 5-inch thick slab-on-grade on a 6-inch capillary water barrier. From grid lines 3 to 6 the first floor is an elevated concrete pan joists system. The typical pans are 16 inches deep by 20 inches wide forming joists that are 6 inches wide by 16 inches deep with a 3-inch slab (16 + 3) for a total of 19 inches. The second through sixth floors are also pan joists systems utilizing primarily the same system as the elevated portion of the first floor. The main roof structure utilizes the same pan joists system as the floors below except the slab is reduced to 2½ inches thick (16 + 2½). The penthouse roof structure consists of 14-inch deep steel bar joists at 3'-6" on center supporting a corrugated metal form deck with 2 inches of concrete cover.

16.1.2. The lateral-force-resisting system is a concrete moment frame. In the north-south direction the lateral loads are resisted by 14-inch wide by 19-inch deep concrete joists framing into the concrete columns at each of the six column lines. In the east-west direction the lateral loads are resisted by 12-inch wide by 52-inch deep continuous spandrel girders framing into the columns along the perimeter grid

lines and by 32-inch wide by 24½ -inch deep continuous concrete girders framing into the columns along the two interior grid lines.

16.2. EXISTING DESIGN CRITERIA

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16.2.1. The contract documents indicate that the design loadings were per TM 5-809-1. The floor structures were designed for live loads of 100-psf in the lobbies and corridors and 80-psf elsewhere. The roof structure was designed for a live load of 20-psf. The lateral-force-resisting system was designed to resist the loading from 80-mph winds. These gravity design loads should be sufficient for the new intended use for the building barring any special equipment of extraordinary weight. The lateral-force-resisting system ~~should~~ shall be ~~checked against the current seismic requirements, however it is expected that the design wind loading will govern~~ checked against current lateral load requirements and notify COE of results. Utilize UFC 3-310-01 "Load Assumptions for Buildings" and TI 809-04 "Seismic Design for Buildings".

16.3. SCOPE OF WORK FOR THIS PROJECT

16.3.1. There are currently no plans to alter or add to the existing structure Any coring of the existing structure that may be required for the new MEP should be centered between the concrete joists. A registered structural engineer shall design all openings greater than 8 inches in diameter and the AHV platforms.

16.3.2. The new entry canopy shall be designed for the following load conditions:

Live Loads – per section 4.9 of ASCE 7-98 depending on roof profile, slope, and area.
Wind Load – Basic wind speed of 100 mph – per TI 809-1
Snow Load – Ground snow load of 10 psf – per TI 809-1
Earthquake Loads – per ASCE 7-98, Chapter 9

16.3.3. Renovations or additions to the foundations are not required as part of the scope of work.

17. PHASING

17.1. The phasing required in this project does not require any additional work to the building structure.

18. FIRE PROTECTION

18.1. Reference Codes And Handbooks

18.1.1. MIL HDBK 1008C
18.1.2. Fire Protection for Facilities Engineering, Design and Construction, 10 June 1997
18.1.3. NFPA 13 (2000)
18.1.4. NFPA 14 (1999)
18.1.5. NFPA 20 (1998)

18.2. Description Of Systems

18.2.1. The building shall be provided with an automatic wet sprinkler system throughout. The basic system classification is light hazard occupancy, however, certain portions of the facility will require ordinary hazard design such as storage rooms, boiler rooms, and mechanical equipment rooms. The systems will be designed in accordance with NFPA 13, NFPA 20, NFPA 72, MIL-HDBK-1190, and MIL-HDBK-1008C. Construction will be required to comply with NFPA 241. The sprinkler system shall be connected to the existing fire service. A post indicator valve will act as system shutoff and a post mounted fire department connection will be installed to serve the new sprinkler system and the existing standpipe system.

18.2.2. Flow tests have been conducted and it is anticipated at this time that a fire pump, to elevate system pressure, will be required to serve the building in compliance with NFPA 14. The pump will be sized to provide a residual pressure of 100 PSI at a flow of 500 GPM to the most hydraulically remote 2½ -inch fire hose connection The fire pump will be housed in a stand alone structure located exterior to the building and will be electric motor driven with transfer switching for emergency power operation.

18.2.3. The fire protection water system interior to the building will be installed above the suspended ceilings. Sprinkler heads will be quick response, semi-recessed. The interior sprinkler piping system will be constructed of black steel piping with malleable steel or grooved end pipefittings. Thin wall piping systems will not be allowed.

18.2.4. The sprinkler flow and tamper switches shall be connected to the building fire alarm system as well as the HVAC control system.

18.2.5. Design specifications shall be in compliance with design criterion of listed as required by RFP and United Facility Guide Specifications (UFGS)

18.3. Qualifications of Fire Protection Engineer

18.3.1. The design of the fire protection features shall be by a qualified fire protection engineer meeting one of the following conditions: a.) An engineer with a Bachelor of Science or Masters of Science Degree in fire protection engineering from an accredited university engineering program, plus a minimum of 5 years’ work experience in fire protection engineering. b.) A registered professional engineer who has passed the National Council of Examiners for Engineering and Surveys (NCEE) fire protection engineering written examination. c.) A registered P.E. in a related engineering discipline with a minimum of 5 years’ experience dedicated to fire protection engineering. The name and credentials (education, registration, experience) of the fire protection engineer shall be submitted with the initial

contract documents and approved by the District fire protection engineer prior to proceeding with fire protection design.

18.4. Technical Requirements

18.4.1. Fire Suppression System: Automatic sprinkler protection shall be provided for all buildings in this project. The requirements indicated below shall be incorporated into the design.

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18.4.2. Sprinkler System: The facility shall be fully protected with automatic wet pipe sprinkler systems. All floors and all areas of the facilities shall be protected. The sprinkler system design shall be in accordance with MIL-HDBK-1008C, NFPA 13, and the appropriate UFGS Specification Sections. The sprinkler hazard classifications shall be in accordance with MIL-HDBK-1008C, NFPA 13, and any other applicable criteria. Design densities, design areas and exterior hose streams shall be in accordance with MIL-HDBK-1008C. The sprinkler systems shall be designed and all piping sized with computer generated hydraulic calculations. The exterior hose stream demand shall be included in the hydraulic calculations. A complete sprinkler system design, including sprinklers, branch lines, floor mains and risers, shall be shown on the drawings. All sprinkler system drains, including main drains, test drains, and auxiliary drains, shall be routed to a 2’ x 2’ splash b~~l~~ack at exterior grade.

18.4.3. Sprinkler Service Main and Riser: The sprinkler service main shall be provided with an exterior post indicator valve with tamper switch reporting to the fire alarm control panel (FACP). The sprinkler entry riser shall include a double check backflow preventer, a fire department connection, and a wall hydrant for testing of backflow preventer. The sprinkler system shall include an indicating control valve, an alarm check valve, a water motor alarm and a flow switch reporting to the FACP. All control valves shall be OS&Y type and shall be provided with tamper switches connected to the FACP. Facilities with multiple floors shall be provided with floor control valves for each floor. The floor control valve assembly shall be in accordance with NFPA 13, Figure A-5-15.4.2(b).

18.4.4. Exterior Hose Stream: Exterior hose stream demand shall be in accordance with MIL-HDBK-1008C. This shall be 946 lpm for light hazard and 1892 lpm for ordinary hazard. Exterior hose stream demand shall be included in the sprinkler system hydraulic calculations.

18.4.5. Backflow Preventer: A double check backflow preventer shall be provided on the fire water main serving each building. This shall be located within the building. An exterior wall hydrant with dual hose connections with OS&Y valve shall be provided to allow testing of backflow preventer at design flow as required by NFPA 13.

*6

18.4.6. Fire Department Connection: ~~A fire department connection shall be provided for each building with sprinkler protection. These shall be located to be directly accessible to the fire department on the main street side of the building.~~ The existing fire department connection shall remain where currently located.

18.4.7. Range Hoods: Ranges, range hoods, exhaust systems, hood fire suppression systems, and alarm and detection features shall be in accordance with NFPA 96.

18.4.8. Elevators: The fire protection features of elevators, hoist ways, machine rooms and lobbies shall be in accordance with MIL-HDBK-1008C, ASME A17.1, NFPA 13, NFPA 72, and UFGS Section 14240 (including the notes to the specification writer).

18.4.9. System Components and Hardware: Materials for the sprinkler system, fire pump system, and hose standpipe system shall be in accordance with the appropriate UFGS Specification Sections 13930 and 13935 and with NFPA 13. Sprinkler system piping shall be black steel and shall be minimum Schedule 40 for sizes 50mm and less and minimum Schedule 10 for sizes greater than 50mm.

18.4.10. Protection of Piping Against Earthquake Damage: Sprinkler and fire pump piping systems shall be protected against damage from earthquakes. Seismic protection shall include flexible and rigid couplings, sway bracing, seismic separation assemblies where piping crosses building seismic separation joints, and other features as required by NFPA 13 for protection of piping against damage from earthquakes.

18.4.11. Fire Water Supply: Refer to Civil Design for design requirements.

18.4.12. Fire Pump: If required a complete fire pump installation shall be provided. Fire pump installation shall be in accordance with MIL-HDBK-1008C, NFPA 13, NFPA 20, and UFGS 13920.

18.4.13. Fire Detection and Alarm: Refer to Electrical Design for design requirements.

18.4.14. Fire Extinguishers: Refer to Architectural Design for design requirements.

18.4.15. Fire Hydrants: Refer to Civil Design for design requirements.

18.5. Specifications

The contractor shall edit the appropriate Unified Guide Specifications (UFGS) for this project. Options and choices shall be limited to those within the sections. These shall be submitted for review with the preliminary and final design submittals. Marked up versions of specifications shall be provided in the

preliminary design submittal to allow reviewer to identify the changes made. These specifications shall be followed for the design and installation of the sprinkler systems. The Contractor shall submit material data, hydraulic calculations, and shop drawings as required by Specification Section 13930 to the Contracting Officer for review and approval.

18.6. Catalog Cuts

18.6.1. Manufacturers Catalog Cuts for major pieces of equipment shall be provided with submittal, and shall represent actual equipment proposed to be installed. RFP shall indicate that deviations and installation of equipment from that indicated in the proposal will not be allowed or accepted unless approved by the Contracting Officer.

18.7. Site Investigation

18.7.1. The contractor shall perform site investigations as necessary to gather any additional information necessary for completing fire protection system design for the project.

18.8. Smoke Control

18.8.1. The new HVAC systems for the building will utilize a passive smoke control philosophy. All of the fan coil units for a floor will shut down upon a signal from a local smoke detector (through the fire alarm system). Exhaust fans and fresh air fans, which are operationally interlocked to the building management control system, will shut down to inhibit the flow of combustion products. There is no code requirement to provide an active smoke control system for this facility, therefore, the proposed passive system concept will provide the best protection and value to the project.

18.8.2. One hour dynamic fire dampers with fusible links will be installed where required by NFPA 90A. . All dampers will be readily accessible.

18.8.3. Duct mounted smoke detectors will be provided for each air handling system. Additional detectors will be provided as required by NFPA 90A. The smoke detectors will be a part of the fire alarm system.

19. HEATING, VENTILATING & AIR CONDITIONING

19.1. Applicable Publications
19.1.1. 2000 International Building Code
19.1.2. 2000 International Mechanical Code
19.1.3. 2000 International Plumbing Code

19.2. Army Technical Manuals
19.2.1. TM 5-785 Engineer Weather Data
19.2.2. TM 5-805-4 Noise & Vibration Control for Mechanical Equipment
19.2.3. TI 809-04 Seismic Design for Buildings
19.2.4. TM 810-10 Mechanical Design

19.3. Heating, Ventilating & Air Conditioning
- 19.3.1. TI 810-10 Heating, Ventilating & Air Conditioning (HVAC) Control Systems
- 19.3.2. TI 800-01 Design Criteria
- 19.3.3. Savannah District Engineering Design Manual for Military Construction
- 19.3.4. Savannah District Design Drafting Standards, Aug 2002

19.4. American Society Of Mechanical Engineers (ASME)
- 19.4.1. B31.1 Power Piping

19.5. Air Conditioning & Refrigeration Institute (ARI)
- 19.5.1. Std. 410 Forced-Circulation Air-Cooling & Air-Heating Coils

19.6. American Society Of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE), Inc. Standards (Latest Edition)
- 19.6.1. HVAC Applications
- 19.6.2. HVAC Systems & Equipment
- 19.6.3. Fundamentals
- 19.6.4. Refrigeration
- 19.6.5. ASHRAE Standard 62-1999 Ventilation for Acceptable Indoor Air Quality

19.7. Sheet Metal And Air Conditioning Contractors' National Association (SMACNA), Inc. (Latest Edition)
- 19.7.1. 06 HVAC Duct Construction Standards - Metal & Flexible

19.8. National Fire Protection Association (NFPA) Standards
- 19.8.1. NFPA 90A Installation of Air Conditioning & Ventilating Systems
- 19.8.2. NFPA 90B Installation of Warm Air Heating & Air Conditioning Systems
- 19.8.3. NFPA 101 Life Safety Code

19.9. HVAC Design Conditions

- 19.9.1. Outside conditions for the heating and air conditioning will be based on TM5-785 data for Fort Bragg Army Base and on the ASHRAE Handbook, latest edition.
- 19.9.2. Summer: 2.5% DB with mean coincident WB; 92 deg F DB, 76 deg F WB
- 19.9.3. Winter: 99 deg F DB = 21 deg F DB

- 19.9.4. Indoor Conditions for the heating and air conditioning design will be based on TM-5-810-1 and Savannah District Mechanical Design Requirements in Chapter A-4 for Army Projects.
- 19.9.5. Summer: 78 deg F DB and 55% RH
- 19.9.6. Winter: 68 deg F DB; no humidity control

20. HVAC SYSTEMS DESCRIPTION

20.1. Design specifications shall be in compliance with design criterion of listed as required by RFP and united facility guide specifications (UFGS) proposer is responsible for determining full building heating, cooling and ventilation loads on a space-by-space basis including internal as well as envelope loads. This information will be utilized in sizing and selecting of all mechanical systems and equipment.

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~~20.2.Provide a Life Cycle Cost Analysis (LCCA) for the HVAC system proposed. The LCCA shall analyze 3 airside systems. Computerized economic analysis shall be made using the Life Cycle Cost In Design (LCCID) program, the Building Life Cycle Cost (BLCC) program or one approved by HQUSACE, CEMP-E to be the equivalent thereof. The LCCID program is available from Building Systems Laboratories at 217-333-3977. The BLCC program is available from the FEMP web site at 222.eren.doe.gov.femp. Before using any computer program, make sure that it is updated with the most current discount factors published in the periodic supplement to NBS Handbook 135. Provide the complete input and output of the energy analysis (TRACE700, Carrier HAP, BLAST, or EnergyPlus) and LCCA programs. Provide backup documentation (cost estimate, fuel rates, source for maintenance costs).~~

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~~20.3.~~20.2. Air Systems

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~~20.3.1.~~20.2.1. It is proposed that a four-pipe fan coil air conditioning unit be installed in each space requiring air condition control. In the open office areas multiple units will need to be employed to provide proper air distribution and control. Fresh air will be ducted to each unit and mixed with return air before passing through heating and cooling coils.

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~~20.3.2.~~20.2.2. Only coil cycles off, ducted outside air not cast off.

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~~20.3.3.~~20.2.3. The fan coil unit will have unit mounted manual three speed switches set to medium and will be provided with a DDC controller for both hot water and chilled water coils, status, air flow and discharge temperature.

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~~20.3.4.~~20.2.4. On a call for heat, the control valves for the cooling coil will close and the valve for the heating coil will modulate to maintain space temperature requirements. On a call for cooling the heating hot water valve will close and the cooling coil will modulate to maintain space temperature set points but in no case shall the supply air temperature exceed 58 deg. F unless dehumidification control is warranted The coils will be sized to provide no less than 90 deg F discharge temperature in the heating mode.

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~~20.4.~~20.3. Water Systems

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~~20.4.1.~~20.3.1. Central Energy Plant high temperature hot water is provided to this building and will be utilized for the fan coil units via variable speed distribution pumps located in the basement. The high temperature hot water is converted to

heating hot water at ~~200~~160 – 180 deg F using existing shell and tube heat exchangers. This equipment (hot water converter, associated pumps and controls) appears to be in good condition and will be evaluated by contractor with installation representative for possible continued use with the new system.

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~~20.4.2.~~20.3.2. Two (2) ~~200~~ 160- 180 deg. F. gas fired hot water boilers will be provided for back-up when central plant medium temperature water is unavailable.

*5

~~20.4.3.~~20.3.3. Heating hot water and chilled water will be distributed to the floor air-handling units via risers in the existing duct shaft. The existing distribution pumps appear to have been recently installed and will be evaluated by the contractor to determine if reuse is feasible. Variable speed drive will be installed on both heating hot water and chilled water distribution pumps.

*5

~~20.4.4.~~20.3.4. The chilled water for will be provide by two (2) stand alone helical screw air-cooled water chillers each sized to provide 75% of full load building cooling / dehumidification requirements. There is no requirement at this time to provide these chillers with emergency power. Critical areas such as SCIF will be provided with dedicated and full redundant units with compressors located on the roof. These units will be served directly with emergency power.

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~~20.5.~~20.4. Air Delivery Systems

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~~20.5.1.~~20.4.1. Filtration will be provided at each fan coil terminal unit from a single fan located on the roof that supplies fresh air in accordance with the requirements of MIL-HDBK 1190 and ASHRAE 62, 1999 for outside air requirements and ASHRAE Test Standard 52-76 for filtration. Fresh air duct riser in the existing chase will supply fresh air to each fan coil unit at a given rate via balancing dampers at each unit. Each unit will be served from ductwork above the ceiling on the floor below. The individual unit filters will consist of a thick pleated medium to provide 30% efficient filtration. As a minimum the outside air supply fan will be provided with 80 to 85% efficient filters with 30% carbon impregnated charcoal throw-away pre filters. The supply air unit will also contain hot water coils for winter tempering of fresh and water coils to temper the air to 78 deg. F in summer.

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~~20.5.2.~~20.4.2. The fan coil terminal units will be wall / floor mounted, single wall 14 gauge steel with powder baked finish steel construction and internal insulation. The casing and components will be installed on a structural steel frame with angle top louvered supply diffuser and front return integral grille. The units are indicated to be equipped with stainless steel drain pans. The condensate drains will be hard drawn copper tube, collected above the ceiling of the floor below routed and discharged to the

nearest mop sink or utility drain. Inaccessible areas can be served by ceiling type or concealed type.

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~~20.5.3.~~20.4.3. The coil casings will be constructed of galvanized steel and the cooling coils are specified to be constructed of aluminum fins and copper tubing.

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~~20.5.4.~~20.4.4. Fresh air and exhaust ductwork systems will be insulated galvanized steel constructed to 2" pressure class standards per the latest SMACNA Standards. Flexible runouts to terminal units shall be limited to 10 feet in length.

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~~20.5.5.~~20.4.5. An above ceiling exhaust system will collect and convey toilet and other required areas to an exhaust utility set fan located on the roof sized to provide 2 CFM / SF required by code for toilet exhaust. All ductwork system will be pressure tested per SMACNA duct testing standards for leakage rates. Exhaust size shall take into consideration the outside air and toilet exhaust requirements. The toilet exhaust may be more than the minimum requirements if there is a large outside air load that needs to be relieved.

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~~20.5.6.~~20.4.6. Building pressurization shall be accommodated by utilization of balancing building exhaust and outside air requirements. Standard design is ½ ach.

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~~20.5.7.~~20.4.7. Cooling only fan coil units will be located at ~~owner specified~~ location of heat producing equipment including but not limited to electrical and communication rooms. Location of these units shall be coordinated with suppliers of communications and other equipment. Indicated at electrical and communication equipment rooms with large sensible loads.

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~~20.5.8.~~20.4.8. Hot water and chilled water piping will extend to all terminal devices. Sectional shutoff and balancing valves will be provided in the piping mains. The piping will be installed above ceilings and in partition spaces within the building. The piping is proposed to be black steel with malleable steel fittings. Seamless copper, hard drawn tubing with wrought copper joints is proposed for pipe sizes 2 inches and smaller. Insulation will be 1½ -inch cellular glass with vapor barrier.

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~~20.5.9.~~20.4.9. A summer design cooling water temperature of 42 deg F will be circulated to individual terminal fan coil units. The system chilled water temperature will be automatically reset upwards in winter, based on the greatest coil demand.

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~~20.5.10.~~20.4.10. District Energy Plant high temperature hot water (380 deg F) is available at this site and will be utilized for this building.

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~~20.5.11.~~20.4.11. The entire sixth floor will be available to operate on emergency power with the SKIF facility operating on stand alone Liebert type self contained computer room air

conditioning units. These units will be equipped with full humidity control and sized to provide for a space temperature of 65 deg. F. non-condensing. The condensers for these units will be located on the roof and fresh air for the SKIF unit will be provided with air from the fresh air system (tempered OA). Where required fire and or smoke dampers will be utilized and will be Type A dynamic dampers with the curtain out of the air stream and access panels in the ductwork that allows inspection of fusible link.

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~~20.5.12.~~20.4.12. The mechanical shall be heated and ventilated to 10 ach and maintain a minimum of 40 deg.F. All electronic drives and control panels in rooms that are not cooled shall have point of use directed cooling air applied.

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~~20.5.13.~~20.4.13. Air shall be returned directly from the space to the fan coil unit. No return air plenum shall not be used.

*5

~~20.5.14.~~20.4.14. Fan coil units shall be factory packaged, unitary type design, construction of insulated ~~double~~ single wall panels with drain pans, piping where condensing apt to occur.

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~~20.6.~~20.5. Temperature Controls

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~~20.6.1.~~20.5.1. It is proposed to use electronic direct digital control (DDC) controls for all equipment. Individual microprocessor based digital equipment controllers with a stand alone building management system that will report to a central local area network utilizing a Honeywell System for building global communications from a central location. All major equipment controllers will have stand alone capability with respect to the specific equipment in each system that is served from a dedicated control panel.

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~~20.6.2.~~20.5.2. HVAC systems shall be connected to the Ft. Bragg system utilizing LonWorks compatible software. The DDC system shall be connected to the Ft. Bragg system using LonTalk protocol as a common communication protocol between all controlled and controlling devices. The system network shall be an Echelon LON (local operating network) utilizing the LNS network operating system. The controls system currently being installed at Ft. Bragg is Honeywell SymmetrE.

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~~20.6.3.~~20.5.3. The DDC system for this facility will consist of a central building controller connected to lower level application specific equipment controllers through a local area network cable system. A central host computer currently installed in the building will be utilized for global system monitoring and remote system set point adjustment. The central building controller in this facility will have the capability to interface through on site network, however, the DDC controllers will have stand-alone operational capability, with the respective equipment related to each system served from a dedicated control panel. The central building

controller will be equipped to connect to a laptop computer for local set point adjustment.

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~~20.6.4.~~20.5.4. Based on the light torque duty requirements of the control damper and valve operators, it is recommended to provide electric operators. Control valves on all new heat transfer equipment will be three-way.

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~~20.6.5.~~20.5.5. Individual room temperature control is to be provided through wall mounted thermostat sensor with lockable covers. An application specific controller and room sensor/thermostat, with local timed override, will be indicated/specified for each air terminal valve. Certain spaces will be indicated to receive hot water reheat and controlled to specific humidity conditions of a high limit of 60%.

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~~20.6.6.~~20.5.6. Mechanical energy using devices will be provided with metering to monitor energy consumption and the capability to capture this data to the building management system. Totalizing flow-measuring meters will be provided on all utility services.

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~~20.6.7.~~20.5.7. The DDC control system will be fully interface able with the Base wide Honeywell control system and report to that system all point to allow full system of controls remotely from the WAN.

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~~20.6.8.~~20.5.8. All thermostats will be lockable and settable and enabled or disabled from the control system.

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~~20.6.9.~~20.5.9. An emergency switch located at the security and fire alarm station will be interlocked to the outside air system to shutdown the intake fan and close a motor operated damper to isolate the building air supply from the outside.

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~~20.7.~~20.6. Testing, Adjusting and Balancing/Commissioning

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~~20.7.1.~~20.6.1. The test and balance shall be per spec section 15990A- Testing, Adjusting, and Balancing of HVAC Systems.

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~~20.7.2.~~20.6.2. A comprehensive test and balance (TABS) effort of all systems will be required.

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~~20.7.3.~~20.6.3. All new airs-side systems require TABS in order to validate space pressure relationships, pressure relationships between departments, and the pressure relationships between interior and exterior spaces.

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~~20.7.4.~~20.6.4. Air quantities will be indicated for each distribution device. Operating conditions of all air moving equipment will be scheduled. Outdoor air dampers will be adjusted to correspond to the building exhaust air quantities. Roof mounted relief damper will be installed an controlled by the building management system to maintain proper building pressure.

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~~20.7.5.~~20.6.5. All new waterside equipment requires TABS in order to verify energy distribution and consumption. Water quantities will be indicated for each heat transfer element and pump.

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~~20.7.6.~~20.6.6. The design build contractor will employ a separate test and balance firm qualified and experienced in system commissioning to provide a full report certifying that all mechanical systems are operating as designed and conform to all required codes and requirements specified herein. The commissioning effort will verify that system components are adequately installed, are operating within the tolerances of the design, control components are calibrated, and that the TABS work was conducted effectively as well as be in accordance with the UFGS specification section 15995a “Commissioning of HVAC Systems”.

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~~20.8.~~20.7. Air System Maintainability and Accessibility

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~~20.8.1.~~20.7.1. Provide adequate clearance around all pieces of equipment for periodic maintenance, inspection and cleaning. Service of one piece of equipment shall not require disturbance of adjacent equipment. Ensure that filters, controls, control valves, and coils are easily accessible for servicing and cleaning. Isolation valves shall be provided for each terminal unit, zone, branch, long runs, etc. as necessary for proper isolation and maintenance. Coils shall be fully removable without requiring demolition of any building components. Coils piping shall include unions to facilitate easy coil removal. Accessibility features (i.e. access panels, etc.) shall be designed and included in this project as required to allow complete access to all mechanical systems and system components, which are concealed, or require adjustment, inspection, maintenance, and replacement. Items located within 18 inches of acoustical tile ceilings shall be considered accessible.

21. ENERGY CONSCIOUS DESIGN FEATURES SUMMARY - MECHANICAL

21.1.1. High efficiency motors and motor controllers will be utilized.

21.1.2. Airside economizer cycles are not available with the use of fan coil terminal unit systems.

21.1.3. Direct digital controls (DDC) are proposed. This type of system will enable precise control and energy monitoring of mechanical environmental systems. The ability to disable selective thermostats and reset others from a central location allows both manual and automatic control for energy savings.

21.1.4. The proposers shall comply with ASHRAE 90.1. The path selected to show compliance with ASHRAE Stand 90.1 shall be clearly identified.

21.1.5. The design energy target (DET) was derived from UFC 3-400-01. The design energy budget (DEB) calculations will include only the energy required for space heating, space cooling, ventilation, domestic hot water, and lighting.

21.1.6. The DET values are taken from MIL-HDBK-1190. The DET represents the maximum unit energy per square foot, based on building category, applicable program area, and Design Region.

21.1.7. The energy study for this building is based on the following criteria:

21.1.7.1. Building Category: Office A1

21.1.7.2. Region: 8

21.1.7.3. DET: 35,000 ~~45~~ BTU per hr/sf/yr

21.1.8. The building schedule for calculations will be 10 hours/day, 5 days/week.

22. "U" VALUES

22.1.1. The roof for this building will be replaced with a similar type of built-up system. UFC 3-400-01 indicates a minimum of 0.05 Btu/hr/sf/deg F for the number of heating degree-days at this geographical location. With an insulation thickness of 3 inches, the composite "U" value is 0.045 BTU/hr/sf/deg F.

23. ENERGY ANALYSIS SOFTWARE

23.1.1. The Trane TRACE 700 Program is proposed for performing energy analysis calculations. This program in both the current and previous versions has been utilized for numerous Army Corps of Engineers projects by Stevens & Wilkinson of South Carolina, Inc. The program provides full year/hourly (8760 hours per year) system energy use and load profile modeling; hour-by-hour operation of all mechanical environmental systems in the building.

23.1.2. The Trane program simulates building loads based on three different day types, 1) peak design day, 2) weekday, and 3) weekend day. Schedules will be established within the program to define the building operating hours, and levels of loading for people, lights, equipment, and domestic hot water consumption during the occupied building period. A typical calendar year input determines the quantities of the different day types. The proposed building model will be simulated in the study.

23.1.3. The simulation weather data used for this study is representative of the Fort Bragg, North Carolina area. The weather data consists of 24 hours/day statistically accumulated temperature and humidity readings for each hour and each day of the year.

23.1.4. Programs also available for use include Carrier Hourly Analysis, BLAST, DOE-2 and EnergyPlus.

24. PLUMBING

24.1. Applicable Publications

24.1.1. Army Technical Manuals:
24.1.1.1. TM 5-810-5 Plumbing

24.1.2. Codes And Standards:
24.1.2.1. 2000 International Plumbing Code

24.1.3. Design specifications shall be in compliance with design criterion of listed as required by RFP and United Facility Guide Specifications (UFGS) specifically 15400a-Plumbing, General Purpose.

24.1.4. Description Of Systems: The new building systems will be connected to existing domestic water, waste piping, and storm drainage systems as follows:

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24.1.4.1. Utilize existing domestic water service to the building and connect new systems to existing piping in the mechanical room. Waste piping will be replaced throughout with concealed vertical risers examined by contractor and replaced as required. The existing water service entrance inside the mechanical room will supply water to new backflow preventer, shutoff and system. A water meter with remote readout capability from BMS will be installed.

24.1.4.2. Water shall be supplied to restrooms, mechanical equipment and any other items requiring water. Fixtures requiring hot water shall be provided from a central system with circulated loop system to hot water as required. Domestic hot water shall be provided using the existing water heater in the basement mechanical room. The water heater and circulation pumps will be connected to the building DDC system for alarm monitoring. Existing floor drains in mechanical rooms will be sufficient to handle pump strainers, relief valves, backflow preventers, etc.

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24.1.4.3. High efficiency water filters installed in an accessible location at the building water service shall provide water quality for the entire building. ~~The owner shall determine the specific type of filtration to be implemented.~~

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24.1.4.4. The contractor shall have water analysis done which will determine what type of filter to use.

24.2. Plumbing Fixtures

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24.2.1. Plumbing fixtures shall be water-conserving type, complete with supplies and traps. Commercial flush valve water closets are required. Traps for lavatories shall have cleanout plugs. All lavatories and water coolers shall have

carriers and all water closets shall be floor mounted. New roof drains will be installed to accommodate revisions and existing drains replaced. Existing roof storm water leaders will be replaced with ~~will be evaluated for condition, location and size as to whether or not reuse is viable. If replacement is w~~warranted~~ schedule 40 steel pipe shall be utilized with 4 (four) heavy-duty stainless steel bands~~ cast iron . Cleanouts will be added and included in all piping that terminates or exists in the basement.

24.3. Piping Distribution System

24.3.1. Domestic water piping is copper, Type "K", with "no-lead" solder joints. All domestic water piping is insulated with fiberglass insulation with vapor meeting the flame and smoke rating of NFPA.

24.3.2. Sanitary, waste, and vent piping will be no-hub cast iron pipe and fittings.

24.3.3. Life Safety Plans. Provide Fire Prevention/Life Safety Plans in accordance with Design Manual, 6.1.4.2.

24.4. Description Of Systems: The new building systems will be connected to existing domestic water, waste piping, and storm drainage systems as follows:

24.4.1. Utilize existing domestic water service to the building and connect new systems to existing piping in the mechanical room. Waste piping will be replaced throughout with concealed vertical risers examined and replaced as required. The existing water service entrance inside the mechanical room will supply water to new backflow preventer, shutoff and system. A water meter with remote readout capability from BMS will be installed. High quality in-line water filters sized for the entire building shall be installed and in a manner that does not require water shut-off for replacement.

24.4.2. Water shall be supplied to restrooms, mechanical equipment and any other items requiring water. Fixtures requiring hot water shall be provided from a central system with circulated loop system to hot water as required. Domestic hot water shall be provided using the existing water heater in the basement mechanical room. A bladder type expansion tank for domestic hot water systems shall be constructed with materials suitable for potable use. The water heater and circulation pumps will be connected to the building DDC system for alarm monitoring. Existing floor drains in mechanical rooms will be sufficient to handle pump strainers, relief valves, backflow preventers, etc. and will be equipped with trap primers at locations subject to deep seal trap evaporation.

24.4.3. Water shall be stored at 140 deg.F , tempered and distributed at 120 deg.F

24.4.4. High efficiency water filters installed in an accessible location at the building water service shall provide water quality for the entire building. The owner shall determine the specific type of filtration to be implemented.

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25. ELECTRICAL SYSTEM REQUIREMENTS

25.1. Building Code: The International Building Code, 2001 edition (IBC) will be the primary building code utilized for this project,

25.2. Energy Conscious Design Features Summary

25.2.1. Fluorescent fixtures provided with electronic ballasts and 32W T-8 lamps. Electronic ballasts will have 0.9 power factor and 5% total harmonic distortion.

25.2.2. The use of incandescent fixtures will be limited to areas requiring dimming.

25.2.3. Occupancy sensors will be provided in low occupancy type rooms (i.e., storage rooms, toilets, janitor's closets, etc.).

25.2.4. A lighting contactor with programmable, photocell-on, photocell-off operation will control exterior lighting.

25.3. Energy Sources

Electrical service is currently provided to the building via the main pad-mounted, unit-substation located in the rear of the building. This substation feeds an indoor main switchboard located in the basement of the building.

25.4. Specific Instructions

25.4.1. The work included in this section shall consist of furnishing professional design, labor, materials, equipment, supervision and services necessary to completely design and install electrical work as described herein. The work includes the following principal items:

25.4.2. Power Distribution System:

25.4.2.1. Lighting system

25.4.2.2. Grounding system

25.4.2.3. Lightning protection system

25.4.2.4. Legally required emergency power system and egress lighting system

25.4.2.5. Fire alarm and detection system

25.4.2.6. Centralized Sound Masking System

25.4.2.7. Master Clock System.

25.4.2.8. Government furnished telecommunications systems

25.4.2.9. Government furnished Access Control/CCTV/Security-Intercom System

25.4.3. The Contractor shall provide a Design Analysis for review by the Government. Design Analysis shall comply with the latest edition of the Design Manual for Military Construction, Chapter A-5, Paragraph 5.7.1.

25.5. Contruction Documents

25.5.1. Prior to construction, the electrical engineer shall prepare construction documents. These shall consist of drawings and specifications for review by the government. The construction documents shall consist of the following drawings:

25.5.1.1. Electrical Symbol Schedule (All electrical symbols used on the electrical drawings shall be defined on this sheet.)

25.5.1.2. Electrical Site Plan Include site lighting layout design, security, access control, and all electrical utility connections.)

25.5.1.3. Lighting Plans (Include layout, circuiting and design for each floor of the building.)

25.5.1.4. Power Plans (Include layout, circuiting and design for each floor of the building.)

25.5.1.5. Security Plans (Include layout, circuiting and design for each floor of the building.)

25.5.1.6. Telecommunication Plans (Include layout, circuiting and design for each floor of the building.)

25.5.1.7. Riser Diagrams (Include power riser diagram and a riser diagram for each electrical system in the building.)

25.5.1.8. Electrical Details (Include all applicable electrical details to illustrate correct methods of construction to be utilized.)

25.5.1.9. Panel board Schedules (Provide a schedule for each panelboard)

25.5.1.10. Specifications for the interior and exterior electrical systems shall be prepared by the A/E and shall include all sections applicable for the work required under this project. (Reference the U.S. Corps of Engineers Vol. II of II - Technical Provisions, Design Criteria, Latest Edition - dated May, 2000, Section 01020, Chapters 11 and 12 for base specifications).

25.6. Applicable Electrical Publications

25.7. U.S. Corps of Engineers Vol. II of II - Technical Provisions, Design Criteria, Latest Edition - dated May, 2000, Section 01020, Chapters 11 and 12

25.8. ETL 1110-3(1989) Electrical Power Systems for Nonlinear Loads

25.9. TM 5-811-1 Electrical Power Supply and Distribution

25.10. Electrical Design Interior Electrical Systems

25.11. Electrical Design Lightning and Static Electricity

25.12. Voice/Data Systems

25.13. Coordinated Power System Protection

25.14. American National Standards Institute (ANSI)

25.14.1. ANSI C2 (1996) National Electrical Safety Code
25.14.2. ANSI C57.12.28 (1988) Liquid-Filled Distribution Transformers Used in Pad-Mounted Installations, Including Unit Substations

25.15. American Society Of Heating, Refrigerating And Air Conditioning Engineers (ASHRAE)
25.15.1. ASHRAE 90.1 (1999) Energy Standards for Buildings Except Low Residential Buildings

25.16. Electronic Industries Association Telecommunications Industry Association (EIA/TIA):
25.16.1. EIA/TIA – 568-A (1995) Commercial Building Telecommunications Wiring Standard
25.16.2. EIA/TIA TSB - 36 (1991) Technical Communications Bulletin - Additional Cable Specifications for Unshielded Twisted-Pair Cables
25.16.3. EIA/TIA TSB - 40 (1992) Technical Communications Bulletin - Additional Transmission Specifications for Unshielded Twisted-Pair Connecting Hardware
25.16.4. EIA/TIA 569A (1996) Commercial Standard for Telecommunications Pathways and Spaces
25.16.5. EIA/TIA 606 (1993) Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
25.16.6. EIA/TIA 607 (1994) Grounding and Bonding Requirements for the Telecommunications Infrastructure of Commercial Buildings

25.17. Federal Communications Commission (FCC)

25.17.1. FCC Part 15 (Jul 1986) Rules and Regulations - Radio Frequency Devices

25.18. Illuminating Engineering Society Of North America (IESNA)
25.18.1. (2000) Lighting Handbook, 9th Edition

25.19. Institute Of Electrical And Electronic Engineers (IEEE)
25.19.1. IEEE Std. 519 Practices and Requirements for Harmonic Control in Electrical Power Systems
25.19.2. IEEE Std. 1100 Powering and Grounding Sensitive Electronic Equipment

25.20. National Fire Protection Association (NFPA)
25.20.1. NFPA 70 (2002) National Electrical Code
25.20.2. NFPA 72 (2002) National Fire Alarm Code
25.20.3. NFPA 101 (2000) Life Safety Code
25.20.4. NFPA 780 (1997) Installation of Lightning Protection Systems

25.21. National Electrical Manufacturers Association (NEMA)
25.21.1. NEMA PB 1 (1990; PB 1.1-1986) Panel boards
25.21.2. NEMA PB 2 (1989; PB2.1-1986) Dead front Distribution Switchboards

25.22. Project Construction Phasing

25.22.1. Refer to the phasing section of this document for construction phasing requirements. These phasing requirements will affect the method of electrical demolition and construction.

25.23. EXTERIOR ELECTRICAL SYSTEM: The existing electrical service will be reused.

25.23.1.

25.24. Source of Power

25.24.1. The existing 2000A, 480/277V service will be reused.

25.24.2. The existing service is considered adequate to support this project..

25.25. Service Entrances

25.25.1. Service to the building's electrical systems will be 480/277 Volt, 3-phase, 4-wire, solidly grounded wye, obtained from the existing 2000A, 480/277Volt main switchboard. The estimated loads are as follows:

25.25.2. Office building 800 KVA connected load,
25.25.3. Chiller Plant: 480 KVA connected load,

25.25.4. Final loads and final decision on the adequate capacity of the existing service transformer shall be verified (with the actual design loads) by the electrical engineer of record.

25.26. Building Service Conductors

25.26.1. Underground service lateral to the building is existing and should be reused where deemed adequate by the electrical engineer of record.

25.27. Exterior Lighting

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25.27.1. Exterior lighting will be provided around the perimeter of the building and in all parking areas ~~as requested by the user,~~ and at all building entrances and exits.

25.27.2. Parking area lighting shall utilize shoe-box style cutoff luminaries on 30’ (maximum) aluminum poles and shall be designed to provide a minimum illumination level of 4 foot-candle(s) at a maximum-to-minimum ratio of 4:1. Minimum foot-candle levels will be increased, where needed, for proper coordination between security cameras and security lighting.

25.27.3. Security lighting around all sides of the building (extending up to 30 feet from the building footprint) shall

be designed to provide a minimum illumination level of 2 foot-candle(s) at a maximum-to-minimum ratio of 4:1.

25.27.4. Exterior lighting will be controlled by a contactor with photocell input. Manual override capability shall be provided via a cover-mounted 'Hand-Off-Auto' switch on the contactor enclosure so that they can be tested or safely re-lamped at any time.

25.27.5. High efficiency, high intensity discharge (HID) light fixtures will be specified. Ballasts for HID fixtures will be high power factor types. HID fixtures shall be provided with metal halide lamps. Lighting methods and illumination levels will be in accordance with Illumination Engineering Society (IES) requirements as a minimum.

25.28. Landscape Lighting

25.28.1. Provide a combination of 100W metal halide, bullet-shaped floodlights to highlight trees and indirect adjustable stanchion mounted 70W and 100W metal halide highlight signage and architectural elements.

25.28.2. Contemporary style luminaires with 175W metal halide lamp source along the walkway will provide security lighting between the parking lot and the building.

25.28.3. All exterior lighting will be controlled by a photocell on, photocell off operation via lighting contactors.. The lighting contactors will be provided with an enclosure mounted and labeled "Hand-Off-Auto" switch in order to manually override feature the time clock's control. Pole top fixtures and bollards will be controlled separately from the exterior wall mounted fixtures such that area and walkway lighting can be turned off while building perimeter lighting can remain on.

25.29. Non-Proprietary Statement

25.29.1. Unless specifically stated herein, no brand names or proprietary terms will be used in the final plans or specifications without approval of COE, Chief of the Electrical Section. Where proprietary items are required, the Base will provide the necessary written waiver.

25.30. Cathodic Protection Statement

25.30.1. The Contractor will perform all pH tests, salinity tests, resistivity measures, etc., required to design the corrosion control and grounding systems. The Design-Build AE shall inform the project manager of the required testing methods, testing locations, ground rod lengths, etc. The raw field data from these tests will be provided in the Foundation Report with interpretation or recommendations. The design and installation of the corrosion control and grounding system shall follow the A/E's recommendations.

25.30.2. Cathodic protection and protective coatings shall be provided for the following buried or submerged ferrous metallic structures regardless of soil or water resistivity.

25.30.3. Natural gas and propane piping

25.30.4. Liquid fuel piping

25.30.5. Underground storage tanks

25.30.6. Fire protection piping

25.30.7. Ductile or cast iron pressurized piping under floor (slab on grade) in soil

25.30.8. Underground heat distribution and chilled water piping in ferrous metallic conduit in soils with resistivity of 30,000 ohm-cm or less

25.30.9. Steel casing for underground hydraulic elevator jack

25.31. Telecommunications Service

25.31.1. The existing voice (copper) and data (fiber optic) outside cable plants have a confirmed capacity to handle new and existing services according to the Base Department of Information Management (DOIM).

25.32. CATV Service

25.32.1. CATV outside cable plant is existing with a confirmed capacity to handle new and existing services according to DOIM.

25.33. Interior Electrical System

25.33.1. Power Distribution: The building electrical distribution system will consist of the existing main distribution switchboard, new downstream electrical equipment and associated feeders and new branch circuit panelboards. Provide K-4 rated, dry-type transformers on each floor to serve 120/208 volt loads in the building. Transient surge protection will be provided for the main distribution switchboard, and all branch circuit panelboards. All TVSS devices shall be integrally mounted in the panel boards and shall be UL 1449, Second Edition listed.

25.33.2. New panelboards will be provided within the existing stacked, electrical rooms located throughout the building. The design shall consist of a main electrical room and two stacked, satellite electrical equipment rooms on each of the upper floors of the building. The electrical engineer of record shall determine whether the existing busway riser in the existing electrical rooms can be reused. The main electrical room will contain the existing main switchboard, while the branch rooms will contain branch circuit panelboards.

25.33.3. A short-circuit and protective devices coordination study will be provided for the complete electrical distribution system.

25.33.4. Electrical equipment will be seismically braced in accordance with guidance provided in TI 809-4 for the seismic region in which the facility is located.

25.33.5. Twenty-five percent future load growth capacity will be provided in all cable and electrical equipment. All branch circuit panel boards shall be 42-circuit type. Twenty-five percent spare circuit breakers and capacity will be provided for all branch circuit panel boards.

25.33.6. It is intended that the existing in-floor, Walker duct system be reused to the greatest extent possible, for the distribution of branch circuit power. All existing conductors shall be removed and disposed of off site.

25.33.7. It is intended to reuse the existing 600-amp busway system for vertical power distribution to the greatest extent possible.

25.33.8. All other electrical system components shall be removed and disposed of off site.

25.34. POWER DISTRIBUTION EQUIPMENT:

25.34.1. The existing Service entrance equipment consists of switchboard-style construction. Distribution panel boards shall consist of group-mounted, molded case circuit breakers.

25.34.2. Branch circuit panel boards provided under this contract shall utilize bolt-on style, inverse-time, circuit breakers. New panel boards shall be equipped with integral TVSS devices. Panel boards specified will be capable of being supplied by a minimum of three major manufacturers of this type of equipment. Panel board types used shall be commercial grade distribution, lighting and power panel boards. All bussing and lugs within the panel board and all lugs and connections for associated devices installed within the panel board shall be copper. The minimum interrupting capacity of each panel board assembly shall be indicated on the drawings and each panel board shall be fully rated for the available interrupting capacity. All panel boards shown used as service entrance equipment shall be rated and equipped for such use and bear a Service Entrance (SE) label. Panel boards specified will be capable of being supplied by a minimum of three major manufacturers of this type of equipment. Equipment rooms will be laid out using the equipment that represents the largest ‘footprint’ from the capable manufacturers.

25.34.3. The main switchboard is existing and will be reused.

25.34.4. The existing Switchboard is mounted on a 3 inches high concrete housekeeping pad doweled to the concrete floor. New feeder circuits should exit the top of the switchboard.

25.34.4.1. The main circuit breaker is existing.

25.34.5. Panel boards will comply with NEMA Standard PB-1 and UL-67. Panel boards, which require a main circuit breaker, will have an individually mounted main breaker and 42 useable pole spaces. Panel boards, which do not require a main circuit breaker, will be main lugs only (MLO).

25.34.6. All panel boards will have copper bus and bolt on branch breakers. Main breakers shall be bolted to the bus bars.

25.34.7. Motor control centers will not be required for this project. Individual motor controllers will be furnished under Division 15, Mechanical.

25.34.8. Equipment will have interrupting capacities and withstand ratings in excess of the calculated available fault current for the final design.

25.34.9. Final design coordination between A/E disciplines will ensure panel boards will not be located under ductwork or piping and panel board locations will comply with all requirements of the National Electrical Code.

25.35. Coordination Statement

25.35.1. The design will be coordinated with other disciplines to ensure that ducts and piping shall not be installed over switchboards and panel boards.

25.36. Interior Lighting Systems

25.36.1. Lighting for the facility will conform to MIL-HDBK-1191 with most fluorescent and all HID lighting operating at 277 Volts. Fluorescent fixtures will utilize electronic ballasts and T-8 lamps. All low occupancy rooms such as toilets and janitor closets will be provided with occupancy sensing lighting controls.

25.36.2. General offices and corridors will be illuminated using 2’ x 2’ static troffers with standard-grade, 3-inch deep, and specular silver, parabolic louvers. Offices, and all other areas with a large number of personal computer workstations, will have low glare and low brightness, specular silver, fluorescent troffers with VDT-grade parabolic louvers complying with IES RP1 specifications. Conference rooms will be provided with dimmable, compact fluorescent fixtures capable of being dimmed between 5% - 100% of the rated lumen output of the fixture. Small storage rooms, mechanical rooms, and electrical rooms will be provided with 4-foot fluorescent strip fixtures with wire guards. Compact fluorescent type down lighting fixtures and

other types of lighting fixtures will be used in areas where special attention must be given to the aesthetics.

25.36.3. Interior lighting fixtures will be supported from the structure and will not be supported from suspended ceiling systems.

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25.36.4. Multiple switching will be provided for rooms ~~as directed by the user,~~ where indicated on standard room guide plates, and in large rooms and areas. Multiple switching through the same light fixtures will be achieved by providing these fixtures with two ballasts. One switch/ballast combination will control the inner lamp(s), while the second switch/ballast combination will control the outer lamps. Corridor lighting fixtures as well as lobbies and other public spaces will be controlled through a lighting contactor. The lighting contactor will be capable of receiving inputs from the building management system.

25.36.5. Emergency egress lighting will be provided for all exit access, exit discharge and conference rooms as required by the NFPA 101. These fixtures shall be connected to the emergency power system. All electrical, communications, and mechanical rooms will also be provided with emergency lighting. In addition, emergency fluorescent fixtures located in stairs shall also be provided with battery/inverter-type ballasts (1000 Lumen minimum) to provide redundant emergency lighting in these spaces.

25.36.6. Illumination levels will be determined in accordance with IES (illuminating Engineering Society) standards for each area or by directive from the user. Design shall be based on the middle of the ranges; not the high values. Energy conservation methods will be in accordance with ASHRAE 90.1.

25.36.7. Interior lighting calculations for rectangular rooms will be based on Zonal Cavity method using lighting levels listed in MIL-HDBK-1191, STD DETL 40-06-04, and IES Handbook. Irregularly shaped rooms will utilize the point-by-point method for lighting calculations.

25.36.8. Fluorescent lamps for general-purpose lighting will be warm white, 3500 degrees K with a minimum CRI of 85.

25.36.9. All exit signs will be LED illuminated type with built-in battery backup capability. Exit signs will be specified to comply with ETL 1110-3-432.

25.37. Raceway Systems

25.37.1. All power and lighting wiring will utilize conduits, boxes and fittings with exception of some grounding conductors and lightning protection conductors.

25.37.2. Service lateral conductors and underground conductors to parking areas (for lighting and convenience outlets and

exterior lighting standards) will be contained in PVC conduit systems.

25.37.3. In areas where a high level of physical protection is required, conductors will be enclosed in galvanized rigid steel or intermediate grade rigid conduit systems.

25.37.4. Electrical metallic tubing, flexible metal conduit and metallic armored cable will be utilized for power and lighting circuits.

25.38. Cable Tray System

25.38.1. Two, distinct cable tray systems shall be provided and shall be located above the 'core' ceiling. The 'Red Network' cable tray (for the secure telecom network) shall be a solid bottom type aluminum tray (18" w x 4" d) with solid sides and pad-lockable, solid, hinged top sections. The 'Black Network' cable tray (18" w x 4" d) shall be a ladder type aluminum tray with a solid bottom. Each of the cable tray systems shall be installed above the corridor ceiling around the 'core corridor'. Corridor cable trays will be connected to communication rooms with 24" x 4" deep cable trays. A detailed coordination of the interstitial space above the suspended ceiling will be provided on the contract drawings to assure adequate clearances. The interstitial space will be designed to provide a minimum of 18 inches above the cable trays for access.

25.38.2. Telecommunications cables and outlets will be provided by the Government. The contractor shall provide a 1 inch empty conduit (EMT with pull string) from each telecom outlet box to the communication system cable tray. The following minimum number of telecommunications outlets shall be provided:

25.38.2.1. Red Network: One outlet per 60 square feet of space. (See the applicable 'programming' section of this RFP for additional requirements.)

25.38.2.2. Black Network: One outlet per 60 square feet of space. (See the applicable 'programming' section of this RFP for additional requirements.)

25.38.3. The 'Red Network' telecom closet shall be a separate room from the 'Black Network' telecom closet with one closet per floor for each network. The minimum clear distance between each of the two network cable tray systems shall be 1 meter. The minimum clear distance between each of the two network cable raceway systems shall be 1 meter for lines running parallel to each other. The minimum clear distance between each of the two network cable raceway systems shall be 0.33 meters for lines running perpendicular to each other.

25.38.4. Each "Black Network" telecom backboard shall be connected to the telecom on the floor below with (2) 4-inch conduits. The telecom board on the first floor shall be

connected to the main telecom service board in the basement with (2) 4-inch conduits.

25.38.5. Each “Red Network” telecom backboard shall be connected to the telecom on the floor below with (2) 4-inch conduits. The telecom board on the first floor shall be connected to the “Black Network” telecom board on the first floor with (2) 2-inch conduits.

25.39. Outlet Devices

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25.39.1. ~~Receptacle and voice/data outlet locations will be based on user requirements.~~ Fire alarm device placement will be in accordance with NFPA 72 and 101.

25.39.2. General-purpose duplex receptacles will be rated 120V, 20A and will be placed as a minimum of one on each wall of a room. In room where walls exceed 9 feet, one additional receptacle will be provided for each additional 9 feet of wall or fraction thereof. General-purpose duplex receptacles in corridors will be located with a maximum spacing of 50 feet. Provide one duplex receptacle adjacent to each telecom outlet. (See the applicable ‘programming’ section of this RFP for additional requirements.)

25.39.3. Safety type receptacles will be provided in any room where pre-school children may be present.

25.39.4. Special Items: The A/E will provide specialty outlets where necessary for all special equipment provided under this contract, all special equipment furnished by the Government, and where directed by the users. (See the applicable ‘programming’ section of this RFP for additional requirements.)

25.40. Non-Linear Loads

25.40.1. Dedicated 120V, 20A circuits will be provided for fax machines, copy machines, workstation computer and laser printers. Also, each computer workstation data outlet will be provided with an adjacent duplex receptacle. These workstation receptacles will be of the isolated ground type and shall be clearly identified on the drawings and on the face of the device. The drawings shall identify these with a separate symbol from than of a general-purpose receptacle. The receptacle shall consist of a permanently engraved, colored triangle on its face. All receptacles serving computer equipment will be labeled and will be served from separate dedicated 120V, 20A branch circuits with no more than four receptacles per circuit. Each branch circuit will be provided with a separate neutral conductor to eliminate the effect of nonlinear loads. Each dedicated computer receptacle will be calculated at 180 VA each as allowed by the National Electrical Code.

25.40.2. Panelboards shall have double-rated neutral buses. True RMS sensing meters, relays, and circuit breaker trip elements shall be used with nonlinear loads.

25.40.3. All interior cables will be copper. No aluminum conductors will be used in the construction of this facility. The use of 75 or 90 degrees C terminals and insulated conductors are required.

25.41. Lightning Protection System

25.41.1. A complete U.L. Master Labeled lightning protection system will be provided. The lightning protection system will include termination devices, roof conductors, ground conductors and electrodes as required. Preliminary risk assessment calculations indicate a severe exposure. A lightning protection system will be designed by the A/E for this building. The system shall comply with the latest addition of NFPA-780 “Lightning Protection Code” and with TM 5-81183 entitled “Electrical Design of Lightning and Static Electricity Protection”.

25.42. Grounding System

25.42.1. The grounding system shall comply with the latest addition of the Article 250 of the National Electrical Code and with IEEE Standard 142-1991 “Grounding of Industrial and Commercial Power Systems”. The grounding systems shall consist of a ground ring located around the building. The service entrance equipment for the building shall be bonded to the ground ring, building steel, and to a metal water pipe (where available). The system will be designed to provide a ground resistance connection of no more than 5 ohms. The use of ground plates, chemical ground rods, chemical treatment of the soil and other measures shall be used to achieve the low resistance level where required.

25.42.2. The grounding electrode system will consist of multiple electrodes bonded together and will include ground rods and bare copper conductors.

25.42.3. All power circuits will include a green insulated equipment grounding conductor bonded to metal non-current-carrying parts of equipment and raceway systems.

25.42.4. Neutrals of separately derived systems will be grounded to the building steel nearest the point of system derivation. All grounding electrodes will be bonded together.

25.42.5. A 4/0 copper-grounding loop (counterpoise) will be provided around the building. (Down conductors shall be connected to this system ground loop.)

25.42.6. A telecommunications signal reference ground shall be provided and shall consist of 250 MCM insulated copper cable

routed from the LPS ground ring to insulated ground bars located in each telecom closet.

25.43. Metering

25.43.1. Electrical service(s) to the building is currently metered for energy usage. The contractor shall maintain and reuse this existing power metering during the renovations.

25.44. Emergency Power

25.44.1. The building's classification of 'High-Rise' requires that a 'Legally Required Emergency Power System' be provided. This emergency system shall consist of the following:

25.44.1.1. A self-contained Diesel generator with integral, adjustable-trip output circuit breaker(s)
25.44.1.2. Critical Grade silencer with rain cap
25.44.1.3. Double-walled, skid-mounted base tank
25.44.1.4. Environmental Housing
25.44.1.5. Automatic Transfer switch
25.44.1.6. Emergency Distribution panel boards.

25.44.2. The generator shall be sized to safely start and run the required loads. The generator shall be located outside the building near the existing cooling tower. The system shall provide power for all code required equipment/systems including, but not limited to, the following:

25.44.2.1. Egress lighting
25.44.2.2. Elevators
25.44.2.3. Smoke removal/control systems
25.44.2.4. Fire pump/controller
25.44.2.5. Jockey pump
25.44.2.6. HVAC controls

25.44.3. The emergency system shall provide power for all user requested loads including, but not limited to, the following:

25.44.3.1. All electrically powered devices and equipment located on the sixth floor. (The entire sixth floor shall be on emergency power including all stand-alone HVAC cooling-equipment serving spaces on this floor.)
25.44.3.1.1. Fire alarm equipment
25.44.3.1.2. Security & CCTV system equipment
25.44.3.1.3. Receptacles in the electrical and telecommunications closets

25.45. Uninterruptable Power System (UPS)

25.45.1. Stand-alone UPS units shall be provided in all telecommunications rooms to enable the Government to connect network system hardware to a clean, uninterruptible power source. These units shall be of the plug-in design and shall be rated at 1.9KW with a 5-minute battery back-up at full load. Provide one UPS for each of the two networks (Black & Red) in each telecommunications closet.

25.46. Coordination with Communications-Electronics Officer

25.46.1. The contractor shall coordinate the installation of telecommunication systems raceway with the Contracting Officer's designated DOIR representative.

25.47. Fire Alarm System

25.47.1. A new multiplexed, addressable fire alarm system with emergency voice evacuation/notification shall be provided for the building. All fire alarm system cabling shall be installed in a dedicated, conduit-based, raceway system. The design and installation shall be in compliance with the referenced building code(s) and life safety code(s) for a 'High-Rise' classification.

25.47.2. This system shall be capable of communicating (on a device-by-device basis) all alarm, supervisory, and trouble conditions via dedicated telephone lines, with the Base's existing Honeywell central receiving station.

25.47.3. The system will consist of a Fire Alarm Control Panel (FACP), Fireman's Voice Communication Panel (FVCP), addressable smoke detectors, addressable air duct detectors, addressable manual pull stations with the appropriate fire department keying system, audio/visual indicating devices with ADA compliant strobes; remote annunciator panel, addressable monitor modules, addressable control modules, and remote fire alarm digital transmitter. The building is being upfitted with a complete fire suppression system. Serviced monitoring of the associated water flow and zone valves shall be included. All conduit and cabling for this system shall be designed with Class A Signal Line Circuits (SLC) and Class A Notification Appliance Circuits (NAC). Audible occupant notification shall be with live and digitally pre-recorded voice messages. Fire alarm cables will be installed in a dedicated, looped, conduit-based, raceway system.

25.47.4. The addressable fire alarm control system will be provided to monitor individual initiating devices including manual stations and various automatic detection devices as required in the building. The system will include a Honeywell digital transmitter compatible with the existing base transmitter/receiver that will report location specific alarm, trouble, and supervisory trouble conditions to the existing central communication center. The system shall be a low voltage, non-coded, fire alarm system. Signal line circuits shall be wired as 4-wire, Class "A". Notification appliance circuits shall be wired as 4-wire, Class "A" and shall provide voice evacuation for occupant evacuation and/or relocation. The system will be U.L. listed and supervised, with all wiring in conduit. The fire alarm system will include the following:

25.47.4.1. Sprinkler System - Zoned water flow and tamper alarms

25.47.4.2. Smoke and Fire Detection for HVAC - Duct

mounted smoke detectors shall be installed for alarm and control of HVAC systems

25.47.4.3. Area Smoke and Fire Detection - Ceiling or wall mounted rate of rise detectors will be installed where required

25.47.4.4. Fireman's phone jacks at locations required by the applicable codes

25.48. CATV System

25.48.1. The television distribution system will consist of a backbone distribution coaxial cable with outlets located in various spaces as directed by the C.O. with a minimum of one outlet per 200 square feet. An RG-11 truck cable shall be routed up through the 'Black Network' telecom rooms. Provide an RG-11 trunk line from each closet throughout the cable tray on each level. Directional taps will be provided on this trunk line and shall be located on the 'Black Network' cable tray to distribute the television signals throughout the facility. Provide RG-6 cables in ¾ inch EMT from the cable tray to wall mounted TV jacks. Provide a minimum of 12 TV outlets on each level of the building with exact locations determined by the C.O. A Broad band, CATV Amplifier will be provided at the main telecom board to produce a 60-dBmv signal at the headend and +6 to +12 dBmv signal level at each outlet.

25.49. Paging System

25.49.1. A paging system shall not be provided. Emergency announcements shall be made over the voice evacuation system provided with the fire alarm system.

25.50. Sound Masking System

25.50.1. A sound masking system shall be provided. System shall consist of sound masking speakers located throughout all open-office spaces with a central audio amplifier with digital noise generator. Amplifier shall be designed with 50% headroom.

25.51. Master Clock System

25.51.1. A master clock system shall be provided. Clocks shall be located within all occupied spaces. The master clock system shall include a master clock and individual, analog clocks with correction coils. Provide a minimum of 12 clocks on each level of the building with exact locations determined by the C.O.

25.52. Security Systems

25.52.1. Entry control stations consisting of a CCTV Camera, a Security Intercom station, and Card Reader shall be provided at each building entrance and at each parking lot entrance. All entry control stations shall have their signals routed back to the main security station on the first floor.

Provide an empty raceway system for the government provided intrusion detection system (ISIDS) for the SCIF located on the sixth floor. Connect the ISIDS controller to the black network cable tray or telecom board with ¾ inch EMT.

25.53. CCTV System

25.53.1. Provide an empty raceway system for the Government provided CCTV system. This system shall include CCTV cameras and video monitors. Pole mounted, Pan/Tilt/Zoom type cameras will be provided along the site perimeter to provide unobstructed view to all portions of the site perimeter. Fixed focal length cameras shall be located at all 'Entry Control Stations'.

25.54. Intercom System

25.54.1. Provide an empty raceway system for the Government provided security intercom system. Intercom stations shall be located at all 'Entry Control Stations' and shall connect to the main security station on the first floor.

25.55. Access Control System

25.55.1. Provide an empty raceway system for the Government provided access control system. Card readers shall be located at all 'Entry Control Stations' and shall connect to the main security station on the first floor. Provide an empty raceway from the main security station to a card reader located at the "Command Parking Lot".

25.56. Non-Proprietary Statement

25.56.1. With the exception of the Honeywell fire alarm transmitter/receiver, all new equipment shall be specified in such a way that no item will become proprietary to a single manufacturer. In addition, no particular brand names will be listed on the drawings or in the specifications. The A/E shall request written approval for this listed exception from the 'Chief of the Electrical Section, Corps of Engineers, and Savannah.'

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~~25.ELECTRICAL SYSTEM REQUIREMENTS~~

~~25.1.Building Code: The International Building Code, 2001 edition (IBC) will be the primary building code utilized for this project,~~

~~25.2.Energy Conscious Design Features Summary~~

~~25.2.1.Fluorescent fixtures provided with electronic ballasts and 32W T-8 lamps. Electronic ballasts will have 0.9 power factor and 5% total harmonic distortion.~~

~~25.2.2.The use of incandescent fixtures will be limited to areas requiring dimming.~~

~~25.2.3.Occupancy sensors will be provided in low occupancy type rooms (i.e., storage rooms, toilets, janitor's closets, etc.).~~

~~25.2.4.A lighting contactor with programmable, photocell-on, time clock-off operation will control exterior lighting.~~

~~25.3.Energy Sources~~

~~25.3.1.Electrical service is currently provided to the building via the main switchboard located in the adjacent Headquarters/Classroom building. The renovations shall include providing a new pad-mounted, 208/120Volt, 3-phase, 4-wire transformer that will provide two distinct services to Bryant Hall. The first service will be used to feed the new stand-alone chiller plant. The second service will feed the actual building. This second service will be used to back-feed the existing busway system where the design engineer determines this is the most practical method for maintaining the electrical services during this phased construction. The existing service to Bryant Hall shall be removed once the new service is installed and ready to back-feed the building.~~

~~25.4.Specific Instructions~~

~~25.4.1.The work included in this section shall consist of furnishing professional design, labor, materials, equipment, supervision and services necessary to completely design and install electrical work as described herein. The work includes the following principal items:~~

~~25.4.2.Power Distribution System:~~

~~25.4.2.1.Lighting system~~

~~25.4.2.2.Grounding system~~

~~25.4.2.3.Lightning protection system~~

~~25.4.2.4.Legally required emergency power system and egress lighting system~~

~~25.4.2.5.Fire alarm and detection system~~

~~25.4.2.6.Centralized Sound Masking System~~

~~25.4.2.7.Master Clock System.~~

~~25.4.2.8.Government furnished telecommunications systems~~

~~25.4.2.9.Government furnished Access Control/CCTV/Security-Intercom System~~

~~25.4.3.The Contractor shall provide a Design Analysis for review by the Government. Design Analysis shall comply with the latest edition of the Design Manual for Military Construction, Chapter A-5, Paragraph 5.7.1.~~

~~25.5.Contruction Documents~~

~~25.5.1.Prior to construction, the electrical engineer shall prepare construction documents. These shall consist of drawings and specifications for review by the government. The construction documents shall consist of the following drawings:~~

~~25.5.1.1.Electrical Symbol Schedule (All electrical symbols used on the electrical drawings shall be defined on this sheet.)~~

~~25.5.1.2.Electrical Site Plan Include site lighting layout design, security, access control, and all electrical utility connections.)~~

~~25.5.1.3.Lighting Plans (Include layout, circuiting and design for each floor of the building.)~~

~~25.5.1.4.Power Plans (Include layout, circuiting and design for each floor of the building.)~~

~~25.5.1.5.Security Plans (Include layout, circuiting and design for each floor of the building.)~~

~~25.5.1.6.Telecommunication Plans (Include layout, circuiting and design for each floor of the building.)~~

~~25.5.1.7.Riser Diagrams (Include power riser diagram and a riser diagram for each electrical system in the building.)~~

~~25.5.1.8.Electrical Details (Include all applicable electrical details to illustrate correct methods of construction to be utilized.)~~

~~25.5.1.9.Panel board Schedules (Provide a schedule for each panelboard)~~

~~25.5.1.10.Specifications for the interior and exterior electrical systems shall be prepared by the A/E and shall include all sections applicable for the work required under this project. (Reference the U.S. Corps of Engineers Vol. II of II - Technical Provisions, Design Criteria, Latest Edition - dated May, 2000, Section 01020, Chapters 11 and 12 for base specifications).~~

~~25.6.Applicable Electrical Publications~~

~~25.7.U.S. Corps of Engineers Vol. II of II - Technical Provisions, Design Criteria, Latest Edition - dated May, 2000, Section 01020, Chapters 11 and 12~~

~~25.8.ETL 1110-3(1989) Electrical Power Systems for Nonlinear Loads~~

~~25.9.TM 5-811-1 Electrical Power Supply and Distribution~~

~~25.10.Electrical Design Interior Electrical Systems~~

~~25.11.Electrical Design Lightning and Static Electricity~~

~~25.12.Voice/Data Systems~~

~~25.13.Coordinated Power System Protection~~

~~25.14.American National Standards Institute (ANSI)~~

~~25.14.1.ANSI C2 (1996) National Electrical Safety Code~~

~~25.14.2.ANSI C57.12.28 (1988) Liquid-Filled Distribution Transformers Used in Pad-Mounted Installations, Including Unit Substations~~

~~25.15.American Society Of Heating, Refrigerating And Air Conditioning Engineers (ASHRAE)~~

~~25.15.1.ASHRAE 90.1 (1999) Energy Standards for Buildings Except Low Residential Buildings~~

~~25.16.Electronic Industries Association Telecommunications Industry Association (EIA/TIA):~~

~~25.16.1.EIA/TIA - 568-A (1995) Commercial Building Telecommunications Wiring Standard~~

~~25.16.2.EIA/TIA TSB - 36 (1991) Technical Communications Bulletin - Additional Cable Specifications for Unshielded Twisted-Pair Cables~~

~~25.16.3.EIA/TIA TSB - 40 (1992) Technical Communications Bulletin - Additional Transmission Specifications for Unshielded Twisted-Pair Connecting Hardware~~

~~25.16.4.EIA/TIA 569A (1996) Commercial Standard for Telecommunications Pathways and Spaces~~

~~25.16.5.EIA/TIA 606 (1993) Administration Standard for the Telecommunications Infrastructure of Commercial Buildings~~

~~25.16.6.EIA/TIA 607 (1994) Grounding and Bonding Requirements for the Telecommunications Infrastructure of Commercial Buildings~~

~~25.17.Federal Communications Commission (FCC)~~

~~25.17.1.FCC Part 15 (Jul 1986) Rules and Regulations - Radio Frequency Devices~~

~~25.18.Illuminating Engineering Society Of North America (IESNA)~~

~~25.18.1.(2000) Lighting Handbook, 9th Edition~~

~~25.19.Institute Of Electrical And Electronic Engineers (IEEE)~~

~~25.19.1.IEEE Std. 519 Practices and Requirements for Harmonic Control in Electrical Power Systems~~

~~25.19.2.IEEE Std. 1100 Powering and Grounding Sensitive Electronic Equipment~~

~~25.20.National Fire Protection Association (NFPA)~~

~~25.20.1.NFPA 70 (2002) National Electrical Code~~

~~25.20.2.NFPA 72 (2002) National Fire Alarm Code~~

~~25.20.3.NFPA 101 (2000) Life Safety Code~~

~~25.20.4.NFPA 780 (1997) Installation of Lightning Protection Systems~~

~~25.21.National Electrical Manufacturers Association (NEMA)~~

~~25.21.1.NEMA PB 1 (1990; PB 1.1-1986) Panel boards~~

~~25.21.2.NEMA PB 2 (1989; PB2.1-1986) Dead-front Distribution Switchboards~~

~~25.22.Project Construction Phasing~~

~~25.22.1.Refer to the phasing section of this document for construction phasing requirements. These phasing requirements will affect the method of electrical demolition and construction.~~

~~25.23.EXTERIOR ELECTRICAL SYSTEM:~~

~~25.23.1.The point of electrical connection to the base medium-voltage, 3-phase, 4-wire overhead distribution system will be obtained from an existing power pole located on the west side~~

~~of the facility. The existing pole should be converted to serve as a primary dip pole for the building.~~

~~25.23.2.A new 25 kv, 3-phase, 3-wire service will be provided and extended from the primary dip pole to the building's new pad mounted transformer located on the north side of the building via a concrete encased ductbank consisting of two 6-inch PVC conduits. The primary feeder to the transformer building will be connected to the existing overhead primary distribution line via fused cutouts located on the primary dip pole.~~

~~25.24.Source of Power~~

~~25.24.1.Primary underground cables will be #2, 25 kV shielded, 133% insulation, one conductor per phase, pulled in single duct. Underground primary circuit, manholes, pad mount service transformers with radial-feed, switches, and service entrances will be provided by the electrical contractor.~~

~~25.24.2.The existing overhead and underground distribution systems are considered adequate to support this project.~~

~~25.25.Service Entrances~~

~~25.25.1.Service to the building's electrical systems will be 208/120 Volt, 3-phase, 4-wire, solidly grounded wye, obtained from an outdoor, liquid-cooled, pad-mounted, energy efficient transformer rated at approximately 1500 KVA. The service entrance conductors shall be installed in a concrete encased ductbank, with conductors terminated on a single, main service disconnecting means. The estimated service entrances based on load allowances per foot squared and pad-mount transformer ratings are as follows:~~

~~25.25.2.Office building 800 KVA connected load,~~
~~25.25.3.Chiller Plant: 480 KVA connected load,~~

~~25.25.4.Final loads and final service transformer size shall be verified (with the actual design loads) by the electrical engineer of record.~~

~~25.26.Building Service Conductors~~

~~25.26.1.Underground service lateral to the building will be copper conductors in multiple parallel sets of 3-phase 4-wire circuits installed in a concrete encased ductbank. The estimated service for this facility is 1200 Amps.~~

~~25.27.Exterior Lighting~~

~~25.27.1.Exterior lighting will be provided around the perimeter of the building and in all parking areas as requested by the user, and at all building entrances and exits.~~

~~25.27.2.Parking area lighting shall utilize shoe-box style cutoff luminaries on 30' (maximum) aluminum poles and shall be~~

~~designed to provide a minimum illumination level of 4 foot-candle(s) at a maximum-to-minimum ratio of 4:1. Minimum foot-candle levels will be increased, where needed, for proper coordination between security cameras and security lighting.~~

~~25.27.3.Security lighting around all sides of the building (extending up to 30 feet from the building footprint) shall be designed to provide a minimum illumination level of 2 foot-candle(s) at a maximum-to-minimum ratio of 4:1.~~

~~25.27.4.Exterior lighting will be controlled by a contactor with photocell input. Manual override capability shall be provided via a cover-mounted 'Hand-Off-Auto' switch on the contactor enclosure so that they can be tested or safely re-lamped at any time.~~

~~25.27.5.High efficiency, high intensity discharge (HID) light fixtures will be specified. Ballasts for HID fixtures will be high power factor types. HID fixtures shall be provided with metal halide lamps. Lighting methods and illumination levels will be in accordance with Illumination Engineering Society (IES) requirements as a minimum.~~

~~25.28.Landscape Lighting~~

~~25.28.1.Provide a combination of 100W metal halide, bullet-shaped floodlights to highlight trees and indirect adjustable stanchion mounted 70W and 100W metal halide highlight signage and architectural elements.~~

~~25.28.2.Contemporary style luminaires with 175W metal halide lamp source along the walkway will provide security lighting between the parking lot and the building.~~

~~25.28.3.All exterior lighting will be controlled by a photocell on, time clock signal off operation via lighting contactors and a multi-zoned digitally operated time clock. The lighting contactors will be provided with an enclosure mounted and labeled "Hand-Off-Auto" switch in order to manually override feature the time clock's control. Pole top fixtures and bollards will be controlled separately from the exterior wall mounted fixtures such that area and walkway lighting can be turned off while building perimeter lighting can remain on.~~

~~25.29.Non-Proprietary Statement~~

~~25.29.1.Unless specifically stated herein, no brand names or proprietary terms will be used in the final plans or specifications without approval of COE, Chief of the Electrical Section. Where proprietary items are required, the Base will provide the necessary written waiver.~~

~~25.30.Cathodic Protection Statement~~

~~25.30.1.The Contractor will perform all pH tests, salinity tests, resistivity measures, etc., required to design the corrosion control and grounding systems. The Design-Build AE shall inform the project manager of the required testing methods, testing locations, ground rod lengths, etc. The raw field data from these tests will be provided in the Foundation Report with interpretation or recommendations. The design and installation of the corrosion control and grounding system shall follow the A/E's recommendations.~~

~~25.30.2.Cathodic protection and protective coatings shall be provided for the following buried or submerged ferrous metallic structures regardless of soil or water resistivity.~~

~~25.30.3.Natural gas and propane piping~~

~~25.30.4.Liquid fuel piping~~

~~25.30.5.Underground storage tanks~~

~~25.30.6.Fire protection piping~~

~~25.30.7.Ductile or cast iron pressurized piping under floor (slab on grade) in soil~~

~~25.30.8.Underground heat distribution and chilled water piping in ferrous metallic conduit in soils with resistivity of 30,000 ohm-cm or less~~

~~25.30.9.Steel casing for underground hydraulic elevator jack~~

~~25.31.Telecommunications Service~~

~~25.31.1.The existing voice (copper) and data (fiber optic) outside cable plants have a confirmed capacity to handle new and existing services according to the Base Department of Information Management (DOIM).~~

~~25.32.CATV Service~~

~~25.32.1.CATV outside cable plant is existing with a confirmed capacity to handle new and existing services according to DOIM.~~

~~25.33.Interior Electrical System~~

~~25.33.1.Power Distribution: A new 208/120 Volt, 3-phase, 4-wire service entrance rated, main distribution switchboard will be provided in the main electrical room in the facility. The service(s) shall be connected (via CT's) to Government-furnished KWH demand meter(s) installed in contractor provided meter enclosures. The main electrical room will be provided with two means of egress as required for working clearances by NFPA 70. The main switchboard will be provided with a switchboard mounted digital meter, which will indicate true RMS values. The building electrical distribution system will consist of the main distribution switchboard, 208/120V~~

~~panelboards and distribution conduits and cables. Transient surge protection will be provided for the main distribution switchboard, and all branch circuit panelboards. All TVSS devices shall be integrally mounted in the panel boards and shall be UL 1449, Second Edition listed.~~

~~25.33.2.New panelboards will be provided within the existing stacked, electrical rooms located throughout the building. The design shall consist of a main electrical room and two stacked, satellite electrical equipment rooms on each of the upper floors of the building. The electrical engineer of record shall determine whether the existing busway riser in the existing electrical rooms can be reused. The main electrical room will contain the main switchboard, while the branch rooms will contain branch circuit panelboards.~~

~~25.33.3.A short-circuit and protective devices coordination study will be provided for the complete electrical distribution system.~~

~~25.33.4.Electrical equipment will be seismically braced in accordance with guidance provided in TI 809-4 for the seismic region in which the facility is located.~~

~~25.33.5.Twenty-five percent future load growth capacity will be provided in all cable and electrical equipment. All branch circuit panel boards shall be 42-circuit type. Twenty-five percent spare circuit breakers and capacity will be provided for all branch circuit panel boards.~~

~~25.33.6.It is intended that the existing in-floor, Walker duct system be reused to the greatest extent possible, for the distribution of branch circuit power. All existing conductors shall be removed and disposed of off site.~~

~~25.33.7.It is intended to reuse the existing 600-amp busway system for vertical power distribution to the greatest extent possible.~~

~~25.33.8.All other electrical system components shall be removed and disposed of off site.~~

~~25.34.POWER DISTRIBUTION EQUIPMENT:~~

~~25.34.1.Service entrance equipment shall consist of switchboard-style construction. Distribution panel boards shall consist of group-mounted, molded case circuit breakers.~~

~~25.34.2.Branch circuit panel boards provided under this contract shall utilize bolt-on style, inverse-time, circuit breakers. New panel boards used to feed receptacles for sensitive electronic devices shall be equipped with integral TVSS devices. Panel boards specified will be capable of being supplied by a minimum of three major manufacturers of this type of equipment. Panel board types used shall be commercial grade distribution, lighting and power panel boards. All bussing and lugs within the panel board and all~~

~~lugs and connections for associated devices installed within the panel board shall be copper. The minimum interrupting capacity of each panel board assembly shall be indicated on the drawings and each panel board shall be fully rated for the available interrupting capacity. All panel boards shown used as service entrance equipment shall be rated and equipped for such use and bear a Service Entrance (SE) label. Panel boards specified will be capable of being supplied by a minimum of three major manufacturers of this type of equipment. Equipment rooms will be laid out using the equipment that represents the largest 'footprint' from the capable manufacturers.~~

~~25.34.3.Main switchboard will comply with National Electrical Manufacturers Association (NEMA), and will include an insulated case main circuit breaker, copper bus, front accessibility and group mounted molded case feeder breakers.~~

~~25.34.4.Switchboard will be mounted on a 3 inches high concrete housekeeping pad doweled to the concrete floor. Feeder circuits will exit the top of the switchboard.~~

~~25.34.5.Main circuit breaker will have the following features:~~

~~25.34.5.1.Adjustable long-time pick up~~
~~25.34.5.2.Adjustable short time pick up~~
~~25.34.5.3.Adjustable short-time delay~~
~~25.34.5.4.Adjustable instantaneous pick up~~
~~25.34.5.5.Adjustable communication port~~
~~25.34.5.6.Manual push to trip button~~

~~25.34.6.Panel boards will comply with NEMA Standard PB-1 and UL-67. Panel boards, which require a main circuit breaker, will have an individually mounted main breaker and 42 useable pole spaces. Panel boards, which do not require a main circuit breaker, will be main lugs only (MLO).~~

~~25.34.7.All panel boards will have copper bus and bolt on branch breakers. Main breakers shall be bolted to the bus bars.~~

~~25.34.8.Motor control centers will not be required for this project. Individual motor controllers will be furnished under Division 15, Mechanical.~~

~~25.34.9.Equipment will have interrupting capacities and withstand ratings in excess of the calculated available fault current for the final design.~~

~~25.34.10.Final design coordination between A/E disciplines will ensure panel boards will not be located under ductwork or piping and panel board locations will comply with all requirements of the National Electrical Code.~~

~~25.35.Coordination Statement~~

~~25.35.1.The design will be coordinated with other disciplines to ensure that ducts and piping shall not be installed over switchboards and panel boards.~~

~~25.36.Interior Lighting Systems~~

~~25.36.1.Lighting for the facility will conform to MIL-HDBK-1191 with most fluorescent and all HID lighting operating at 120 Volts. Fluorescent fixtures will utilize electronic ballasts and T-8 lamps. All low occupancy rooms such as toilets and janitor closets will be provided with occupancy sensing lighting controls.~~

~~25.36.2.General offices and corridors will be illuminated using 2′ x 2′ static troffers with standard-grade, 3-inch deep, and specular silver, parabolic louvers. Offices, and all other areas with a large number of personal computer workstations, will have low glare and low brightness, specular silver, fluorescent troffers with VDT-grade parabolic louvers complying with IES RP1 specifications. Conference rooms will be provided with dimmable, compact fluorescent fixtures capable of being dimmed between 5% - 100% of the rated lumen output of the fixture. Small storage rooms, mechanical rooms, and electrical rooms will be provided with 4-foot fluorescent strip fixtures with wire guards. Compact fluorescent type down lighting fixtures and other types of lighting fixtures will be used in areas where special attention must be given to the aesthetics.~~

~~25.36.3.Interior lighting fixtures will be supported from the structure and will not be supported from suspended ceiling systems.~~

~~25.36.4.Multiple switching will be provided for rooms as directed by the user, where indicated on standard room guide plates, and in large rooms and areas. Multiple switching through the same light fixtures will be achieved by providing these fixtures with two ballasts. One switch/ballast combination will control the inner lamp(s), while the second switch/ballast combination will control the outer lamps. Corridor lighting fixtures as well as lobbies and other public spaces will be controlled through a lighting contactor. The lighting contactor will be capable of receiving inputs from the building management system.~~

~~25.36.5.Emergency egress lighting will be provided for all exit access, exit discharge and conference rooms as required by the NFPA 101. These fixtures shall be connected to the emergency power system. All electrical, communications, and mechanical rooms will also be provided with emergency lighting. In addition, emergency fluorescent fixtures located in stairs shall also be provided with battery/inverter-type ballasts (1000 Lumen minimum) to provide redundant emergency lighting in these spaces.~~

~~25.36.6.Illumination levels will be determined in accordance with IES (illuminating Engineering Society) standards for each~~

~~area or by directive from the user. Design shall be based on the middle of the ranges; not the high values. Energy conservation methods will be in accordance with ASHRAE 90.1.~~

~~25.36.7.Interior lighting calculations for rectangular rooms will be based on Zonal Cavity method using lighting levels listed in MIL-HDBK-1191, STD DETL 40-06-04, and IES Handbook. Irregularly shaped rooms will utilize the point-by-point method for lighting calculations.~~

~~25.36.8.Fluorescent lamps for general-purpose lighting will be warm white, 3500 degrees K with a minimum CRI of 85.~~

~~25.36.9.All exit signs will be LED illuminated type with built-in battery backup capability. Exit signs will be specified to comply with ETL 1110-3-432.~~

~~25.37.Raceway Systems~~

~~25.37.1.All power and lighting wiring will utilize conduits, boxes and fittings with exception of some grounding conductors and lightning protection conductors.~~

~~25.37.2.Service lateral conductors and underground conductors to parking areas (for lighting and convenience outlets and exterior lighting standards) will be contained in PVC conduit systems.~~

~~25.37.3.In areas where a high level of physical protection is required, conductors will be enclosed in galvanized rigid steel or intermediate grade rigid conduit systems.~~

~~25.37.4.Electrical metallic tubing, flexible metal conduit and metallic armored cable will be utilized for power and lighting circuits.~~

~~25.38.Cable Tray System~~

~~25.38.1.Two, distinct cable tray systems shall be provided and shall be located above the 'core' ceiling. The 'Red Network' cable tray (for the secure telecom network) shall be a solid bottom type aluminum tray (18" w x 4" d) with solid sides and pad lockable, solid, hinged top sections. The 'Black Network' cable tray (18" w x 4" d) shall be a ladder type aluminum tray with a solid bottom. Each of the cable tray systems shall be installed above the corridor ceiling around the 'core corridor'. Corridor cable trays will be connected to communication rooms with 24" x 4" deep cable trays. A detailed coordination of the interstitial space above the suspended ceiling will be provided on the contract drawings to assure adequate clearances. The interstitial space will be designed to provide a minimum of 18 inches above the cable trays for access.~~

~~25.38.2.Telecommunications cables and outlets will be provided by the Government. The contractor shall provide a 1 inch empty conduit (EMT with pull string) from each telecom outlet box~~

~~to the communication system cable tray. The following minimum number of telecommunications outlets shall be provided:~~

~~25.38.2.1.Red Network: One outlet per 60 square feet of space. (See the applicable 'programming' section of this RFP for additional requirements.)~~

~~25.38.2.2.Black Network: One outlet per 60 square feet of space. (See the applicable 'programming' section of this RFP for additional requirements.)~~

~~25.38.3.The 'Red Network' telecom closet shall be a separate room from the 'Black Network' telecom closet with one closet per floor for each network. The minimum clear distance between each of the two network cable tray systems shall be 1 meter. The minimum clear distance between each of the two network cable raceway systems shall be 1 meter for lines running parallel to each other. The minimum clear distance between each of the two network cable raceway systems shall be 0.33 meters for lines running perpendicular to each other.~~

~~25.38.4.Each "Black Network" telecom backboard shall be connected to the telecom on the floor below with (2) 4-inch conduits. The telecom board on the first floor shall be connected to the main telecom service board in the basement with (2) 4-inch conduits.~~

~~25.38.5.Each "Red Network" telecom backboard shall be connected to the telecom on the floor below with (2) 4-inch conduits. The telecom board on the first floor shall be connected to the "Black Network" telecom board on the first floor with (2) 2-inch conduits.~~

~~25.39.Outlet Devices~~

~~25.39.1.Receptacle and voice/data outlet locations will be based on user requirements. Fire alarm device placement will be in accordance with NFPA 72 and 101.~~

~~25.39.2.General-purpose duplex receptacles will be rated 120V, 20A and will be placed as a minimum of one on each wall of a room. In room where walls exceed 9 feet, one additional receptacle will be provided for each additional 9 feet of wall or fraction thereof. General-purpose duplex receptacles in corridors will be located with a maximum spacing of 50 feet. Provide one duplex receptacle adjacent to each telecom outlet. (See the applicable 'programming' section of this RFP for additional requirements.)~~

~~25.39.3.Safety type receptacles will be provided in any room where pre-school children may be present.~~

~~25.39.4.Special Items: The A/E will provide specialty outlets where necessary for all special equipment provided under this contract, all special equipment furnished by the Government, and where directed by the users. (See the applicable~~

~~'programming' section of this RFP for additional requirements.)~~

~~25.40.Non-Linear Loads~~

~~25.40.1.Dedicated 120V, 20A circuits will be provided for fax machines, copy machines, workstation computer and laser printers. Also, each computer workstation data outlet will be provided with an adjacent duplex receptacle. These workstation receptacles will be of the isolated ground type and shall be clearly identified on the drawings and on the face of the device. The drawings shall identify these with a separate symbol from than of a general-purpose receptacle. The receptacle shall consist of a permanently engraved, colored triangle on its face. All receptacles serving computer equipment will be labeled and will be served from separate dedicated 120V, 20A branch circuits with no more than four receptacles per circuit. Each branch circuit will be provided with a separate neutral conductor to eliminate the effect of nonlinear loads. Each dedicated computer receptacle will be calculated at 180 VA each as allowed by the National Electrical Code.~~

~~25.40.2.Panelboards serving nonlinear loads shall have double-rated neutral buses. True RMS sensing meters, relays, and circuit breaker trip elements shall be used with nonlinear loads.~~

~~25.40.3.All interior cables will be copper. No aluminum conductors will be used in the construction of this facility. The use of 75 or 90 degrees C terminals and insulated conductors are required.~~

~~25.41.Lightning Protection System~~

~~25.41.1.A complete U.L. Master Labeled lightning protection system will be provided. The lightning protection system will include termination devices, roof conductors, ground conductors and electrodes as required. Preliminary risk assessment calculations indicate a severe exposure. A lightning protection system will be designed by the A/E for this building. The system shall comply with the latest addition of NFPA 780 "Lightning Protection Code" and with TM 5-81183 entitled "Electrical Design of Lightning and Static Electricity Protection".~~

~~25.42.Grounding System~~

~~25.42.1.The grounding system shall comply with the latest addition of the Article 250 of the National Electrical Code and with IEEE Standard 142-1991 "Grounding of Industrial and Commercial Power Systems". The grounding systems shall consist of a ground ring located around the building. The service entrance equipment for the building shall be bonded to the ground ring, building steel, and to a metal water pipe (where available). The system will be designed to provide a ground resistance connection of no more than 5 ohms. The use~~

~~of ground plates, chemical ground rods, chemical treatment of the soil and other measures shall be used to achieve the low resistance level where required.~~

~~25.42.2.The grounding electrode system will consist of multiple electrodes bonded together and will include ground rods and bare copper conductors.~~

~~25.42.3.All power circuits will include a green insulated equipment grounding conductor bonded to metal non-current-carrying parts of equipment and raceway systems.~~

~~25.42.4.Neutrals of separately derived systems will be grounded to the building steel nearest the point of system derivation. All grounding electrodes will be bonded together.~~

~~25.42.5.A 4/0 copper-grounding loop (counterpoise) will be provided around the building. (Down conductors shall be connected to this system ground loop.)~~

~~25.42.6.A telecommunications signal reference ground shall be provided and shall consist of 250 MCM insulated copper cable routed from the LPS ground ring to insulated ground bars located in each telecom closet.~~

~~25.43.Metering~~

~~25.43.1.Electrical service(s) to the building will be metered for energy usage. The contractor shall provide a Honeywell meter compatible with the Base's system as directed by the Contracting Officer. The meter shall be connected to the 'Black Network' via a 1 inch empty conduit.~~

~~25.44.Emergency Power~~

~~25.44.1.The building's classification of 'High-Rise' requires that a 'Legally Required Emergency Power System' be provided. This emergency system shall consist of the following:~~

~~25.44.1.1.A self-contained Diesel generator with integral, adjustable-trip output circuit breaker(s)~~
~~25.44.1.2.Critical Grade silencer with rain cap~~
~~25.44.1.3.Double-walled, skid-mounted base tank~~
~~25.44.1.4.Environmental Housing~~
~~25.44.1.5.Automatic Transfer switch~~
~~25.44.1.6.Emergency Distribution panel boards.~~

~~25.44.2.The generator shall be sized to safely start and run the required loads. The generator shall be located outside the building near the existing cooling tower. The system shall provide power for all code required equipment/systems including, but not limited to, the following:~~

~~25.44.2.1.Egress lighting~~
~~25.44.2.2.Elevators~~
~~25.44.2.3.Smoke removal/control systems~~
~~25.44.2.4.Fire pump/controller~~
~~25.44.2.5.Jockey pump~~

~~25.44.2.6.HVAC controls~~

~~25.44.3.The emergency system shall provide power for all user requested loads including, but not limited to, the following:~~

~~25.44.3.1.All electrically powered devices and equipment located on the sixth floor. (The entire sixth floor shall be on emergency power including all stand-alone HVAC cooling-equipment serving spaces on this floor.)~~

~~25.44.3.1.1.Fire alarm equipment~~

~~25.44.3.1.2.Security & CCTV system equipment~~

~~25.44.3.1.3.Receptacles in the electrical and telecommunications closets~~

~~25.45.Uninterruptable Power System (UPS)~~

~~25.45.1.Stand-alone UPS units shall be provided in all telecommunications rooms to enable the Government to connect network system hardware to a clean, uninterruptible power source. These units shall be of the plug-in design and shall be rated at 1.9KW with a 5-minute battery back-up at full load. Provide one UPS for each of the two networks (Black & Red) in each telecommunications closet.~~

~~25.46.Coordination with Communications-Electronics Officer~~

~~25.46.1.The contractor shall coordinate the installation of telecommunication systems raceway with the Contracting Officer's designated DOIR representative.~~

~~25.47.Fire Alarm System~~

~~25.47.1.A new multiplexed, addressable fire alarm system with emergency voice evacuation/notification shall be provided for the building. All fire alarm system cabling shall be installed in a dedicated, conduit-based, raceway system. The design and installation shall be in compliance with the referenced building code(s) and life safety code(s) for the building's 'High-Rise' classification.~~

~~25.47.2.This system shall be capable of communicating (on a device-by-device basis) all alarm, supervisory, and trouble conditions via dedicated telephone lines, with the Base's existing Honeywell central receiving station.~~

~~25.47.3.The system will consist of a Fire Alarm Control Panel (FACP), Fireman's Voice Communication Panel (FVCP), addressable smoke detectors, addressable air duct detectors, addressable manual pull stations with the appropriate fire department keying system, audio/visual indicating devices with ADA compliant strobes; remote annunciator panel, addressable monitor modules, addressable control modules, and remote fire alarm digital transmitter. The building is being upfitted with a complete fire suppression system. Serviced monitoring of the associated water flow and zone valves shall be included. All conduit and cabling for this system shall be designed with Class A Signal Line Circuits (SLC) and Class~~

~~A Notification Appliance Circuits (NAC). Audible occupant notification shall be with live and digitally pre-recorded voice messages. Fire alarm cables will be installed in a dedicated, looped, conduit-based, raceway system.~~

~~25.47.4.The addressable fire alarm control system will be provided to monitor individual initiating devices including manual stations and various automatic detection devices as required in the building. The system will include a Honeywell digital transmitter compatible with the existing base transmitter/receiver that will report location specific alarm, trouble, and supervisory trouble conditions to the existing central communication center. The system shall be a low voltage, non-coded, fire alarm system. Signal line circuits shall be wired as 4-wire, Class "A". Notification appliance circuits shall be wired as 4-wire, Class "A" and shall provide voice evacuation for occupant evacuation and/or relocation. The system will be U.L. listed and supervised, with all wiring in conduit. The fire alarm system will include the following:~~

~~25.47.4.1.Sprinkler System - Zoned water flow and tamper alarms~~

~~25.47.4.2.Smoke and Fire Detection for HVAC - Duct mounted smoke detectors shall be installed for alarm and control of HVAC systems~~

~~25.47.4.3.Area Smoke and Fire Detection - Ceiling or wall mounted rate of rise detectors will be installed where required~~

~~25.47.4.4.Fireman's phone jacks at locations required by the applicable codes~~

~~25.48.CATV System~~

~~25.48.1.The television distribution system will consist of a backbone distribution coaxial cable with outlets located in various spaces as directed by the C.O. with a minimum of one outlet per 200 square feet. An RG-11 truck cable shall be routed up through the 'Black Network' telecom rooms. Provide an RG-11 trunk line from each closet throughout the cable tray on each level. Directional taps will be provided on this trunk line and shall be located on the 'Black Network' cable tray to distribute the television signals throughout the facility. Provide RG-6 cables in ¾ inch EMT from the cable tray to wall mounted TV jacks. Provide a minimum of 12 TV outlets on each level of the building with exact locations determined by the C.O. A Broad band, CATV Amplifier will be provided at the main telecom board to produce a 60 dBmv signal at the headend and +6 to +12 dBmv signal level at each outlet.~~

~~25.49.Paging System~~

~~25.49.1.A paging system shall not be provided. Emergency announcements shall be made over the voice evacuation system provided with the fire alarm system.~~

~~25.50.Sound Masking System~~

~~25.50.1.A sound masking system shall be provided. System shall consist of sound masking speakers located throughout all open-office spaces with a central audio amplifier with digital noise generator. Amplifier shall be designed with 50% headroom.~~

~~25.51.Master Clock System~~

~~25.51.1.A master clock system shall be provided. Clocks shall be located within all occupied spaces. The master clock system shall include a master clock and individual, analog clocks with correction coils. Provide a minimum of 12 clocks on each level of the building with exact locations determined by the C.O.~~

~~25.52.Security Systems~~

~~25.52.1.Entry control stations consisting of a CCTV Camera, a Security Intercom station, and Card Reader shall be provided at each building entrance and at each parking lot entrance. All entry control stations shall have their signals routed back to the main security station on the first floor. Provide an empty raceway system for the government provided intrusion detection system (ISIDS) for the SCIF located on the sixth floor. Connect the ISIDS controller to the black network cable tray or telecom board with ¾ inch EMT.~~

~~25.53.CCTV System~~

~~25.53.1.Provide an empty raceway system for the Government provided CCTV system. This system shall include CCTV cameras and video monitors. Pole mounted, Pan/Tilt/Zoom type cameras will be provided along the site perimeter to provide unobstructed view to all portions of the site perimeter. Fixed focal length cameras shall be located at all 'Entry Control Stations'.~~

~~25.54.Intercom System~~

~~25.54.1.Provide an empty raceway system for the Government provided security intercom system. Intercom stations shall be located at all 'Entry Control Stations' and shall connect to the main security station on the first floor.~~

~~25.55.Access Control System~~

~~25.55.1.Provide an empty raceway system for the Government provided access control system. Card readers shall be located at all 'Entry Control Stations' and shall connect to the main security station on the first floor. Provide an empty raceway from the main security station to a card reader located at the "Command Parking Lot".~~

~~25.56.Non-Proprietary Statement~~

~~25.56.1.With the exception of the Honeywell fire alarm transmitter/receiver, all new equipment shall be specified in such a way that no item will become proprietary to a single manufacturer. In addition, no particular brand names will be listed on the drawings or in the specifications. The A/E shall request written approval for this listed exception from the 'Chief of the Electrical Section, Corps of Engineers, and Savannah.'~~

26. TEMPORARY OFFICE REQUIREMENTS

26.1. General

26.1.1. A 13,400 sf temporary facility for the relocation of 100 personnel will be designed, furnished, and installed by the contractor. The design of the facility will follow the Fort Bragg IDG. The building will have the required number of exits and be handicap accessible. All exterior doors and windows shall be hollow metal.

A visitor will enter the building through a communal lobby. The layout and design of the building will consist of three compartments within the larger shell space and will be determined at the time of design. Each of the compartments will have a small reception space. Within the shell space, fourteen 120 sf private offices will be provided with freestanding furniture. The remainder of the space will be divided into 86 standard 6'x8' (48 sf) cubicles with modular furniture. The conference room will be 250 sf with freestanding furniture. A 120 sf break room will be provided with cabinets and countertop. The contractor is responsible for design and installation of modular walls and furniture as well as furniture and furnishings of private offices, conference room and reception areas. Toilet facilities are to be provided as required by code. A janitor's closet with mop sink is to be provided.

All spaces are to have carpet except for the restrooms, janitor's closet, break room, and communication room, which will have vinyl tile. All rooms are to receive rubber base. All walls are to be painted. The ceiling is to receive 2x2 acoustic ceiling tile. Directional signage will be provided in the lobby of the building. Each of the three compartments will have a sign to distinguish the area. Signage will also be required as needed to distinguish rooms such as the conference room, break room, and toilet rooms.

The contractor is responsible for removing the temporary office building, including building foundations, upon completion and occupancy of the renovated Bryant Hall.

26.2. Site/Environmental

26.2.1. The proposed temporary modular building site is located off Mosby Street between Mosby Street and Funston Street. The proposed site has an existing modular building that shall be removed for the proposed 12,000 sf temporary modular building. The existing parking lot and sidewalks

shall remain. The proposed site is mostly level except for a deep drainage swale along the west side of the site and a workable slope to the north. The proposed site has the following utilities on site: sanitary sewer, water, electrical and telephone.

26.3. Pavements

26.3.1. Parking lot exists in front of the proposed temporary modular building. The existing parking lot in front of the proposed temporary modular building is to be overlay paved and parking lines re-striped.

26.4. Landscape

26.4.1. The area where asphalt drives and parking were removed will become grassed areas between the new sidewalks and existing buildings. Raised planters and bollards will be added adjacent to and incorporated within the sidewalks. Raised planters will be either pre-cast or poured-in-place concrete. No trees area planned within this 80’ buffer. Landscaping within the 80’ buffer. Landscaping within the 80’ buffer will consist of grass or ground cover. The area is not currently served by an irrigation system.

26.5. ENVIRONMENTAL

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26.5.1. No survey has been performed to identify lead based paint materials in the existing building.

26.5.2. ~~No survey has been performed to identify asbestos containing materials~~Asbestos survey performed and is attached.

26.5.3. A survey for the presence of lead paint and asbestos is required. This can occur prior to the start of the design/build process in order for the cost of abatement to be included in the cost of construction; or an allowance with unit price removal/disposal can be included with construction cost and lead paint/asbestos removed at a predetermined cost and deducted from the construction allowance.

26.6. Site Utilities

26.6.1. Utilities are existing on site and shall be revised as required to accommodate new plumbing, fire protection and HVAC systems.

26.6.2. Water

26.6.2.1. Water service is currently supplied by the base to the site via a 4″ below grade service. A bacteriological test should be conducted on service prior to connecting proposed temporary modular building.

26.6.2.2. The flow test has not been performed as of this date, Government is to provide. Prior to design a flow test shall be obtained from the base. This flow test shall be conducted within 12 months of the projects permitting. Flow test information shall be provided to the mechanical engineer for fire protection design.

26.6.2.3. Backflow prevention measures will be incorporated into the design of the buildings for potable water and fire service. Backflow preventers will be located in the mechanical rooms.

26.6.3. Sanitary Sewer

26.6.3.1. There is an existing 6” gravity sanitary sewer system on the site to which the proposed temporary modular building shall connect.

26.7. Stormwater

26.7.1. Drainage for the site shall remain as currently functioning. Roof storm water shall be transferred to adjacent swale by the roof leaders.

26.8. Other Characteristics Are:

26.8.1. No known easements or setbacks (other than Force Protection) exist within the site. Force protection modifications will be developed as part of this project.

26.8.2. No ongoing environmental investigations are underway.

26.8.3. A “Land Disturbing Activity Permit” will be required, by the installation, issued by the local authority having jurisdiction.

26.8.4. The Government and the State of North Carolina will require a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall be submitted to the Contracting Officer’s Representative (COR). The COR will submit the documentation for permitting. Notice of Intent shall be submitted to the State at least 30 days prior to land disturbing activities.

26.8.5. A Spill Prevention and Response Plan (SPRP) shall be prepared by the contractor and submitted to the Government for approval by Environmental.

26.8.6. The site is not located in a wellhead protection zone.

26.8.7. There are no threatened or endangered species or habitat known at the site.

26.8.8. Trees to be removed need to be identified and reported to the Forestry Branch for possible sale a minimum of 60 days prior to start of site work.

26.8.9. No wetlands will be impacted. No flood plains are located in the site area, nor is the site known to flood.

26.8.10. A final cultural resources impact determination will be made when final plans are reviewed.

26.8.11. Acoustical considerations for the project site are not significant since the site is not located near the flight line or within normal flight paths.

26.8.12. This site has been evaluated for impact on historic and archeological property and complies with the National Historic Preservation Act. If during construction or demolition, a discovery is found, work shall stop and proper authorities notified for additional direction.

26.8.13. Plans shall be submitted to the base environmental office when plans reach 65% review stage.

26.8.14. The proposed building site is not located in any prohibited wetland or sinkhole areas, based upon maps provided by the Government or within critical radius of the existing AST or UST’s or wells. No payment for materials incorporated in this project will be made if the required

designers of record or required Government approvals have not been obtained.

26.8.15. Backflow preventers shall be installed and tested by a State of North Carolina certified installer and tester.

26.8.16. Force Protection is a project requirement. Under this project removal of existing paved driveway, parking surfaces, and trees within eighty-two feet (82’) of existing building is required. Parking spaces lost to Force Protection requirements will be replaced as an expansion of the existing parking lot. The eighty-two foot setback will utilize standard green space design. Concrete sidewalks within the new eighty-two foot setback will be replaced and upgraded.

26.9. Codes And Standards. Same as stated in paragraph 14 of this section.

26.10. Plumbing Fixtures

26.10.1. All previous plumbing description of materials, methods and code references shall apply to the installation of the temporary facilities.

26.10.2. Plumbing fixtures for each 13,000 square foot module shall include a minimum of two (2) water closets for female, a water closet and urinal, mounted at accessible height for male. The toilet rooms shall also be equipped with 2 lavatories each the module shall contain a dual high/low type drinking fountain as well as a service sink.

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26.10.3. Plumbing systems shall be connected to ~~an approved septic system or to a “haul away’ type sewage retaining tank~~ the existing gravity sanitary sewer.

26.10.4. Potable water shall be provided from site services and a backflow preventer installed to protect other systems. A water heater at a minimum of 10 gallons shall be provided and piping installed above the ceiling to each fixture requiring hot water. The temperature shall be set at 120 deg.F.

26.11. HVAC Systems

26.11.1. All previous HVAC descriptions of installation methods, materials and code references shall apply to the installation of the temporary facilities.

26.11.2. The HVAC systems for each module shall consist of two (2) Bard type unitary heat pump units with electric supplemental heat rated. The units shall be rated at a minimum of 15 tons each of total cooling at 95 deg.F ambient temperature and mounted to the exterior of the module at each end. Ductwork shall protrude from the unit through the end wall and be routed above the lay-in ceiling to diffusers. Return air shall be at a single sidewall filter grill located at the return to the unit. 30% efficient filters shall be utilized and the outside air damper set to provide a minimum of 1000 CFM for each unit. Wall mounted thermostats shall control directly each unit and shall be located so as not to be rendered ineffective by non-air environmental situations.

26.12. Fire Protection Systems

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26.12.1. An automatic fire protection system is not required in the Temporary Office Facility. ~~All previous Fire Protection descriptions of installation methods, materials and code references shall apply to the installation of the temporary facilities.~~

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26.12.2. Deleted~~Modules shall be equipped with a fully automatic wet pipe sprinkler system that shall be connected to site service water using a double check backflow preventer. The occupancy classification shall be Ordinary Hazard Group I for the module and be served with a 6″ fire line. Flow and tamper switches shall be connected to the temporary fire alarm system and a fire department connection and PIV shall be installed exterior to each module~~.

26.13. Electrical Systems

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26.13.1. Provide electrical and communications services to the temporary office facilities. Electrical service shall be derived from the existing 12.47KV distribution lines. Provide a pad-mounted, oil filled service transformer to serve the temporary facility. Communication service to the facility shall consist of a 4-inch underground conduit routed to the nearest communication manhole at the site. The closest electrical and communications service manhole is located one block away on Gruber St. For pricing include 500 foot service. Telecommunication service cables will be provided by the Government.

26.13.2. Within the facility, the following electrical and communications provisions shall be provided:

26.13.2.1. One dedicated, 20A, 120-volt branch circuit per 100 square feet for duplex receptacles within the office space;

26.13.2.2. Four duplex receptacles in each private office;

26.13.2.3. Two, floor-mounted duplex receptacles per 100 square feet in open office areas;

26.13.2.4. One telecommunications jack in each private office. (Provide four, CAT 5e cables per jack to the nearest telecommunications closet.)

26.13.2.5. One telecommunications jack per 100 square feet for voice and data connections to workstations located in open office areas. (Provide four, CAT 5e cables per jack to the nearest telecommunications closet.)

26.13.2.6. Recessed, fluorescent lighting using parabolic troffers to provide 50 footcandles (average) illumination within all interior spaces.

27. EXPLANATION OF BID ITEMS

27.1. General

27.1.1. This section comprises an explanation of the bid items identified. This section is a general scope of work for the bid items described in the bid schedule and is not intended to be all-encompassing in the descriptions. All work specified herein shall be accomplished in accordance

with the procedures prescribed in the technical provisions of the RFP. The Contractor shall bid each type of work under the applicable bid item. Measurement for payment will not be made. Payment described for the various bid items will be full compensation for all labor, materials, and equipment required to complete the work. Compensation for any item of work described in the contract but not listed in the bid schedule shall be included in the payment for the item of work to which it is made subsidiary.

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27.2. Schedule 1:

27.2.1. Payment under Bid Item No. 0001AB, “Phased Construction SOF Bryant Hall Renovation, Building Complete to 5-foot line” will constitute full compensation for furnishing all materials, equipment, plant, tools, and all labor costs and other associated incidentals necessary to complete the phased construction of the building as proposed by the Contractor.

27.2.2. Payment under Bid Item No. 0001AC, “Support Facilities: Site Preparation and Development, including Utilities, Complete, Outside of the 5-foot building line” This will constitute full compensation for furnishing all materials, equipment, plant, tools, and all labor costs and other associated incidentals necessary to complete the construction of the work beyond the 5-foot building line including clearing, grubbing, grading, new curbs, gutters and pavement, landscaping, irrigation and all utilities.

27.2.3. Payment under Bid Item No. 0001AA, Design Effort and Engineering Services During Construction for the Base Bid and Options, Complete” will constitute full compensation for furnishing all materials, labor and other associated incidentals necessary to complete the design for the facilities including demolition, sitework and utility design in accordance with RFP. This also includes engineering services during construction to assure quality construction and commissioning of equipment. This item will also include the structural interior design work and compensation for the design and development of the order forms for the comprehensive interior design package and furniture for the building.

27.2.4. Payment under Bid Item No. 0001AD, “Install Government-Furnished Furnishings Items (O&M Funded)" will constitute full compensation for installation, to include all assembly requirements, of the interior design package items and furnishings procured by the Government from the Contractor's order forms.

27.2.5. Payment under Bid Item No. 0001AE, "Parking Lot and Associated Items" will constitute full compensation for ~~the design and~~ furnishing all materials, equipment, plant, tools and all labor costs and other associated incidentals necessary to complete the construction of the parking lot revisions and parking lot addition including selective

demolition, clearing, grubbing, grading, curbs, gutters, sidewalks, pavement, landscaping, irrigation and utilities.

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27.3. Schedule 2:

27.3.1. Payment under Bid Item No. 0002AB, “Construction of Bryant Hall Renovation with Building Vacant, Complete to 5-Foot Line” will constitute full compensation for furnishing all materials, equipment, plant, tools, and all labor costs and other associated incidentals necessary to complete the construction of the building as proposed by the Contractor.

27.3.2. Payment under Bid Item No. 0002AD, “Temporary Relocation of 100 Personnel in Temporary Office Building Furnished by the Proposer, Complete” will constitute full compensation for the design, procurement, installation and set-up, including all utilities of the Temporary Office Building for 100 Personnel. This also includes design and procurement of the temporary office furnishings, furniture and partitions and removal of the building and furnishings, furniture and partitions from Fort Bragg upon completion of construction and relocation of personnel into the completed, renovated Bryant Hall.

27.3.3. Payment under Bid Item No. 0002AC, “Support Facilities: Site Preparation and Development, Including Utilities, Complete, Outside the Five Foot Building Line” this will constitute full compensation for furnishing all materials, equipment, plant tools, and all labor costs and other associated incidentals necessary to complete the construction of the work beyond the five foot building line including clearing, grubbing, grading, new curbs, gutters and pavement, landscaping, irrigation and all utilities.

27.3.4. Payment under Bid Item No. 0002AA, Design Effort and Engineering Services During Construction for the Base Bid and Options, Complete” will constitute full compensation for furnishing all materials, labor and other associated incidentals necessary to complete the design for the facilities including demolition, sitework and utility design in accordance with RFP. This also includes engineering services during construction to assure quality construction and commissioning of equipment. This item will also include the structural interior design work and compensation for the design and development of the order forms for the comprehensive interior design package and furniture for the building.

27.3.5. Payment under Bid Item No. 0002AE, “Install Government-Furnished Furnishings Items (O&M Funded)" will constitute full compensation for installation, to include all assembly requirements, of the interior design package items and furnishings procured by the Government from the Contractor's order forms.

27.3.6. Payment under Bid Item No. 02AF, "Parking Lot and Associated Items" will constitute full compensation for ~~the design and~~ furnishing all materials, equipment, plant, tools and all labor costs and other associated incidentals necessary to complete the construction of the parking lot revisions and parking lot addition including selective demolition, clearing, grubbing, grading curbs, gutters, sidewalks, pavement, landscaping, irrigation and utilities.

--End of Section--

SECTION 01012

DESIGN AFTER AWARD
(DESIGN/BUILD)
01/2002

1. GENERAL

The Contractor shall furnish and be responsible for a complete set of design documents as called for in Section 01010, GENERAL PROJECT DESCRIPTION AND DESIGN REQUIREMENTS and as called for hereinafter.

1.1 Within 30 days after Notice to Proceed (NTP), 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. No design submittals will be reviewed or evaluated until after receipt and acceptance of the proposed design/review schedule. As a minimum, design submittals are required at the preliminary (60%), final (100%), and at the design complete (corrected final) stage. The requirements of each design stage are listed hereinafter. The Contractor shall reflect the number and schedules for the design submittals phases in the progress charts. As a maximum, the 60%, 100%, and design complete submittals shall be made in one consolidated package, which includes each of the major categories listed in paragraph “Contents of Design Submittals.”

1.2 To facilitate fast-track design-construction activities the Contractor shall submit a 100% Site/Utility Design as the first design submittal. Following review, resolution, and incorporation of all Government comments, and submittal of a satisfactory set of site/utility design documents, the Contracting Officer shall issue a limited Notice to Proceed (NTP) which shall allow the Contractor to proceed with site development activities within the parameters set forth in the accepted design submittal. Submittal review, comment, and resolution times from this specification apply to this initial 100% Site/Utility Design Submittal. No onsite construction activities shall begin prior to receipt of a construction NTP by the Contractor.

1.3 The Contractor shall submit the design of the buildings at different stages of design to the Government for review. The drawings shall be grouped by building type, each set complete by itself. All submittals required at each stage of design shall be submitted as a complete package at one time. No partial submittals will be reviewed.

2. DESIGNER OF RECORD

The Contractor shall identify, for approval, the Designer of Record for each area of work. One Designer of Record may be responsible for more than one area. A listed, registered Designer of Record shall account for all areas of design disciplines. The Designer(s) of Record shall stamp, sign, and date all design drawings under their responsible discipline at each design submittal stage (see SCR - "Registration of Designers").

3. DEFINITION OF DESIGN SUBMITTALS

3.1 Corrected Proposal Submittal

The Contractor shall submit 10 copies of corrected drawings and technical proposal notebooks which incorporate any corrections on clarification items or deficiencies noted during negotiations for distribution to the Users and Government agencies. Submit the drawings in half size to the project manager within 30 days after contract award. This item only applies to the successful

proposer after contract award, and only if there were requests for clarification or deficiencies were noted.

3.2 Site/Utility Design Submittal (100%)

This submittal is provided to allow the Contractor to concentrate initial efforts for the site/utility portions of the project. By allowing this work to be separated, the Contractor is given the opportunity to fast track and begin construction on the site/utility work prior to completion of the building designs. More specific submittal requirements by stage and discipline are identified in the Savannah District Design Manual. This is available on the Internet (under “Engineering Criteria”) at:

http://en.sas.usace.army.mil

This submittal shall consist of the following:

a. Design analysis, developed to 100%, site work and utility work only.

b. 100% complete site/utility drawings.

c. Final site/utility specifications.

d. Environmental permits, as required. When environmental permits are not required, the Contractor shall provide a statement with justification to that effect.

3.3 Preliminary Conformance Review Submittal (60%). This submittal is intended to insure that the Contractor's design is proceeding in accordance with the terms of the solicitation and the Contractor's original proposal as well as in a timely manner. This submittal shall consist of the following:

a. Design analysis, developed to 60%.

b. 60% complete drawings.

c. Draft specifications.

d. Site utility design information need not be included in this submittal package except where interface to the interior building systems is required.

e. Preliminary Comprehensive Interior Design (C.I.D.) package.

3.4 Final Design 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 as well as the original solicitation and the Contractor's proposal. The Contractor shall submit the following documents for Final Design Review:

3.4.1 60% review comments and responses annotated.

3.4.2 The Design Analysis submitted for Final Design Review shall be in its final form. The Design Analysis shall include all backup material previously submitted and revised as necessary. All design calculations shall be included. 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.

3.4.3 The contract drawings submitted for Final Design Review shall include the drawings previously submitted which have been revised and completed as

necessary. 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 complete at this time including the incorporation of any design review comments generated by the previous design reviews. The drawings shall contain all the details necessary to assure a clear understanding of the work throughout construction. Shop drawings will not be considered as design drawings. All design shall be shown on design drawings prior to submittal of shop drawings. Each discipline has unique Final Design submittal requirements. Respective chapters of the Savannah District Design Manual should be reviewed to determine the exact nature of these requirements.

Example for HVAC Controls: HVAC Controls System Drawings (MC-Plates) shall be submitted at the final design stage and shall include the following.

HVAC Controls System Legend
Control System Schematic
Equipment Schedule
Valve Schedule
Damper Schedule
Sequence of Operations
I/O Summery table and Data Terminal Strip Diagram
Wiring Diagram
Communications Network and Block Diagram
Metering of Utilities (gas, electrical and water)
DDC Panel locations

The control drawings shall use the Corps of Engineers standard control drawings. These drawings are available at the following website: http://www.sas.usace.army.mil/eng/hvac/ or on the SAS_STD CD available from the project manager.

3.4.4 The draft specifications on all items of work submitted for Final Design Review shall consist of legible marked up guide specification sections.

3.4.5 Site utility design information need not be included in this submittal package except where interface to the interior building systems is required.

3.5 Design Complete Submittal (Corrected Final)

After the Final Design Review, the Contractor shall revise the Contract Documents by incorporating any comments generated during the Final Design Review and shall prepare final hard copy Contract Specifications. The Contractor shall submit the following documents for the design complete submittal:

3.5.1 Design analysis, in final 100% complete form.

3.5.2 100% complete drawings.

3.5.2.1 100% Comprehensive Interior Design (C.I.D.) Package.

3.5.3 Final specifications.

3.5.4 Final review comments and responses.

3.5.5 Electronic Submission.

All CADD files in native MicroStation format, as well as all prepared technical specifications shall be provided on CD-ROM. Two copies are required.

3.6 Structural Interior Design (SID).

3.6.1 Definition: The Structural Interior Design (SID) shall involve the selection and sampling of all applied finishes including material, color, texture and patterns necessary to complete the building's interior architectural features. The SID shall also include all prewired workstation finishes and required drawings for prewired workstations. This information shall be submitted in 3-inch D-ring binders, 8-1/2 inch x 11-inch format.

3.6.2 Present architectural finish samples in an orderly arrangement according to like rooms/areas receiving like finishes. Each like room receiving like finishes will be noted as a Color Scheme. Each Color Scheme shall have a written description of material used. This written description shall use the same material abbreviations and notes that appear on the Room Finish Schedule and Legend in the contract drawings. Present prewired workstation finishes on a color board separate from the architectural finishes. Submit the SID binders concurrently with the architectural design submittals.

3.6.3 Preliminary Submittals: The Contractor shall submit three complete sets of the initial SID package. The design philosophy shall use a warm neutral background color with appropriate accent colors. All SID proposals shall be reviewed and approved by the Government. The Interior Designer shall revise the SID binders after each review and update the SID to satisfy review comments. Each submittal will follow this method of review until the Government approves the completed SID package.

3.6.4 Final Submittal: After approval of the Preliminary Submittal, the Contractor shall submit three complete sets of the approved and final Structural Interior Design packages. Once the Contractor has submitted the SID and the Government has approved the submittal, all materials, finishes, colors, textures and pattern submitted and approved for this project are then considered as part of the contract and the Contractor shall furnish all approved SID finishes. No deviations will be considered.

3.6.5 Format: Submit all SID information and samples on 8 1/2"x 11" modules with only one foldout. The maximum foldout width shall be approximately 25 inches. No foldouts on the top or bottom of the pages. Place the project title, base, architectural firm, page number and date on the bottom of each page or module.

3.6.5.1 The module shall support and anchor all samples. Anchor large or heavy samples with mechanical fasteners, velcro or double sided foam tape. Rubber cement or glue will not be acceptable.

3.6.5.2 Assemble the 8-1/2 inch x 11-inch pages and modules in a 3-inch D-ring binder. Holes for placement of the modules in the binder shall be 3/8 inch in diameter. Each binder shall be identified on the outside spine and front cover by title, project number, percentage phase and date.

3.6.5.3 Material and finish samples shall indicate true pattern, color and texture. Carpet samples shall be large enough to indicate a complete pattern or design.

3.6.5.4 Where paint manufacturers’ color names and numbers are used indicate the finish of the paint such as gloss, semi-gloss, flat and so on.

3.6.5.5 Signage may include emblems, striping, letters, numbers and logos. The interior designer shall consider visual appearance, organization, location, structural supports (if required) and relation to other base graphics. Indicate on a separate signage sheet the location and message for

all signage. Submit a sample of the signage material finish and color with the structural finishes.

3.6.5.6 No photographs or colored photocopies of materials will be accepted or approved.

3.6.6 The SID binder shall include the following information at each design submittal in this order:

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SEQUENCE OF SID SUBMITTAL

1. Title page

2. Table of contents

3. Design objectives - A statement of design objectives explaining the interior design philosophy of the facility shall be provided in the SID. Design objectives and the proposed method of accomplishing the objectives. Shall cover, when applicable, energy efficiency, safety, health, maintenance, image, personal performance of occupants and functional flexibility.

4. Interior floor plan

5. Interior sample finish boards (Color boards)

Scheme A
Scheme B
Scheme C

Example all restrooms could be noted as color scheme "A", all general open office finishes could be noted as color scheme "B" and the main lobby could be noted as color scheme "C".

6. Room finish schedule

7. Signage

8. Signage plan

9. Prewired workstation composite floor plans

10. Prewired workstation typicals - elevations and component inventory.

11. Prewired workstation panel identification plan with electrical outlet placement including base feed.

12. Integration and layout of ACSIM specific furniture. Plan must show suitability of proposed space to suit the furniture to be provided.

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4. GOVERNMENT APPROVED DESIGN SUBMITTALS

The approval of submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the design is in conformance with the contract requirements. Approval will not relieve the Contractor of

the responsibility for any error which may exist, as the Contractor is responsible for the design and construction of all work.

5. MAILING OF SUBMITTALS

All submittals to the Government during design shall be mailed using overnight mailing service. Each copy of the submittals shall be mailed to the addresses listed below. Each submittal shall have a transmittal letter accompanying it that indicates the date, design percentage, type of submittal, list of items submitted, transmittal number and point of contact with telephone number.

Addresses and submittal distribution:

1. U.S. Army Engineer District, Savannah
   ATTN: CESAS-PM-[Mr. Steve Bell]
   100 W. Oglethorpe Avenue
   P.O. Box 889
   Savannah, GA 31402-0889

2. U.S. Army Corps Engineer District- Savannah
   XVIII Airborne Corps & Ft. Bragg
   Attn: Corps of Engineers, Resident Engineer
   (Mr. Vernon B. Crudup)
   Bldg. No. 3-2033
   Ruther Road
   Fort Bragg, NC 28310

3. U.S. Army Special Operations Command
   Attn: AOEN (Cpt. Duncan)
   Building D-02507
   Ardennes Street
   Fort Bragg, NC 28310-5000

4. Director USAISEC-FDEO
   ATTN: AMSEL-IE-DE-IN-CO (Mr. Gaffney)
   1435 Porter Street, Suite 200
   Fort Detrick, Maryland 21702-5047

5. Eastern Paralyzed Veterans Association
   Architecture & Facilities Management
   75-20 Astoria Boulevard
   Queens, NY 11370-1178

The following table lists the number of copies of design submittal requirements for this project:

(1) Corrected Proposal
COE 10 1/2 Size drawings
SAS 10 Revised Proposal Notebooks

	#	Item 60%	#	Item Final	#	Item Corrected Final
(1)	8	Design Anal.	8	Design Anal.	3	Design Anal.
COE	8	Drawings	8	Drawings	3	Drawings
SAS	8	Spec.	8	Spec.	3	Spec.
			8	Ann. Comments	3	Ann. Comments
	2	Permit Appl.	2	Permit Docum.	2	CD’s w/all electronic files
	1	SID	1	SID		
	1	CID	1	CID		

(2) CD-GO	2 Design Anal. 2 Drawings 2 Spec. 2 Permit Appl. 1 SID 1 CID	2 Design Anal. 2 Drawings 2 Spec. 2 Ann. Comments 2 Permit Docum. 1 SID 1 CID	1 Design Anal. 5 Drawings 5 Spec. 5 Ann. Comments 2 Drawings, full size 2 CD’s w/ all electronic files
(3) DPW	5 Design Anal. 5 Drawings 5 Spec. 2 Permit Appl. 1 SID 1 CID	5 Design Anal. 5 Drawings 5 Spec. 2 Ann. Comments 2 Permit Docum. 1 SID 1 CID	2 Design Anal. 2 Drawings 2 Spec. 2 Ann. Comments 2 Permit Docum. 2 CD’s w/all electronic files
(4) ISEC	1 Design Anal. 2 Drawings 2 Spec.	1 Design Anal. 2 Drawings 2 Spec. 2 Ann. Comments	
(5) EPVA	1 Design Anal. 1 Drawings 1 Spec.	1 Design Anal. 1 Drawings 1 Spec. 1 Ann. Comments	

6. GOVERNMENT REVIEWS

The Government will take 21 days to review and comment on each design submittal. For each design review submittal, the COR will furnish, to the Contractor, a single consolidated listing of all comments from the various design sections and from other concerned agencies involved in the review process. The review will be for conformance with the technical requirements of the solicitation and the Successful Offeror's (Contractor's) RFP proposal. 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 5 days after receipt of these comments in order that the comment can be resolved. The Contractor shall furnish disposition of all comments, in writing, with the next scheduled submittal. The Contractor is cautioned in that if he believes the action required by any comment exceeds the requirements of this contract, that he should take no action and notify the COR in writing immediately. Review conferences will be held for each design submittal at the Installation. The Contractor shall bring the appropriate design staff to the review conference. These conferences will take place the week after the receipt of the comments by the Contractor.

ProjNet/DrChecks is the required method for preparing and annotating comments. This is an Internet based database available on the Internet at:

http://65.204.17.188/projnet/home/version1/

User ID and password will be granted at the submittal stage.

6.1 If a design submittal is late by the approved schedule, the review will slip accordingly. The review process will not be shortened. Submittals date revisions must be made in writing at least 1 week prior to the effect submittal.

6.2 Post review conference action: Copies of comments, annotated with comment action agreed on, will be made available to all parties before the conference adjourns. Unresolved problems will be resolved by immediate follow-on action at the end of conferences. Valid comments will be incorporated. After receipt of final corrected design documents upon incorporation of backcheck comments the Project Manager will recommend issuance of a Construction Notice to Proceed (NTP). The Government, however, reserves the right to disapprove design document submittals if comments are significant. If final or backcheck submittal(s) are incomplete or deficient, and require correction by the Contractor and resubmittal for review, the cost of rehandling and reviewing will be deducted from payment due the Contractor at the rate of $5,000.00 per submittal.

7. COORDINATION

7.1 Written Records

The Contractor shall prepare a written record of each design site visit, meeting, or conference, either telephonic or personal, and furnish within 5 working days copies to the Contracting Officer and all parties involved. The written record shall include subject, names of participants, outline of discussion, and recommendation or conclusions. Number each written record for the particular project under design in consecutive order.

7.2 Design Needs List

Throughout the life of his contract the Contractor shall furnish the COR a monthly "needs" list for design related items. This list shall itemize in an orderly fashion design data required by the Contractor to advance the design in a timely manner. Each list shall include a sequence number, description of action item, name of the individual or agency responsible for satisfying the action item and remarks. The list will be maintained on a continuous basis with satisfied action items checked off and new action items added as required. Once a request for information is initiated, that item shall remain on the list until the requested information has been furnished or otherwise resolved. Copies of the list will be mailed to both the Administrative Contracting Officer and the agencies tasked with supplying the information. It is highly recommended that the Corps' RFI system be utilized during the design phase for this purpose. The system has report capability. User access and passwords will be furnished at the time needed with over the phone instructions.

8. DESIGN ANALYSIS

8.1 Media and Format

Present the design analysis on 8-1/2-inch by 11-inch paper except that larger sheets may be used when required for graphs or other special calculation forms. All sheets shall be in reproducible form. The material may be typewritten, hand lettered, handwritten, or a combination thereof, provided it is legible. Side margins shall be 1-inch minimum to permit side binding and head to head printing. Bottom margins shall be 1-1/4 inches, with page numbers centered 1 inch from the bottom.

8.2 Organization

Assign the several parts and sheets of the design analysis a sequential binding number and bind them under a cover indicating the name of the facility and project number, if applicable. The title page shall carry the designation of the submittal being made. The complete design analysis presented for final

review with the final drawings and specifications shall carry the designation "FINAL DESIGN ANALYSIS" on the title page.

8.3 Design Calculations

Design calculations are a part of the design analysis. When they are voluminous, bind them separately from the narrative part of the design analysis. Present the design calculations in a clean and legible form incorporating a title page and index for each volume. Furnish a table of contents, which shall be an index of the indices, when there is more than one volume. Identify the source of loading conditions, supplementary sketches, graphs, formulae, and references. Explain all assumptions and conclusions. Calculation sheets shall carry the names or initials of the author and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person.

8.4 Automatic Data Processing Systems (ADPS)

When ADPS are used to perform design calculations, the design analysis shall include descriptions of the computer programs used and copies of the ADPS input data and output summaries. When the computer output is large, it may be divided into volumes at logical division points. Precede each set of computer printouts 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. Preparation of the description which must accompany each set of ADPS printouts shall include the following:

a. Explain the design method, including assumptions, theories, and formulae.
b. Include applicable diagrams, adequately identified.
c. State exactly the computation performed by the computer.
d. Provide all necessary explanations of the computer printout format, symbols, and abbreviations.
e. Use adequate and consistent notation.
f. Provide sufficient information to permit manual checks of the results.

9. DRAWINGS

9.1 Prepare all drawings on Computer-Aided Design and Drafting (CADD) so that they are well-arranged and placed for ready reference and so that they present complete information. The Contractor shall prepare the drawings with the expectation that the Corps of Engineers, in the role of supervision, will be able to construct the facility without any additional assistance from the Contractor. Drawings shall be complete; unnecessary work such as duplicate views, notes and lettering, and repetition of details shall not be permitted. Do not show standard details not applicable to the project, and minimize unnecessary wasted space. Do not include details of standard products or items which are adequately covered by specifications on the drawings. Detail the drawings such that conformance with the RFP can be checked and to the extent that shop drawings can be checked. Do not use shop drawings as design drawings. The Contractor shall use standard Corps of Engineers title blocks and borders on all drawings. Submit an index of drawings with each submittal. The COR will furnish the Contractor file number, drawing name prefix, and specifics for inclusion in the title blocks of the drawings.

9.2 Create all drawings using CADD methods in MicroStation format. Save all Design Complete CADD files as MicroStation 5.0 or later version. The Contractor shall use EM 1110-1-1807 Standards Manual for U.S. Army Corps of Engineers Computer-Aided Design and Drafting (CADD) Systems as guidance for standard details, cell libraries, title blocks, and layer/level assignments.

Drawing features not addressed in EM 1110-1-1807 shall conform to drafting standards.

9.3 Only standard fonts provided by MicroStation are allowed to be used in the creation of CADD files. No fonts created by third parties or the designer are permitted.

9.4 The uses of reference files and model files during the design stage is up to the discretion of the designers. All CADD files at Design Complete submittal shall be in separate folders by discipline or building, free standing, independent files by folder. All reference files shall be in the same folder as the design files. Example of folders, Civil, Building 1, Building 2, etc.

9.5 Submit all Design Complete CADD files on read/write CD-ROM disk.

10. SPECIFICATIONS

10.1 The Contractor shall submit marked-up and final specifications as required. The specifications shall be Unified Facilities Guide Specifications (UFGS). Edit the specifications for this project and submit in marked up or redlined draft version at the Final Review submittal stage. If the design is based on a specific product, the specification shall consist of the important features of the product. The specification shall be detailed enough such that another product meeting the specification could be substituted and it would not adversely impact the project. After incorporation of comments, submit a final, design complete specification package. Delete all marked out or redlined text and type in all inserted text. Unified Federal Guide Specifications (UFGS) and Savannah District Guide Specifications are available on the Internet at:

http://www.hnd.usace.army.mil and http://en.sas.usace.army.mil/

Specsintact software is available free of charge at:

http://si.ksc.nasa.gov/specsintact

These specifications shall be edited and tailored by the Contractor to meet the requirements of the project under design.

10.2 Submittal Register

Develop the construction submittal requirements during the design phase of the contract. List the submittal requirements in paragraph SUBMITTALS of each specification section. The SPECSINTACT program generates a submittal register from these paragraphs. Include this register at the end of Section 01330 SUBMITTAL PROCEDURES (DESIGN BUILD). The Contractor shall be responsible for listing all required submittals necessary to insure the project requirements are complied with. The submittals paragraph shall identify submittal items such as shop drawings, manufacturer's literature, certificates of compliance, material samples, guarantees, test results, etc. that the Contractor shall submit for review and/or approval action during the life of the construction contract.

11. CONTENTS OF DESIGN SUBMITTALS

11.1 The 100% site/utility design submittal shall contain as a minimum, the following:

11.1.1 General Narratives

11.1.1.1 Site/Layout

Explanation of objectives and factors influencing siting decisions. General overview of major site features planned, such as ~~building orientation,~~ drainage patterns, parking provisions, traffic circulation, provisions for the handicapped, security requirements, etc. Rationale for locating major site elements. Set back requirements or specific clearance requirements. Locations of borrow and spoil areas.

11.1.1.2 Utility Systems

Design narrative for the natural gas, water supply, storm drainage, and wastewater systems relating to this project. Include an analysis of the existing distribution systems capability to supply sufficient quantity at adequate levels. If the existing distribution systems are inadequate, provide the design solution to augment the systems to provide the requirements for the new facilities.

11.2 All drawings included in the required technical data for the proposal submission (see Contract Clause, TECHNICAL SUBMISSION REQUIREMENTS AND INSTRUCTIONS) shall be developed to 100 percent completion. In addition to the individual utility plans, submit a combined utility plan drawn to the same scale as the individual utility plans.

11.2.1 General Site Layout

Scale shall be included.

11.2.2 Site Grading and Drainage Plans

Show locations of all sediment basins, diversion ditches, and other erosion control structures. Indicate the approximate drainage areas each will service. Indicate the materials, construction and capacity of each structure. Include limits of landscaping and seeded areas. General site grading and drainage shall be indicated by contour lines with an interval of not more than approximately 1 foot [800mm].

11.2.3 Parking Lots

Show the actual dimensions of parking lots and measurements from a known reference point rather than coordinates at corners. Show the number of parking spaces.

11.2.4 Electrical Plan Requirements

11.1.4.1 Required diagrams and details on Site Electrical Drawings.

a. On-Site Electrical Distribution Plan:
b. On-Site One Line Diagram.
c. On-Site Distribution Transformer Schedule: Provide with the following headings:
   Transformer Designation.
   Transformer Size (KVA).
   Building(s) Served.
   Primary Phase(s) and Circuit to which connected.
d. On-Site Details (Site Lighting, Trenching, Pad-Mounted Transformer, etc.).

11.1.5 Specifications

Provide final specifications which include all sections which apply to site/utility work.

11.1.6 Design Analysis

Design analysis shall include design calculations fully developed to support the design of the site and utility systems included in this submittal.

11.1.7 Geotechnical

Any data necessary for the design will be obtained by the Contractor. Geotechnical information must be provided to support all assumptions and design parameters utilized in the presented site/utility design as applicable.

11.2 The final design submittal shall contain as a minimum, the following:

11.2.1 Lawn and Landscaping Irrigation System

The design submittal shall include drawings clearly showing the piping layout and location of sprinkler heads coordinated with the landscaping plan, control valves, backflow preventers, rain check switches, controllers, etc. Indicate buildings, walks, shrubbery, trees, and other obstacles that might interfere with the proper operation of the sprinkler system. A design analysis calculating the pressures at each sprinkler head for the capacity and radius of throw is required. Details of the sprinkler head installation, valve boxes, and other irrigation appurtenances shall be submitted. 11.2.2 Landscape, Planting and Turfing

11.2.2.1 The landscape planting design narrative shall describe the analysis of existing site conditions, including an indication of existing plant materials that are to remain on the site. The statement of concept shall indicate specific site problems related to proposed development and the rationale for proposed plant locations. The narrative shall also include a list of suggested types and sizes of plant materials which are to be used, based upon the designated functional and visual criteria.

11.2.2.2 The drawings shall be prepared at a scale which corresponds with the site layout and grading plans and, likewise, shall include reference coordinates, north arrows, graphic scales and appropriate legends. An overall planting layout shall be developed and shall include enlarged detail plans of specific areas, as needed, to clarify requirements. The proposed layout shall indicate shade trees, evergreen trees, flowering trees, shrub masses, etc., according to designated functional and visual locations of planting. A legend which also indicates sizes of plants recommended for each of the above categories shall be included. The drawings and all subsequent plans shall indicate existing and proposed buildings, paved areas, signs, light standards, transformers, dumpster areas, storm drainage system, and other structures and utilities.

11.2.2.3 Landscape, Planting and Turfing

Final design drawing(s) shall include a complete schedule of plant materials which indicates their botanical and common names, plan symbols, quantities, sizes, condition furnished, and pertinent remarks. Scale of drawing shall be prepared at 1" = 30'. Drawing shall correspond with the site layout and grading plans and reference coordinates, north arrows, graphic scales and appropriate legends. An overall planting layout shall be developed and shall include enlarged detail plans of specific areas as needed, to clarify requirements. Final design drawings, indicating proposed plants by a (+) mark for the plant location and a circle which is scaled at approximately 2/3 the ultimate growth spread (diameter) of plants, shall also include a complete

schedule of plant materials which indicates botanical and common names, plan symbols, quantities, sizes, condition furnished, and pertinent remarks. Final drawings shall also include the basic details for installation of tree, shrub, and ground cover planting, as well as any other applicable details for clarification of specific project requirements.

11.2.3 Architectural

11.2.3.1 Design narrative shall provide a summary of functional space relationships, as well as circulation. There shall also be a general statement for the rationale behind the major design decisions.

11.2.3.2 Architectural Floor Plans shall indicate dimensions, columns lines, and detail references. Toilets and other specialized areas shall be drawn to 1/4" scale and shall show any needed interior features.

11.2.3.3 Finish schedule shall indicate material, finishes, colors and any special interior design features such as soffits, fascias, and lighting troughs, etc.

11.2.3.4 All required equipment shall be shown on the drawings with an equipment list.

11.2.3.5 List any special graphics requirements that will be provided.

11.2.3.6 Schedules shall be provided for both doors and windows. These schedules shall indicate sizes, types, and details for all items shown on floor plans.

11.2.3.7 Hardware sets using BHMA designations.

11.2.3.8 Composite floor plan showing all prewired workstations. Also show typical elevations of each type of workstation.

11.2.3.9 SID package.

11.2.3.10 Fire Protection and Life Safety Analysis. This analysis must be performed by a Registered Fire Protection Engineer (FPE). NICET certification is not sufficient to address this requirement.

11.2.3.11 C.I.D. Package.

11.2.4 Structural Systems

11.2.4.1 State the live loads to be used for design. Include roof and floor loads; wind loads, lateral earth pressure loads, seismic loads, etc., as applicable.

11.2.4.2 Describe the method of providing lateral stability for the new portion of the structural system to meet seismic and wind load requirements. Include sufficient calculations to verify the adequacy of the method.

11.2.4.3 This submittal shall include drawings showing roof and floor framing plans as applicable. Principal members will be shown on the plans. A foundation plan shall also be furnished showing main footings and grade beams where applicable. Where beam, column, and footing schedules are used, show schedules and fill in sufficient items to indicate method to be used. Show typical bar bending diagram if applicable. Typical sections shall be furnished for roof, floor, and foundation conditions. Structural drawings for proposals and submittals shall be separate from architectural drawings.

11.2.4.4 Provide any computer analyses used. The software shall be widely accepted, commercially available programs and complete documentation of the input and output of the program must be provided.

11.2.5 Plumbing Systems

11.2.5.1 List all references used in the design including Government design documents and industry standards.

11.2.5.2 Provide justification and brief description of the types of plumbing fixtures, piping materials and equipment proposed for use.

11.2.5.3 Prepare detail calculations for systems such as sizing of domestic hot water heater and piping; natural gas piping; [lp gas piping and tanks] [fuel oil piping and tanks].

11.2.5.4. Indicate locations and general arrangement of plumbing fixtures and major equipment.

11.2.5.5 Include plan and isometric riser diagrams of all areas including hot water, cold water, waste and vent piping. Piping layouts and risers should also include natural gas (and meter as required), [LP gas], [fuel oil] and other specialty systems as applicable.

11.2.5.6 Include equipment and fixture connection schedules with descriptions, capacities, locations, connection sizes and other information as required.

11.2.6 Fire Protection/Suppression

11.2.6.1 List all references used in the design including Government design documents and industry standards used to generate the fire protection analysis.

11.2.6.2 Classify each building in accordance with fire zone, building floor areas and height and number of stories. This information shall be contained in the fire protection analysis.

11.2.6.3 Discuss and provide description of required fire protection requirements including extinguishing equipment, detection equipment, alarm equipment [and water supply]. Alarm and detection equipment shall interface to requirements of electronic systems. This information shall be contained in the fire protection design analysis.

11.2.6.4 Prepare a plan for each floor of each building that presents a compendium of the total fire protection features being incorporated into the design. Provide the following types of information:

The location and rating of any fire-resistive construction such as occupancy separations, area separations, exterior walls, shaft enclosures, corridors, stair enclosures, exit passageways, etc.

The location and coverage of any fire detection systems.

The location and coverage of any fire suppression systems (sprinkler risers, standpipes, etc.).

The location of any other major fire protection equipment.

Indicate any hazardous areas and their classification.

11.2.6.5 Prepare a schedule describing the internal systems with the following information: fire hazard and occupancy classifications, building construction type, GPM/square foot sprinkler density, area of operation and other as required.

11.2.6.6 Hydraulic calculations based on water flow test shall be prepared for each sprinkler system to insure that flow and pressure requirements can be met with current water supply. Include copies of Contractor water flow testing done to certify the available water source.

11.2.7 Elevators

11.2.7.1 A list of criteria codes, documents and design conditions used. Reference to any authorized waiver of these criteria or codes.

11.2.7.2 Permits and Registration: Provide a list of all required permits and registrations for construction of items of special mechanical systems and equipment.

11.2.7.3 A description of the proposed control system.

11.2.7.4 Description, approximate capacity and location of any special mechanical equipment such as elevators, etc.

11.2.8 Electronic Systems

Electronic Systems responsibilities include the following as applicable:

Fire Detection and Alarm System
Fire Suppression System Control
Public Address System
Telephone System
Cable Television System
Special Grounding Systems
Cathodic Protection
Intrusion Detection, Card Access System
Central Control and Monitoring System

11.2.8.1 The design analysis shall include all calculations required to support design decisions and estimates at this stage of design. The analysis shall include specific criteria furnished, conference minutes and cost analyses of all systems considered.

11.2.8.2 Design of the fire alarm and detection system shall include layout drawings for all devices and a riser diagram showing the control panel, annunciator panel, all zones, radio transmitter and interfaces to other systems (HVAC, sprinkler, etc.).

11.2.8.3 Specify all components of the fire suppression (FS) system in the FS section of the specifications. Provide a clear description of how the system will operate and interact with other systems such as the fire alarm system. Include a riser diagram on the drawings showing principal components and interconnections with other systems. Include FS system components on drawing legend. All components shown of floor plans shall be designated as FS system components (as opposed to Fire Alarm components). Show the location of FS control panels, HVAC control devices, sensors, and 120V power panel connections on the floor plans. Indicate zoning of areas by numbers (1, 2, 3) and detectors subzoned for cross zoning by letter designations (A and B). Differentiate between ceiling mounted and underfloor detectors with distinct symbols and indicate subzone of each.

11.2.8.4 Show location of telephone outlets (including pay phones) on the plans. Include legend and symbol definition to indicate height above finished floor. Show Telephone Conduit System Riser Diagram. Size conduit on Riser Diagram. Do not show conduit runs between backboard and outlets on the floor plans. Underground telephone distribution conduit shall be shown on either the electrical or electronic site plan.

11.2.8.5 Grounding System

The specifications and drawings shall completely reflect all of the design requirements. The specifications shall require field tests (in the construction phase), witnessed by the Contracting Officer, to determine the effectiveness of the grounding system. The design shall include drawings showing existing construction. Verification of the validity of any existing drawings and/or any other data furnished by the Government shall be the responsibility of the engineering services firm.

11.2.8.6 Provide a statement describing the extent of any exterior work such as telephone lines, cable television (TV) distribution cables, duct banks, etc., outside of 5 feet from the building line.

11.2.8.7 Provide the name of the licensed corrosion engineer or NACE specialist. Provide the following for cathodic protection systems:

Clearly define areas of structures or components in soil or water to be protected.

Type system recommended, comparison of systems, cost estimates showing all equipment alternatives.

Calculations on all systems that are considered showing all information and descriptions.

11.2.8.7.1 Design of Cathodic Protection

The design shall clearly provide a thorough and comprehensive specification and drawing. The design plans and specifications shall show extent of the facilities to be protected, location and type of anodes, location of test points, details for sectionalizing an underground piping system. This design shall be complete enough to purchase equipment and build without design changes to meet criteria of protection.

11.2.8.8 Exterior work to be shown on electrical site plan.

Existing and new communications service lines, both overhead and underground, shall be properly identified.

Show removals and relocations, if any.

11.2.8.9 Provide a descriptive narrative of all electronic systems that are required for project. Define any hazardous areas (as defined in the National Electric Code) and indicate the type of equipment proposed for use in such areas. Show the location of all electronic system panels, etc., on the floor plans. Show the proposed riser diagrams for all systems. Show sizes of all conduit, wires, cables, panels, etc. Provide a complete symbol legend for all devices or equipment shown on the plans. For work requiring removals or demolition, the designer shall show by use of drawings or narrative, how demolition work is to be done.

11.2.9 Electrical and Mechanical Systems

Provide all information as required on the 100% design submittal developed to 50% completion.

11.2.10 Specifications
*5
Draft of specifications ~~for housing units,~~ including index and trade sections.

11.3 The 100% design submittal shall contain, as a minimum, the following items for all submittals:

11.3.1 General

A complete set of construction documents, plans and specifications at the same level of detail as if the project were to be bid including a complete list of equipment, fixtures and materials to be used. The final drawings are an extension of the reviewed 60% drawings and are to include the 60% comments and responses. All details shall be shown on the drawings.

11.3.2 The design analysis is an extension of the reviewed 60% design analysis and supports and verifies that the design complies with the requirements of the project.

11.3.3 Submit marked up specifications. The specifications shall be coordinated with the drawings and shall describe in detail all items shown on the drawings.

11.3.4 Architectural

11.3.4.1 All architectural drawings shall be coordinated with the other engineering disciplines. Ensure that the plans are in compliance with the applicable codes. It will be the Contractor's responsibility to implement the comments generated from any design review submittal as well as verify the consistency between plans and specification. The evaluation of the Contractor's submittals shall be based on degree to which the submittal meet the requirements set forth in this document and the specifications.

11.3.4.2 Prewired Workstation Composite Floor Plans

Prewired workstation typicals - elevations and component inventory. Prewired workstation panel identification plan with electrical outlet placement including base feed.

11.3.4.3 SID package.

11.3.4.4 Fire Protection and Life Safety Analysis

This analysis must be performed by a Registered Fire Protection Engineer (FPE). NICET certification is not sufficient to address this requirement.

11.3.5 Structural Design

11.3.5.1 Furnish complete checked calculations for all structural members. Incorporate any changes required by comments on 50% Design Submittal.

11.3.5.2 Prior to this submittal, structural drawings shall be coordinated with all other design disciplines.

11.3.5.3 The final structural drawings shall contain the following information as a set of general notes:

The allowable soil bearing value.

The design stresses of structural materials used.
The design live loads used in the design of various portions of the structures.
The design wind speed.
The seismic zone and the "K", "C", "I" and "Z" values used in design.

11.3.5.4 All structural drawings and calculations shall be checked and stamped by the designer of record (a registered Professional Engineer).

11.3.6 Fire Suppression System

Provide a file of the input data used in the computer program to design the fire suppression system as well as the output data.

11.3.7 Specific Mechanical and Plumbing Requirements

11.3.7.1 Required Plans, Diagrams, Schedules and Details on Unit Mechanical Drawings

11.3.7.1.1 Mechanical Floor Plan

The floor plans shall show all principle architectural features of the building which will affect the mechanical design. The floor plans shall also show the following:

Room designations.
Mechanical legend and applicable notes.
Location of all ductwork or piping (double line ductwork required).
Location and capacity of all terminal units (i.e., registers, diffusers, grilles, hydronic baseboards).
Exhaust fan and range hood location.
Size of all ductwork and piping.
Thermostat location.
Location of heating/cooling plant (i.e., boiler, chiller, cooling tower, etc).
Location of all air handling equipment.
Return air paths (i.e., undercut doors, transfer grilles).
Flue piping size and location.
Piping diagram for forced hot water system (if used).
Fuel supply and return piping.

11.3.7.1.2. Equipment Schedule

Complete equipment schedules shall be provided. Schedule shall also include:

Capacity
Electrical characteristics
Efficiency (if applicable)
Manufacturer's name
Optional features to be provided
Physical size

11.3.7.1.3 Details: Construction details, sections, elevations, etc. shall be provided where required for clarification of methods and materials of design. Roof and exterior wall penetrations shall be detailed on the drawings.

11.3.7.2 Plumbing Floor Plan: The floor plan shall show all principal architectural features of the building which will affect the plumbing design. Separate plumbing plans will not be required if sufficient information can be shown on the mechanical plans to meet the requirements shown above. The floor plan shall also show the following:

Room designations.
Fixture Schedule.
Location of utility entrances.
Waste and water pipe location and size.
Fixture designations.

11.3.7.3 Design Analysis

Complete design calculations for mechanical systems. Include computations for sizing PM&E equipment, air duct design, and U-factors for ceilings, roofs and exterior walls and floors. Contractor shall employ commercially available energy analysis techniques to determine the energy performance of all passive systems and features. Use of hourly energy load computer simulation (e.g., TRNSYS, DOE 2.1 Blast, etc.) is required. These calculations can be used to size the mechanical systems. Based on the results of calculations, provide a complete list of the materials and equipment proposed for heating and plumbing, with the manufacturer's published cataloged product installation specifications and roughing-in data. The heating and cooling equipment data shall include the manufacturer's wiring diagrams, installation specifications, ARI certification, and the standard warranty for the equipment.

11.3.8 Specific Electrical Requirements

11.3.8.1 Required Plans, Diagrams, Schedules, and Details on Unit Electrical Drawings:

11.3.8.1.1 Electrical Floor Plan

The floor plans shall show all principle architectural features of the building which will affect the electrical design. The floor plan shall also show the following:

Room designations.
Electrical legend and applicable notes.
Lighting fixtures, properly identified.
Location of smoke and CO detectors.
Location of telephone and cable TV outlets.
Switches for control of lighting.
Receptacles.
Location and designation of panelboards. Plans should clearly indicate type of mounting required (flush or surface) and be reflected accordingly in specifications. Service entrance (conduit and main disconnect).
Location, designation and rating of motors and/or equipment which requires electrical service. Show method of termination and/or connection to motors and/or equipment. Show necessary junction boxes, disconnects, controllers (approximate only), conduit stubs, and receptacles required to serve the motor and/or equipment.

11.3.8.1.2 Building Riser Diagram (from pad-mounted transformer to unit load center panelboard)

Indicate the types and sizes of electrical equipment and wiring. Include grounding and metering requirements.

11.3.8.1.3 Load Center Panelboard Schedule(s)

Schedule shall indicate the following information:

Panelboard Characteristics (Panel Designation, Voltage, Phase, Wires, Main Breaker Rating and Mounting.

Branch Circuit Designations.
Load Designations.
Circuit Breaker Characteristics. (Number of Poles, Trip Rating, AIC Rating)
Branch Circuit Connected Loads (AMPS).
Special Features.

11.3.8.1.4 Lighting Fixture Schedule (Schedule shall indicate the following information:)

Fixture Designation.
General Fixture Description.
Number and Type of Lamp(s).
Type of Mounting.
Special Features.

11.3.8.1.5 Details

Construction details, sections, elevations, etc., shall be provided where required for clarification of methods and materials of design.

11.3.8.2 Required Electrical Design Analysis
*5
Design analysis and calculations for the electrical systems shall be prepared by a licensed professional engineer ~~with experience in family housing,~~ and shall be stamped as such. The design analysis shall be separately bound, in one or more volumes. Show functional and engineering criteria, design information, and calculations applicable to the project. The analysis shall be organized in a format appropriate for review, approval, and record purposes. The design calculations shall indicate methods and references identified, and shall explain assumptions and conclusions.

11.3.8.2.1 Voltage Drop (VD) Calculations

Select conductor sizes of primary feeders, site lighting circuits, service laterals, and unit feeder conductors. Calculate maximum length for each phase of each primary circuit, using a maximum allowable VD for each circuit. Calculate voltage drops for each conductor. Maximum allowable voltage drop for site lighting and service laterals is 3%. The combined voltage drop for the service laterals, unit feeders, and branch circuit cannot exceed 5%. Calculate the available fault current at the main breaker for the living unit panel. Provide a coordination study to support breaker selection.

11.3.9 Specifications

Provide final specifications. The Contractor shall make final identification of all materials and finishes at this stage.

11.4 Design Complete Submittal (Corrected Final)

11.4.1 Design Drawings

Drawings shall be 100% complete, signed and sealed by the designer of record. All previous review comments shall be incorporated.

11.4.2 Design Analysis

Complete design analysis for all design disciplines. The final Fire Protection and Life Safety Analysis shall be included in the Design Analysis.

11.4.3 Comment Response Package

Complete package showing all comments from all previous reviews and the respective response and disposition.

11.4.4 This submittal shall include all drawings and design information from the 100% site/utility submittal to form a complete design package.

12. DESIGN RELATED PRODUCTS

12.1 DD Form 1354

Three sets of DD Form 1354, Transfer and Acceptance of Military Real Property shall be prepared in accordance with DA Pamphlet 415-28 available at http://www.usapa.army.mil/gils/ and submitted to the Contracting Officer. The DD Form 1354 will require input from both the design agent and the Contractor. The form must be completed in English units.

12.2 Submittal Register, ENG FORM 4288

The Contractor shall complete and submit three copies of a "preliminary" Eng Form 4288, Submittal Register to Contracting Officer. The "preliminary" Eng Form 4288, Submittal Register shall have the column "Submittal Identification", "Specification Paragraph Number", "Description of Submittal" "Type of Submittal", and "Remarks" completed; the Contractor shall identify whether the submittal is for "Government Approval" or for "Government Information" under the column "Remarks." The "final" Eng Form 4288, Submittal Register, shall be in accordance with paragraph Submittal Register in this section.

12.3 Reproduction

Upon Government approval of 100% design documents, the original will be returned to the Contractor for reproduction purposes. The Contractor will be responsible for his own reproduction as well as reproduction for Government use. The Government will require twice the number of copies of the plans and specifications as were required for the review stages. No color boards will be required. The originals will be retained by the Contractor for recording of as-built conditions. Upon completion of the project, the original design documents corrected to reflect as-built conditions will be supplied to the Government.

13. PAYMENT DURING DESIGN

Payments, as authorized by the Authorized Representative of the Contracting Officer (COR), will be made monthly for the amount and value of the work and services performed by the Contractor. This estimate will be verified by the Contracting Officer utilizing the progress charts or the CONTRACTOR-PREPARED NETWORK ANALYSIS SYSTEM submitted by the Contractor and independent analyses of progress. See Contract Clause entitled PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS for additional information.

-- END OF SECTION --

SECTION 01020

DESIGN REQUIREMENTS

1. DESIGN REQUIREMENTS

   1.1. GENERAL. The Contractor shall design and construct renovations to SOF Bryant Hall at Fort Bragg, North Carolina resulting in complete and useable facilities.

2. DESIGN CRITERIA

   2.1. Information provided in the Appendices is intended to provide additional design requirements and information. Appendix “A” is Functional Room Requirements, a room-by-room summary of specific user requirements for functions within the new facility. Appendix “B” is the Life Safety/Fire Protection Analysis. Appendix “C” is the Sustainable Project Rating Tool (SPiRiT). Appendix “D” is the SPiRiT Requirements and Summary Table. Appendix “F” contains environmental and abatement information (to be issued with final RFP).

   2.2. Drawings included in this RFP include a conceptual site plans and conceptual floor plans including finish requirements. The drawings represent an acceptable solution to the functional requirements for this facility. They have been coordinated with and approved by the using agency. Use of this design is optional.

3. SPECIFICATION INTENT. The intent of these specification sections is to describe the requirements for quality, function, and materials, and types of construction in sufficient detail to enable engineering and design to be completed by the Contractor. In this specification section, each engineering and design discipline describes design intent and outlines the parameters to which the Contractor shall design.

   3.1. Section 01020 DESIGN REQUIREMENTS defines the design and performance criteria. The applicable building codes and standards shall be used as the minimum criteria to develop the construction documents unless more stringent criteria are defined for a specific area.

   3.2. Section 01030 DESIGN AFTER AWARD defines the format and submittal requirements in which the Contractor shall prepare the design and the construction documents.

4. COORDINATION BETWEEN THE VARIOUS DISCIPLINES

   4.1. The Contractor shall be responsible for the coordination between design, engineering and construction disciplines in order to fulfill the requirements of this contract and to provide for a complete, integrated and functional design.

5. QUALITY OF WORK

5.1. Construction documents shall be sufficient to afford a clear understanding of the construction work required. The work shall be organized in a manner that will assure thorough coordination between the various details on the drawings, and between the drawings and the specifications. The Contractor shall crosscheck all work until all conflicts have been reconciled. The US Army Corps of Engineers, Savannah District Design Manual, current edition, and Savannah District Guide Specifications are available on the Internet at:

http://www.hnd.usace.army.mil/TECHINFO/

SPECSINTACT software which is used to edit the guide specifications is available free of charge at the same site.

Unified Facilities Guide Specifications (UFGS) are available on the Internet at:

http://www.hnd.usace.army.mil/

They shall be used as the basis for format and preparation of construction documents.

6. DESIGN REQUIREMENTS

6.1. General

6.1.1. The project shall be designed and constructed in accordance with the criteria contained herein using industry standard materials and efficient practices. The Contractor shall use materials and equipment accepted within the construction industry. The building design and the materials selected shall be high quality, durable and easily maintained.

6.1.2. The Contractor shall prepare complete construction documents for all work designed as required by the RFP. The construction documents to be prepared include, but are not limited to, construction drawings, specifications, submittals, and design analyses as required in Section 01030, DESIGN AFTER AWARD. The Contractor's Designers of Record shall develop construction document technical specifications for all areas of work.

6.1.3. The Contractor shall be responsible for the professional quality, code compliance, technical accuracy and coordination of all designs, drawings, specifications and other documents or publications upon which the design and construction are based.

6.1.4. The project specifications shall be prepared using UFGS guide specifications. If a UFGS guide specification cannot be found, contact the Savannah District to see if a guide specification exists. If a guide specification does not exist the Design/Build Contractor will prepare a job-specific specification. The UFGS shall be edited and adapted by the designer for this project, incorporating UFGS instructions and recommendations in the notes to specifier contained in the guide specs. The designer is to delete inapplicable portions of the guide specification and revise

and/or supplement, as required, the applicable portions to provide a complete project specification. Editing of specifications shall be for bracketed options and project requirements as stated in the RFP only. Deviations will not be allowed without prior approval from the Contracting Officer. Specifications shall be submitted at final design submittal in hard copy form that shows the text added and deleted with additions highlighted and deletions lined through but still readable. This feature is available in SPECSINTACT or Microsoft Word. In Microsoft Word this feature is located under “Tools”, “Track Changes” and “Highlight Changes”. Following is a partial list of UFGS specifications required for this project. Other UFGS sections shall be added and submitted by the Design/Build Contractor as needed to address all other portions of the work in the accepted proposal. Use the Division 01 GENERAL REQUIREMENTS specifications as provided in the RFP. No changes to these sections are allowed.

Division 01 General Requirements

UF-01320A Project Schedule
UF-01330 Submittal Procedures
UF-01150N Special Project Procedures
UF-01356A Storm Water Pollution Prevention Measures
UF-01415 Metric Measurements
UF-01420 Sources For Reference Publications
UF-01451A Contractor Quality Control
UF-01572A Construction And Demolition Waste Management
UF-01670A Recycled/Recovered Materials
UF-01780A Closeout Submittals
UF-01781N Operation And Maintenance Data

Division 02 – Site Work

SAVH-02013 Environmental Protection During Construction

Division 04 Masonry

UF-04230N Reinforced Masonry

Division 05 Metals

UF-05055A Metalwork Fabrication, Machine Work, Miscellaneous Provisions
UF-05090A Welding, Structural
UF-05120A Structural Steel
UF-05210A Steel Joists
UF-05300A Steel Decking
UF-05400A Cold-Formed Steel Framing
UF-05500A Miscellaneous Metal

Division 06 Woods and Plastics

UF-06100A Rough Carpentry
UF-06200A Finish Carpentry
UF-06410A Laminate Clad Architectural Casework
UF-06650N Solid Polymer Fabrications

Division 07 Thermal and Moisture Protection

UF-07110A Bituminous Dampproofing
UF-07131A Elastomeric Membrane Waterproofing

UF-07212N Mineral Fiber Blanket Insulation
UF-07220A Roof Insulation
UF-07551A Modified Bitumen
UF-07600A Sheet Metalwork, General
UF-07840A Firestopping
UF-07900A Joint Sealing

Division 08 Doors and Windows
Uf-08110 Steel Doors And Frames
UF-08210 Wood Doors
UF-08331A Metal Rolling Counter Doors
UF-08520A Aluminum And Environmental Control Aluminum Windows
UF-08520N Aluminum Windows
UF-08581 Blast-Resistant Tempered Glass Windows
SAVH-08702 Builders Hardware (Fort Bragg Projects)
UF-08810A Glass And Glazing
UF-08850 Fragment Retention Film For Glass
UF-08900 Glazed Curtain Wall

Division 09 Finishes
UF-09000 Building Color And Finish Schedule
UF-09250A Gypsum Wallboard
UF-09310N Ceramic Tile, Quarry Tile, And Paver Tile
UF-09510A Acoustical Ceilings
UF-09651A Resilient Flooring
UF-09680A Carpet
UF-09720A Wallcoverings
UF-09900A Painting, General
UF-09915 Color Schedule

Division 10 Specialties
UF-10100A Visual Communication Specialties
UF-10160A Toilet Partitions
UF-10260A Wall And Corner Protection
UF-10430A Exterior Signage
UF-10440 Interior Signage
UF-10505N Steel Clothing Lockers
UF-10650A Operable Partitions
UF-10675N Steel Shelving
UF-10800A Toilet Accessories

Division 11 Equipment
UF-11400A Food Service Equipment

Division 12 Furnishings
UF-12320A Cabinets And Countertops
UF-12490A Window Treatment
UF-12705 Furniture Systems

Division 13 Special Construction
UF-13080 Seismic Protection For Miscellaneous Equipment
UF-13100A Lightning Protection System
UF-13280A Asbestos Abatement
UF-13286N Handling Of Lighting Ballasts And Lamps Containing Pcb’s and Mercury
UF-13851A Fire Detection And Alarm System, Addressable
UF-13930A Wet Pipe Sprinkler System, Fire Protection

Division 14 Conveying Systems

UF-14240A	Elevators, Electronic

Division 15 Mechanical

15080a	Thermal Insulation For Mechanical Systems
15080	Pipe and Duct Insulation
15181A	Chilled And Condenser Water Piping And Accessories
15556A	Forced Hot Water Heating Systems Using Water And Steam Heat Exchangers
15190a	Gas Piping Systems
15569a	Water And Steam Heating; Oil, Gas Or Both; Up To 20 MBTUH
15601n	Central Refrigeration Equipment For Air Conditioning
15895a	Air Supply, Distribution, Ventilation, And Exhaust System
15951a	Direct Digital Control For HVAC
15990a	Testing, Adjusting, And Balancing Of HVAC Systems
15995a	Commissioning Of HVAC Systems

Division 16 Electrical

16070A	Seismic Protection For Electrical Equipment
16370a	Electrical Distribution System, Aerial
16375a	Electrical Distribution System, Underground
16415a	Electrical Work Interior
16710a	Premises Distribution System
16770a	Radio And Public Address System
16771	Telephone System Outside Plant

7. RFP DESIGN AND TECHNICAL CRITERIA

7.1. All design and construction document drawings and specifications shall be prepared to comply with the RFP. The RFP describes the design work that shall not be changed, and shall be included in the construction documents. All remaining design work shall be performed by the Contractor based on the design criteria as required by the RFP. No deviations from the criteria will be allowed unless prior approval is obtained from the Contracting Officer's Representative. All questions or problems encountered by the Contractor in following criteria shall be promptly submitted with recommendations to the Contracting Officer's Representative for approval.

7.2. CONFLICTS IN RFP CRITERIA. Where the various elements of the RFP are in conflict, the following priority shall be used to establish precedence, unless specifically noted otherwise:

1. Specifications
2. Drawings

8. APPLICABLE BUILDING CODES AND STANDARDS

8.1. The following codes of the most current edition shall be used as standards for building construction and life safety design. Where there is a conflict between the RFP and building codes, the most stringent shall apply. When codes are in conflict, the most stringent shall apply. This list is not

intended to be a complete list. All work shall be designed and constructed to meet all State and Federal codes, standards and laws. Refer to the technical specifications for other standards and references not listed below.

Regulatory, Reference Requirements and Standards

ASSOCIATED AIR BALANCE COUNCIL (AABC) PUBLICATIONS

AMERICANS WITH DISABILITIES ACT (ADA)

Accessibility Guidelines for Buildings and Facilities. Available from US Architectural and Transportation Barriers Compliance Board, 1111 18th Street, N.W., Suite 501, Washington, DC 20036-3894, (202) 653-7834 v/TDD or (202) 653-7863 FAX

AASHTO American Association of State Highway and Transportation Officials
A policy on Geometric Design of Highways and Streets, AASHTO

ADAAG Americans with Disabilities Act Accessibility Guidelines

ARMY/AIR FORCE TECHNICAL MANUAL ™

TM 5-337	Paving & Surfacing Operations
TM 5-785	Engineer Weather Data
TM 5-805-4	Noise and Vibration Control for Mechanical Equipment
TM 5-809-12	Concrete Floor Slabs on Grade Subjected to Heavy Loads
TM 5-810-5	Plumbing
TM 5-811-1	Electrical Power Supply and Distribution
TM 5-811-2	Electrical Design Interior Electrical Systems
TM 5-811-3	Electrical Design Lightning and Static Electricity
TM 5-811-9	Voice/Data Systems
TM 5-811-13	Standards for High-Efficiency Motors and Controllers
TM 5-811-14	Coordinated Power System Protection
TM 5-813-5	Water Supply, Water Distribution
TM 5-814-1	Sanitary and Industrial Wastewater Collection Gravity Sewers and Appurtenances

TM 5-822-2/ AFM 88-7, Chap. 5, General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Area

TM 5-822-5 Pavement Design for Roads, Streets, Walks, and Open Storage Areas

TM 5-822-7 Standard Practice for Concrete Pavements

TM 5-822-8 Bituminous Pavements Standard Practice

TM 5-822-13 Pavement Design for Roads, Streets, and Open Storage Areas, Elastic Layered Method

TM 5-811-7 Electrical Design, Cathodic Protection

TM 5-853-1/ AFMAN 32-1071, Vol. 1 Security Engineering Project Development

TM 5-853-3/ AFMAN 32-1071, Vol. 3 Security Engineering Final Design Interim Department of Defense Antiterrorism/Force Protection Construction Standards

ARMY/COE MILITARY HANDBOOKS

MIL-HDBK-1008C Fire Protection for Facilities Engineering, Design, and Construction, 1997

ARMY REG 190-11 Physical Security of Arms, Ammunition and Explosives

ENGINEER TECHNICAL LETTER (ETL), MANUAL (EM) AND REGULATIONS (ER)

EM 1110-2-1906 Laboratory Soils Testing

EM 1110-2-1909 Cathodic Protection

ETL 1110-9-10 Cathodic Protection System Using Ceramic Anodes

ER 1110-3-110 Information Systems Design in Support of Military Construction

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC Load and Resistance Factor Design Specifications for Structural Steel Buildings

AISC Code of Standard Practice for Steel Buildings and Bridges

AISC LRFD Specification for Structural Joints Using ASTM A325 or A490 Bolts

AMERICAN IRON AND STEEL INSTITUTE (AISI)

American Iron and Steel Institute (AISI), Specification for the Design of Cold-Formed Steel Structural Members

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/ASME 17.1 – 2000 Safety Code for Elevators and Escalators

ANSI 117.1-1998 Accessibility and Usable Buildings and Facilities

ANSI 302.9 Standard Test Methods for Impact Resistance of Flat Rigid Plastic Specimens by Means of a TUP (Falling Object)

ANSI 402.9 Retaining Rings

ANSI A156.1 (1988) Butts and Hinges (BHMA 101)

ANSI A156.2 (1989) Bored and Pre-assembled Locks and Latches (BHMA 601)

ANSI A156.3 Exit Devices (BHMA 156.3)

ANSI A156.4 (1992) Door Controls - Closers

A156.5(1992) Auxiliary Locks and Associated Products

A156.6 Architectural Door Trim (BMHA)

A156.7 Template Hinge Dimensions (BHMA)

A156.26 Continuous Hinges (BHMA)

ANSI A156.9 (1988) Cabinet Hardware (BHMA 201)

ANSI A156.12(1992) Interconnected Locks and Latches

ANSI B16.3-85 Malleable Iron Threaded Fittings, Classes 150 and 300

ANSI C2 (1996) National Electrical Safety Code

ANSI C57.12.28(1988) Liquid-Filled Distribution Transformers Used In Pad-Mounted Installations, Including Unit Substations

ANSI Z21.45 (1985; Z21.ag; Z21.45b) Flexible Connectors of Other Than All Metal Construction for Gas Appliances (Fourth Edition)

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

Air Conditioning and Refrigeration Institute (ARI), publication Directory of Certified Unitary Air Conditioners, latest edition.

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7 (1995) Minimum Design Loads for Buildings and Other Structures

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING

ENGINEERS (ASHRAE)

ASHRAE Handbooks (Latest Edition)

Standard 62 (1999) Ventilation for Acceptable Indoor Air Quality

Standard 90.1 (1999) Energy Standards for Buildings except Low-Rise Residential Buildings

Standard 15 (1994) Safety Code for Mechanical Refrigeration

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 48 (1983; R 1990) Gray Iron Castings

ASTM C 90-02 Standard Specification for Load bearing concrete Masonry Units

ASTM C 136 (2001) Sieve Analysis of Fine and Coarse Aggregates

ASTM C 478 (1990b) Precast Reinforced Concrete Manhole Sections

ASTM D 420 (1998) Site Characterization for Engineering, Design, and Construction Purposes

ASTM D 422 (1963; R 1998) Particle-Size Analysis of Soils

ASTM D 1140 (2000) Amount of Material in Soils Finer than the No. 200 (75-Micrometer) Sieve

ASTM D 1556 (2000) Density of Soil in Place by the Sand-Cone Method

ASTM D 1557 (2000) Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3))

ASTM D 1586 (1999) Penetration Test and Split-Barrel Sampling of Soils

ASTM D 1587 (2000) Thin-Walled Tube Sampling of Soils for Geotechnical Purposes

ASTM D 2216 (1998), Laboratory Determination of Water (Moisture) Content of Soil, and Rock

ASTM D 2487 (2000) Classification of Soils for Engineering Purposes

ASTM D 2488 (2000) Description and Identification of Soils (Visual-Manual Procedure)

ASTM D 2661 (2001) Acrylonitrile-Butadiene-Styrene (ABS) Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D 2665 (2001) Poly(Vinyl Chloride) (PVC) Plastic Drains, Waste, and Vent Pipe and Fittings

ASTM D 2666 (1996a) Polybutylene (PB) Plastic Tubing

ASTM D 3441 (1998) Standard Test Method for Deep, Quasi-Static, Cone And Friction-Cone Penetration Tests of Soil

ASTM D 4318 (2000) Liquid Limit, Plastic Limit, and Plasticity Index of Soils

ASTM D 5778 (2000) Standard Test Method for Performing Electric Friction-Cone and Piezocone Penetration Testing of Soils

ASTM E 84 (2001) Standard Test Methods for Surface Burning Characteristics of Building Materials

ASTM E 119 (2000a) Standard Test Methods and Fire Tests of Building Construction and Materials

ASTM E 580 (2000) Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels in Areas Requiring Moderate Seismic Restraint

ASTM E 779 (1999) Standard Test Method for Determining Air Leakage Rate by Fan Pressurization

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

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U.S. Army Corps of Engineers, Architectural and Engineering Instructions, Design Control

TECHNICAL INSTRUCTIONS (TI)

TI 800-01 Design Criteria

TI 809-04 Seismic Design For Buildings

TI 809-07 Design of Cold-Formed Load Bearing Steel Systems

TI 810-10 Mechanical Design Heating, Ventilating, and Air Conditioning

TI 810-11 Heating, Ventilating and Air Conditioning (HVAC) Control System

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA Standards

AWWA C500 (Latest Edition) Gate Valves for Water and Sewerage Systems (DOD adopted)

AWWA C502 (Latest Edition) Dry-Barrel Fire Hydrants

AMERICAN WELDING SOCIETY (AWS)

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AWI Quality Standards, Version 1.2, 7th Edition 1999

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Guidelines for Seismic Restraint of Direct-Hung Suspended Ceiling Assemblies.

DEPARTMENT OF THE ARMY

Pamphlet 385-64 (1999) Ammunition and Explosives Safety Standards

DEPARTMENT OF DEFENSE

Department of Defense Antiterrorism Construction Standards, DRAFT, 2 Oct 2001

ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 340/1-90-018 (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance

EPA 340/1-90-019 (1990) Asbestos/NESHAP Adequately Wet Guidance

EPA 402-R-94-009 (1994) Model Standards and Techniques for Control of Radon in New Residential Buildings

EPA 560/5-85-024 (1985) Guidance for Controlling Asbestos Containing Materials in Buildings

FACTORY MUTUAL SYSTEM (FM) STANDARDS

FEDERAL COMMUNICATIONS COMMISSION (FCC)

FCC Part 15 (Jul 1986) Rules and Regulations: Radio Frequency Devices

FEDERAL HIGHWAY ADMINISTRATION

Federal Standard 595, Uniform Federal Accessibility Standards

FEDERAL REGULATIONS

The Federal Clean Water Act
40 CFR 122 National Pollutant Discharge Elimination System
40 CFR 141 National Primary Drinking Water Regulations
Safe Drinking Water Act, Public Law 95-190 as amended
40 CFR 122 National Pollutant Discharge Elimination System
Federal Standard 595, Uniform Federal Accessibility Standards.
Public Law 89-665, National Historic Preservation Act of 1966, October 15, 1966, as amended by Public Law 95-515, December 12, 1980.
Archaeological Resources Protection Act of 1979, Public Law 96-95, 93 STAT-721.
AR 420-40, Historic Preservation, 15 May 1984

TM 5-801-1, Historic Preservation, Administrative Procedures, November, 1995.
TM 5-801-2, Historic Preservation Maintenance Procedures, February 1977.
Secretary of the Interior's Standards and Guidelines. For construction on military installation, plans must be coordinated with the local Environmental Coordinator or Environmental Manager.

FEDERAL STANDARD SPECIFICATIONS (FS)

FED-STD 595 (Rev B) Colors
FS795 Federal Standard 795 (Accessibility)
FS WW-P-541 Plumbing Fixtures
FS WW-P-541/5 Plumbing Fixtures (Sinks, Kitchens, Service, Laundry Trays - Detail Specification)

FORT BRAGG DESIGN GUIDELINES

Fort Bragg Installation Guide and Appendix(s)
www.bragg.army.mil\pwbc-cmd

GYPSUM ASSOCIATION

GA-600 Fire Resistance Design Manual, Current Edition
GA-216 Application and Finishing of Gypsum Board
GA-214 Recommended Levels of Gypsum Board Finish

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS

International Building Code, 2000 edition
International Plumbing Code, 2000 edition
International Mechanical Code, 2000 edition
International Fire Protection Code, 2000 edition

ILLUMINATING ENGINEERING SOCIETY (IES)

(2000) LIGHTING HANDBOOK REFERENCE AND APPLICATION, 9TH EDITION

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IEEE STD 144 IEEE Recommended Practice for Grounding of Industrial and Commercial Power Systems
IEEE Std. 519 Practices and Requirements for Harmonic Control in Electrical Power Systems
IEEE Std. 1100 Powering and Grounding Sensitive Electronic Equipment

INTERNATIONAL PLUMBING CODE

MILHDBK 1008C
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NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM-01 (1988) Metal Finishes Manual for Architectural and

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NATIONAL ASSOCIATION OF CORROSION ENGINEERS (NACE)

NACE RP0169 Control of External Corrosion and Underground or Submerged Metallic

NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB), NEBB PUBLICATIONS

NEBB-01 (1991) Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems

NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)

Specifications for the Design and Construction of Load Bearing Concrete Masonry

NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)

NEMA PB 1 (1990; PB 1.1-1986) Panelboards
NEMA PB 2 (1989; PB 2.1-1986) Deadfront Distribution Switchboards

NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA)

NFPA 70 (1999) National Electrical Code
NFPA 72 (1999) National Fire Alarm Code
NFPA 101 (2000) Life Safety Code
NFPA 780 (1997) Installation of Lightning Protection Systems
National Fire Codes (NFC) Current as of 2001

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

29 CFR Occupational Safety and Health Standards Part 1910

10 CFR 435B Energy Conservation Performance Standards

29 CFR 1926 Safety and Health Regulations for Construction

40 CFR 61 National Emission Standards for Hazardous Air Pollutants

40 CFR 260 Hazardous Waste Management System General

40 CFR 261 Identification and Listing of Hazardous Waste

40 CFR 763 Asbestos

SAVANNAH DISTRICT DESIGN MANUAL
Design Manual for Military Construction, June 2000

SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)

STATE OF NORTH CAROLINA REGULATIONS

STATE STANDARDS

Recommended Standards for Water Works
Recommended Standards for Wastewater Facilities

STEEL DECK INSTITUTE (SDI)

STEEL DECK INSTITUTE DIAPHRAGM DESIGN MANUAL (Second Edition)

STEEL JOIST INSTITUTE

Standard Specification for Load Table for Open Web Joists (latest edition)

TELECOMMUNICATIONS INDUSTRY ASSOCIATION/ELECTRONIC INDUSTRIES ALLIANCE (TIA/EIA)

TIA/EIA 568-B (2001) Commercial Building Telecommunications Cabling Standard
TIA/EIA 569 (1998) Commercial Building Standard for Telecommunications Pathways and Spaces
TIA/EIA 606 (1993) Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
TIA/EIA 607 (1994) Commercial Building Grounding and Bonding Requirements for Telecommunications
TIA/EIA 758 (1999) Customer Owned Outside Plant Telecommunications Cabling Standard

UNDERWRITERS LABORATORIES STANDARDS (UL)

UNIFORM FEDERAL ACCESSIBILITY STANDARD (UFAS)

UNITED STATES ARMY INFORMATION SYSTEMS ENGINEERING COMMAND

CE99008 (2000) Outside Plant Performance Requirements
I3A (2001) Installation Information Infrastructure Architecture

I3A) Implementation Guide

WATER ENVIRONMENTAL FEDERATION

Water Environment Federation Manual of Practice
No. FD-5, Gravity Sanitary Sewer Design and Construction, except asbestos and asbestos cement products shall not be allowed.

9. METRIC DESIGN

9.1. If the Contractor chooses to develop the design using metric measurements, the following shall apply: Use the hard metric system. The site survey and concept plans are done in English units. The Contractor shall coordinate. Specifications requiring metric measurements may contain requirements for equipment (e.g. printers, HVAC systems) described in inch-pound (I-P) units in which case no metric substitution will be allowed. Specifications requiring metric measurements shall include

references to related non-metric industry and/or Government standards. Discrepancies, such as mismatches or product unavailability, arising from use of metric measurements and discrepancies between the measurements in the specifications and the measurements in the drawings shall be resolved by the Contractor. 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 E 380 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

10. GENERAL CONSTRUCTION REQUIREMENTS

10.1. Government-Furnished Government-Installed Equipment (GFGI). All existing loose furniture, equipment, computers and related hardware, video projectors, VCR's, TV's, drink machines, vending machines, microwaves, and refrigerators are Government-furnished and installed. The Contractor shall provide utility connections and space for these items.

10.2. Government-Furnished Contractor-Installed Equipment (GFCI). The items to be specified in the Comprehensive Interior Design Package (modular office furniture and new loose furnishings) are GFCI equipment. See Appendix ‘G’ to the specifications. The installation of these items is an Option No. 1 as indicated in the Bid Schedule.

11. SITE CONDITIONS AND REQUIREMENTS

11.1. Project Limits. The Contractor shall confine all work within the area shown on the site plan and in paragraph 12.1 below.

11.2. Hazardous Materials And Contamination. The Government does not anticipate that the Contractor will be required to remove or dispose of any hazardous materials or waste during the site preparation phase of this project.

12. DISPOSAL OF WASTE MATERIALS

12.1. The Contractor shall identify, as a part of his submittals required by this contract, the specific disposal site or sites for any waste materials generated by the contractors operations at Fort Bragg.

12.2. The Contractor’s haul route to the disposal site or sites shall be coordinated with and approved by the Installation Planning Branch.

13. STAKING, DEMOLITION AND REMOVALS.

13.1. The Contractor shall field survey and stake-out the project boundaries before starting work on demolition activities. The survey drawing provided in the RFP indicates existing conditions and locations of existing utilities. The Contractor may utilize the utilities during construction operations and may incorporate the utilities as part of the final project. If these existing

utilities are determined to be inadequate for construction operations or incorporation into the final facility, they will be upgraded as part of the construction project. However, if the Contractor elects not to use the existing utilities, they will be demolished and removed as part of the construction project. All utilities to be demolished shall be demolished so that no abandoned systems remain at the end of construction. Existing utilities that interfere with this project will be relocated. The information shown on the survey drawing is the most recent data. The Contractor shall prepare and provide an as-built survey of the construction. All demolition debris shall be removed to the Ft. Bragg Landfill. The haul route shall be coordinated with the Installation Planning Branch.

13.2. Trees. Removal of tree trunks is not included in the Contract. Removal of branches left after tree trunk removal, stumps, roots, and other debris is in the Contract. Tree trunks will be harvested at start of the Contractor’s design phase. Removal of items in Contract shall occur during the Design Phase so that site is prepared for building construction by the end of design.

13.3. Site Access. Access gate to Base and access route to demolition and construction sites shall be determined at the start of construction by the Installation Planning Branch.

14. NEW SITE DESIGN AND CONSTRUCTION

14.1. The concept site plan presents the general geometric layout for the site work. The Contractor shall design the paving, sidewalks and utilities including fire hydrants, irrigation and street lights. The Contractor shall prepare, submit and obtain approval of an erosion control plan prior to start of land disturbing activities.

14.2. Project Limits. The Contractor shall confine all work within the area of the project limits shown on the concept site plan.

14.3. A Stormwater Pollution Prevention Plan (Best Management Plan) shall be designed and included in the design submittals shown in Section 01030. The approved plan shall be onsite at all times for inspection by EPA, GA DENR, and Fort Bragg environmental personnel. All activities in the approved plan shall be implemented. The Contractor shall control erosion and sedimentation during construction. Sedimentation of adjacent sites or downstream ditches will not be permitted. The plan shall be approved and permitted by North Carolina Department of Environmental and Natural Resources (GA DENR).

15. CONSTRAINTS

15.1. The new project grading and storm water system shall not impact the surrounding buildings. Construction shall not impact the existing drainage system adjacent to the site.

15.2. Building Setback Requirements. The building shall be located on the site in accordance with the DOD Antiterrorism/Force Protection Construction Standards.

15.2.1. Building Setbacks Minimum acceptable

15.2.2. Building front to edge of 25 meters (eighty-two feet) at controlled perimeter pavement for vehicles situations

15.3. The Contractor shall harden the structure if minimum setback requirements are not met. The trees on the site shall be incorporated in the design, retained and protected during construction to the extent possible.

15.4. Access Drives, Parking And Sidewalks. Connections to existing asphalt or concrete pavements shall be accomplished by saw cutting the adjacent existing pavement.

15.5. Width Criteria. All pavement and radii dimensions in this section are from back of curb to back of curb or as shown. Parking lot islands do not have curb and gutter. Minimum access drive width shall be 7.62 meters (25 feet). Minimum turning radius for all intersections shall be 9 meters (30 feet) except where fire truck access and semi-truck and trailer access is required a 15.3 meter (50 feet) radius is required. Designer shall consider the types of vehicles traversing and parking on these facilities. Vehicles shall include but not be limited to: passenger cars, emergency vehicles, garbage, fire trucks, military vehicles, delivery service, and utility vehicles. Contractor shall provide traffic control signs and pavement markings. Parking stripes shall be white and handicap parking stripes shall be blue.

15.6. Curb and Gutters. All gradients shall provide positive drainage (no ponding). Curb cuts shall be provided as necessary for pavement drainage.

15.7. Pavement Thickness. Pavement structure shall be designed for actual vehicle loadings and frequencies. Access drives shall be asphalt pavement with graded crushed aggregate base course, or portland cement concrete. See the conceptual site plan for locations of each pavement type. Pavement structure thickness shall be in accordance with PCASE Program, latest version. Pavement structure shall be designed for a 20-year pavement life.

15.8. Concrete Pavement. A concrete joint layout plan shall be required for all concrete pavements. Joint spacing, joint types, and joint grading shall be shown. Concrete pavement thickness shall be designed for an equivalent 8,165 kilogram (18,000 pound) single axle load for the design vehicle loading and number of passes. Pavement life shall be twenty years. Concrete pavement shall be designed in accordance with TM 5-822-5, Chapter 1. Concrete pavement shall be non-reinforced except for odd shaped slabs. The number of joints shall be kept to a minimum by using the greatest joint spacing, which will effectively control cracking. The maximum length to width ratio of the slabs shall be 125 percent. Joint sealant type shall be preformed compression seal.

16. SIDEWALKS

16.1. Sidewalks, minimum 1.83 meters (6 feet) wide, shall be provided as indicated on the concept site plan. Sidewalks shall be widened as necessary to meet building entrance and exit way widths. Sidewalks shall connect the parking areas to the building exits. Sidewalks shall be concrete with a minimum nominal thickness of 100 mm (4-inch) with 2,109,300 kilograms per square meter (3000 psi) compressive strength. Contraction joints

shall be spaced at 1.83 meters (6 feet) on center and expansion joints shall be placed at 15.24 meters (50 feet) on center and at the intersection of walks and curbs. Minimum cross slope on sidewalks shall be 2 percent. Sidewalks allowing vehicular crossings or in odd shapes shall be reinforced with wire mesh.

16.2. Handicapped Access. Ramps shall be provided for handicapped access. Number of parking slots and site access for the physically disabled shall be as required by ADAAG, UFAS and FS 795.

17. PARKING

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17.1. Parking shall be provided as generally indicated in the layout presented in the concept site plan. ~~All~~ New parking shall be 90 degrees off-street parking. Existing lot to be striped 90 degree or 60 degree as shown on drawing C2.0 and C2.01. Handicap parking stalls shall be provided. Area lighting and landscaping shall reinforce the parking area in accordance with the Fort Bragg Installation Design Guide and Appendix while meeting functional and safety requirements.

17.2. Parking areas shall be paint striped and adequately drained. Parking stalls shall be a minimum of 2740 mm by 5486 mm (9 feet by 18 feet). Paint markings shall be 100 mm (4 inch) in width. Traffic isles shall be 3,660 mm (12 feet) in width.

*5

17.3. ~~Parking area drainage shall sheet flow to grassed swales then into the storm collection system.~~ Parking area slopes shall be adequate to provide proper drainage. Minimum slopes across pavement shall be 1 percent. Maximum slopes shall be 5% except in areas of handicap spaces where a 2% slope is required.

17.4. Parking areas design shall conform to TM 5-822-3. Parking stalls and access drives shall be asphalt pavement with graded crushed aggregate base course. Pavement structure thickness shall be in accordance with TM 5-822-5, Chapter 3. The pavement structure shall be designed for a twenty-year pavement life. Pavement under and for 12 feet in front of dumpsters shall be heavy duty concrete.

17.5. Area Lighting. The Contractor shall design parking lot area lighting and shall install poles and fixtures. See Electrical for type.

17.6. Building Connection to the Site.

18. FOUNDATION AND GEOTECHNICAL DESIGN

18.1. Foundation Design

18.1.1. General- Given the proposed site and the proposed structures, it is anticipated that shallow spread footings can be used for support of the proposed canopies.

18.1.2. Allowable Bearing Pressure- Allowable soil bearing pressure shall be determined by the consulting geotechnical engineer.

18.1.3. Footing Dimensions- Column footings and load-bearing wall footings shall have minimum dimensions of 30 inches and 24 inches, respectively, and shall be located at a minimum depth of 24 inches below finish floor or finish grade, as appropriate. Non load-bearing wall footings shall have a minimum width of 18 inches and shall be located at a minimum

depth of 18 inches below finish floor or finish grade, as appropriate.

18.1.4. Site Classification for Seismic Design- The project site shall be classified as Site Class D for the purpose of determining maximum considered earthquake spectral response accelerations S_{ms} and S_{ml} in accordance with Corps of Engineers Technical Instruction “TI809-04, Seismic Design for Buildings.”

18.1.5. Slabs on Grade- All interior slabs on grade, including storage rooms, shall be underlain by a moisture vapor barrier consisting of lapped polyethylene sheeting having a minimum thickness of 10 mils and a minimum 4-inch thick capillary water barrier of open graded, washed gravel, or crushed stone. Concrete slabs shall be jointed around columns and along supported walls to minimize cracking due to possible differential movement.

18.1.6. Soil Compaction- Soil compaction shall be achieved by equipment approved by the consulting geotechnical engineer. Soil materials shall be moistened or aerated as necessary to provide the moisture content that will readily facilitate obtaining the compaction specified with the compaction equipment used.

18.1.7. Each layer of structural fill and subgrades shall be compacted to the following minimum percent of the modified Proctor maximum density, determined in accordance with ASTM D 1557:

18.1.8. Beneath structures and building slabs, to 5 feet beyond structure limits, around footings and in trenches 90 percent

18.1.9. Beneath streets and paved areas, except top 12 inches in fill and top 6 inches in native 90 percent soil

18.1.10. Beneath streets and paved areas, top 12 inches in fill and top 6 inches in native soil 95 percent

18.1.11. Beneath shoulders 90 percent

18.1.12. Beneath sidewalks and grassed areas 85 percent

18.1.13. Base course under paved areas 100 percent

18.1.14. The requirements shall be verified or modifications recommended by the consulting professional geotechnical engineer in the report wherever engineering, soils, or climatic factors indicate the necessity. Any modification to the specified compaction requirements shall require the approval of the Contracting Officer.

18.1.15. The Contractor, with recommendations and input from his consulting geotechnical engineer, shall edit and submit the following UFGS Specifications:

18.1.15.1.1. 02300A Earthwork

18.1.15.1.2. 02315A Excavation, Filling and Backfilling for Buildings

18.1.15.1.3. 02316A Excavation, Filling and Backfilling for Utilities Construction Quality Control Testing

18.1.16. Prior to initiating any structural fill placement and/or compaction operations, representative samples of the soils which will be used as structural fill or subgrade, both suitable on-site soils and off-site soils (borrow), shall be obtained and tested to determine their classification and compaction characteristics. The samples shall be carefully

selected to represent the full range of soil types to be used. The moisture content, maximum dry density, optimum moisture content, grain-size and plasticity characteristics shall be determined. These tests are required to determine if the fill and subgrade soils are acceptable and for compaction quality control of the subgrades and structural fill. A minimum of 7 compaction tests shall be performed on materials classified as satisfactory for use.

18.1.17. Tests for the above soil properties shall be in accordance with the following:

18.1.17.1.1. Moisture Content ASTM D 2216

18.1.17.1.2. Maximum Dry Density and Optimum Moisture ASTM D 1557

18.1.17.1.3. Grain-Size (Wash No. 200, w/o Hydrometer) ASTM D 422 and ASTM D 1140 Plasticity ASTM D 4318

18.1.17.1.4. A representative number of in-place field density tests shall be performed in the subgrade of compacted on-site soils and in the structural fill and backfill to confirm that the required degree of compaction has been obtained. In-place density tests shall be performed in accordance with the sand cone method prescribed in ASTM D 1556; the use of nuclear gauges for density testing will not be permitted. At least one density test shall be performed for each 5,000 square feet, or portion thereof, of compacted existing onsite soils, subgrades, and in **each** lift of compacted structural fill. At least one density test shall be performed in the bearing level soils for each column footing and for each 75 linear feet in continuous footings. Density tests shall be performed at 75-foot intervals along roadway subgrade soils. In addition, a density test shall be performed for each 150 linear feet of backfill placed per foot of depth in trenches for utilities. Where other areas are compacted separately by manually operated compactors, a minimum of one density test shall be performed for every 250 square feet, or portion thereof, of fill placed per foot of depth.

18.1.17.1.5. Any area that does not meet the required compaction criteria shall be reworked, and retested. If the moisture content of the soil is within the recommended range, additional compaction may be all that is necessary to increase the density. If the moisture content is not within the recommended range, then, the moisture content shall be adjusted to within the range, and the area re-compacted.

18.1.17.1.6. All laboratory and field density testing shall be performed by a commercial testing laboratory that has been found adequate and qualified by a Corps of Engineers Division Laboratory Inspection Team.

18.2. Soil Treatment

18.2.1. The pesticide applicator's principal business shall be pest control and the pesticide applicator shall be State certified in the U.S. Environmental Protection Agency (EPA) pesticide applicator category, which includes structural pest control, and certified in the State of the project's location.

18.2.2. Pesticides shall be delivered to the project site in sealed and labeled containers in good condition as supplied by the manufacturer or formulator. Pesticides shall be stored, handled, and used in accordance with manufacturer's labels. Labels shall bear evidence of registration under the Federal Insecticide, Fungicide, and Rodenticide Act (MX), as amended.

18.2.3. The Contractor shall formulate, treat, and dispose of termiticides and their containers in accordance with label directions. Pesticides and related materials shall be kept under lock and key when unattended. Proper protective clothing and equipment shall be worn and used during all phases of termiticide application.

18.2.4. The Contractor shall provide a 5-year written warranty against infestations or reinfestations by subterranean termites of the buildings constructed under this contract. Warranty shall include annual inspections of the buildings. If live subterranean termite infestation or subterranean termite damage is discovered during the warranty period, and the soil and building conditions have not been altered in the interim, the Contractor shall:

18.2.4.1. Retreat the soil and perform other treatment as may be necessary for elimination of subterranean termite infestation;

18.2.4.2. Repair damage caused by termite infestation;

18.2.4.3. Reinspect the building approximately 180 days after the retreatment.

18.2.5. Termiticides shall be currently registered by the EPA.

18.2.6. At the time of application, the soil moisture content shall be sufficiently low to allow uniform distribution of the treatment solution throughout the soil. Applications shall not be made during or immediately following heavy rains or when conditions may cause runoff and create an environmental hazard.

18.2.7. The Contractor shall establish complete and unbroken vertical and/or horizontal (as necessary) soil poison barriers between the soil and all portions of the intended structure that may allow termite access to wood and wood related products. Application shall not be made to areas intended for use as a plenum air space. Surface treatments shall not be made for areas to serve as crawl spaces. Termiticide shall be applied as a coarse spray and provide uniform distribution unto the soil surface. Treatment shall be applied prior to placement of the vapor barrier and at least 12 hours prior to concrete placement. Where treated soil or fill material is not to be covered with a vapor barrier or waterproof membrane; adequate precautions shall be taken to prevent its disturbance. Soil or fill material disturbed after treatment shall be retreated as specified above before placement of slabs or other covering structures. Treatment of the soil on the exterior sides of foundation walls, grade beams, and similar structures shall be coordinated with final grading and planting operations so as to avoid disturbance of the treated barriers. Manufacturer's warnings and precautions shall be observed in the handling and use of such materials. Care shall be taken to prevent

these chemicals from entering water supply systems, potable water supplies, or aquifers; and that they do not endanger plants or animals. The Contracting Officer shall be notified at least 48 hours prior to beginning of treatment and formulating, mixing, and application shall be performed in the presence of the Contracting Officer's representative.

18.2.8. Rates and methods of application shall be in accordance with the manufacturer's instructions on the pesticide label. Maximum application or dosage rates shall be used. If the pesticide contains less than the amount of active ingredient specified on the label, work shall be repeated with pesticides conforming to this specification.

18.2.9. The Contractor shall dispose of residual pesticides and containers off Government property in accordance with label instructions and EPA criteria.

18.2.10. The Contractor shall edit and submit the following UFGS Specification:

18.2.10.1. 02364A Termiticide Treatment Measures For Subterranean Termite Control

18.2.11. Decay Treatment- The Contractor shall be responsible for determining and implementing the appropriate treatment for prevention of subsurface induced decay.

18.2.12. Radon Mitigation-The design and construction of foundation walls, slabs, and crawl spaces shall include provisions for the reduction of radon entry and facilitate its removal. Radon mitigation shall comply with the requirements of EPA 402-R-94-009.

18.2.13. Soil Resistivity Testing-The proposer to whom this contract is awarded shall be responsible for all soil resistivity testing required for cathodic protection design of underground utilities.

18.3. Borrow

18.3.1. Borrow material shall be selected to meet the requirements and conditions of the particular fill or embankment for which it is to be used. Borrow material shall be obtained from the borrow areas available on installation. Necessary clearing, grubbing, and satisfactory drainage of borrow pits and the disposal of debris thereon shall be considered related operations to the borrow excavation. Borrow pits shall be neatly trimmed and drained after the excavation is completed.

19. LANDSCAPE DESIGN

19.1. The landscape shall be designed using the Fort Bragg Installation Design Guide and Appendix including force protection criteria as modified here. Graded and scarred areas shall be seeded or solid sodded (refer to Site Plan). Existing grass not affected during construction shall be protected. Landscaping shall be absolutely minimum maintenance. Planting shall consist predominantly of tree species matching adjacent growth. Trees shall be planted in a formal pattern to provide shade for the East and West facades, and to highlight the building entrance. Trees shall also be planted in islands designed in the Contractor's parking layout with the intent of breaking up the linear image of the parking lots.

20. TURF

20.1. Solid sod in accordance with the Installation Design Guide shall be provided for all graded and scarred areas. All existing grassed areas not graded or disturbed shall remain sodded. Contractor shall be responsible for proper care and watering of grass from the beginning of the turfing operation and continuing for 3 months after completion of sod placement. New trees and shrubs shall be maintained for a 12-month period after installation. Proper care means watering, fertilizing, cutting and weeding. Trees and shrubs shall require a 1 year warranty and sod shall require a ninety day warranty. Turf preparation shall include eradication of unwanted vegetation with Roundup and the use of a pre-emergent granular herbicide. Provide for a soil test that includes pH, potassium, phosphorus, calcium, magnesium, nematode count, and soil amendment recommendations (N-P-K). Post planting fertilizer for the turf after the sod is rooted shall be applied based on the soil analysis. Grass shall be mowed initially after achieving a 75 mm (3 inch) growth and then twice monthly thereafter.

20.2. Landscape Plantings. Landscaping shall emphasize low maintenance. Mulch shall be shredded cypress or pine bark. Mulch should have a minimum thickness of 4”. Also, there shall be a weed barrier under the mulch. Solid rubber guys with 610 mm stakes shall be used to stabilize newly planted trees. Landscaping shall be in accordance with the Fort Bragg Installation Design Guide and Appendix. Quality plant material shall be as specified by the American Standard for Nursery Stock, ANSI 260.1.

20.3. Approved Plant List. Large trees, 3 inches maximum caliper, and small shrubs at entrances, as defined in the Fort Bragg Installation Design Guide and Appendix consistent with adjacent existing trees and plants.

21. IRRIGATION SYSTEM

21.1. The project shall include a complete operating lawn and landscape irrigation system. The system shall connect to the existing potable water system for areas within 82’ of the building. Cut-off valves shall be installed at the water supply source. The piping design and layout shall be coordinated with the landscaping plan to provide adequate irrigation requirements/coverage to protect and maintain the health of all landscape materials within the design boundaries. A system shall be selected for minimum maintenance and operational skill requirements, without waste of water, including the piping, valves, sprinkler heads, controller and wiring, and all of the other system appurtenances that help to make a complete and operable landscape irrigation system. The system selected shall be divided into zones and shall be automatically controlled. The system shall be designed and installed by a experienced firms licensed for irrigation design and installation in the State and County.

22. UTILITY LAYOUT

22.1. Coordination of all site work on the project, including utility work, is the responsibility of the Contractor. It is the Contractor's responsibility to confirm the specific locations of the existing utilities and to design and construct new utility services for the new buildings. All utilities, including electrical service, telephone, fiber optic, cable TV, gas, and chilled water, shall be installed underground. New underground utility lines, including appurtenant structures such as valve boxes, manholes, vaults, etc., shall not be located under pavement, road shoulders or drainage ditches to the maximum extent practicable. Unless otherwise approved, placing utilities and culverts under existing roads shall be by jack and bore.

22.2. Backflow prevention valves, post indicator valves, transformers, electric switches, telephone/cable boxes, manholes, irrigation pump and controllers, etc., shall be located in locations not immediately apparent to the facility users or personnel passing by the site. New utility lines shall not be located within 5 meters (15 feet) of the footprint of any future building as shown on the site.

22.3. Marking Of Utility Lines. Utility lines shall be marked with plastic marking tape. Plastic marking tape shall be acid and alkali-resistant polyethylene film, 150 mm (6 inch) wide with minimum thickness of 0.01 mm. Tape shall have a minimum strength of 12.5 MPa lengthwise and 10.5 MPa crosswise. The tape shall be manufactured with integral wires, foil backing or other means to enable detection by a metal detector when the tape is buried up to 1 meter deep. The tape shall be of a type specifically manufactured for marking and locating underground utilities. The metallic core of the tape shall be encased in a protective jacket or provided with other means to protect it from corrosion. Warning tapes shall be installed directly above all buried pipes or wires, at a depth of 450 mm (18 inch) below finished grade. Tape color shall be as specified below and shall bear a continuous printed inscription describing the specific utility.

22.3.1. Tape Color:

22.3.1.1. Red: Electric

22.3.1.2. Orange: Telephone, Telegraph, Television, Police, Fiber Optics, and Fire Communications

22.3.1.3. Blue: Water Systems

22.3.1.4. Green: Sewer Systems

22.3.1.5. Yellow: Gas, Dangerous Materials

22.3.2. Tracer Wire. In addition to the plastic marking tape, tracer wire shall also be provided for all new underground utilities. Tracer wire shall be provided for all pipelines, including force mains but excluding storm drain and sanitary sewer lines. Tracer wire shall be provided for all electrical and communication conduits, direct buried cables, gas, and chilled water piping systems. Tracer wire shall be installed on the bottom of the trench just to one side of where the pipe, conduit, or cable contacts the trench bottom. The wire shall run continuously between and terminate at valve boxes on water and gas lines, regulator stub-ups on gas lines, sprinkler heads and valve boxes on sprinkler system lines, panel boxes on electrical lines, and other such aboveground appurtenances. Each end of the wire shall have an additional length of at least 0.6m (2 feet) coiled up in the appurtenance. Tracer wire shall be

insulated No. 12 AWG solid copper and of a type specifically manufactured for locating underground utilities. Insulation shall be solid in color, matching tape color. Tracer wire shall be subject to approval by the Contracting Officer.

22.4. Metering. Area master meters shall be provided where water, gas and electricity are connected to base distribution lines. Water, electrical, and natural gas meters shall transmit usage data to the existing Fort Bragg digital control system. Meters, interface devices and programming of the existing host shall be furnished as required to accomplish complete utility metering and remote usage monitoring as required by Ft. Bragg utility managing agency.

23. PERMITS

23.1. General. The Contractor shall determine permit requirements as part of the design process and shall submit permit draft applications as part of the submittal process. Water, sewer, storm water, excavation and air are some of the permits required for this project.

24. STORM DRAINAGE

24.1. Post construction storm water discharge shall not exceed pre-construction discharge. A combination of infiltration, retention, and detention will be used. Drainage from roofs shall be handled with downspouts filtering the water into the ground in dry well sumps and/or other types of infiltration systems. Do not use splash blocks.

24.2. The storm drain collection system shall consist of grassed swales and pavement sheet flow. The proposed system shall tie to the existing grassed ditches or pipe systems. Minimum pipe velocities shall be 2.5 fps (0.762 m/s) when drains are one-third or more full, and the maximum shall be 10 fps (3.048 m/s) for fully coated, fully paved, corrugated pipe and 15 fps (4.6 m/s) for concrete pipe, with outlet erosion protection. The minimum pipe size for an open pipe system shall be 0.46 meter (18 inch) and 0.38 meter (15 inch) for a closed system. The design frequency for the collection systems and surface drainage shall be 10 years.

24.3. The allowable pipe types shall include concrete pipe, type III or IV as required. Pipe joints shall be water tight with gaskets.

25. WATER AND WASTE WATER

25.1. The Contractor shall design and construct the new water supply and wastewater utility services for the new building. The Contractor shall provide water service lines, new water distribution lines (as required) and connection to the existing water mains. The Contractor shall also provide new wastewater building laterals, new sewage mains (as required) and connection to the existing sanitary sewerage system. The water and sewage facilities shall be designed and constructed in accordance with the criteria contained herein. Placement of a buried utility main under a new building shall not be allowed. Minimum earth cover for the new utility lines will not be less than 760 mm (30 inch), except for sewer lines where the minimum cover shall be

1000 mm (36 inch). Contractor shall refer to the Savannah District Design Manual, Chapter A-8, and TM-5-814-1.

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25.2. The Government anticipates that the Contractor will connect the new water laterals to the existing water distribution system and that sufficient pressure and quantity will be available for domestic and industrial uses. The design of the water distribution mains and service lines shall provide adequate quantity at sufficient pressure for domestic use and industrial use ~~(vehicle washing, etc.)~~. The Contractor shall determine minimum pressures in accordance with applicable plumbing and fire protection criteria. Flow test shall be conducted by the Contractor prior to obtaining permits.

25.3. The mains shall be designed and installed in accordance and compatible with the Savannah District Design Manual, Chapter A-8, and with TM5-813-5 (Water) and TM5-814-1 (Sanitary Sewer) Standards. Water mains shall follow existing streets or utility corridors. The design shall limit installation beneath pavement.

~~25.4.~~Design of the service lines shall be in accordance with the National Plumbing Code and applicable AWWA standards. A curb stop or valve shall be installed near the point of connection to the main. Water service lines shall be equipped with suitable meters. Metering of fire service lines is not required.

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~~25.5.~~25.4. ~~The water distribution system in the fire truck parking or servicing area shall provide a fire hydrant dedicated to the fire truck water refilling operations.~~

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~~25.6.~~25.5. ~~-~~Water Supply for Fire Protection.

~~25.6.1.~~25.5.1. Interior and outside fire protection shall be designed in accordance with MILITARY HANDBOOK 1008C (MIL-HDBK 1008C). Fire flow test has not been preformed as of this date, Government is to provide.

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~~25.6.2.~~25.5.2. ~~From the data obtained from the flow test, and the specific fire protection requirements, the Contractor shall determine the need for additional water supply components such as fire pumps, water storage, or new connection to off-site water mains (perhaps several blocks from the building site) or the creation of loops.~~

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~~25.6.3.~~25.5.3. The Contractor shall provide the required water flow and pressure for the interior and outside (hose stream) demand. Fire pumps and storage shall be provided as required to meet the required water demand. Connection to off-site water mains shall be considered the most desirable solution to water supply needs. Fire pumps ~~(if required)~~ shall be designed and installed in accordance with NFPA 20. Fire pumps shall be electric motor driven. Water storage ~~(if required)~~ shall be designed and installed in accordance with AWWA D100.

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~~25.6.4.~~25.5.4. The fire sprinkler supply line shall include a post indicator valve with a tamper switch wired to the building fire alarm panel and a double check valve assembly backflow prevention device equipped with a flow detection

meter. The backflow prevention device is located in the building. Indicate tamper switch on Fire Alarm Riser Diagram on Electrical Drawings.

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~~25.6.5.~~25.5.5. Protect all fire hydrants subject to corrosion with cathodic protection complying with the National Association of Corrosion Engineers (NACE) criteria.

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~~25.7.~~25.6. Wastewater.

~~25.7.1.~~25.6.1. The wastewater collection and conveyance system shall be designed in accordance with TM 5-814-1. In addition, the designer shall comply with specific state and local regulations that apply.

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~~25.7.2.~~25.6.2. If a sewage pump station is necessary, the Contractor shall provide (as a minimum requirement) a duplex submersible sewage pump station with a 1,524 mm minimum diameter reinforced concrete wet well, with aluminum cover. All electrical components and controls shall be included.

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~~25.7.3.~~25.6.3. The wastewater conveyance system shall comply with all the above requirements and shall be compatible with the wastewater to be conveyed. The materials specified shall withstand the effects of the wastewater and not deteriorate as a result of pollutants in the wastewater.

26. GAS DISTRIBUTION SYSTEM

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26.1. Natural gas is available adjacent to the project site. An existing natural gas line has adequate capacity to serve this project. Contractor shall confirm system pressure. Connection to the line is to be made with the line under full pressure—no outage of service to existing facilities. Provide a gas distribution system complete with master meter, connected to the existing system and designed in accordance with local codes, utility company requirements, and installation requirements. Gas distribution system shall comply with the requirements of NFPA 54, National Fuel Gas Code. ~~Unless otherwise indicated by the Contracting Officer, a hot tap connection to existing gas distribution system shall be made at the location shown on the Gas Distribution Plan drawings provided within the RFP.~~ Where new structures are located above existing gas mains, existing gas mains shall be relocated. The Contractor shall bear the cost of installation and relocation of all utilities. When connecting to existing steel piping system, provision shall be made to ensure that the integrity of the cathodic protection is not compromised. Plastic gas shutoff valves and valve boxes shall not be used. Gas valves shall be provided in a valve box at the tie-in point to the existing gas distribution system and also as shown on the on the Gas Distribution drawings provided in the RFP. A gas regulator and meter assembly shall be provided, located at least 15 feet from the air intakes. The building service entrance shall be installed at a height sufficient to allow for installation of the gas meter. Installation of gas piping shall be in accordance with manufacturer's recommendations and applicable sections of ASME B31.8, and the AGA Manual. UFGS Specification Section 02556 Gas Distribution System, shall be the

basis for the gas distribution system specifications. Metallic underground gas piping shall not be used. Aboveground gas piping shall be steel. Gas mains and service lines shall be graded. Mains and service lines shall have 24-inch minimum cover; and both mains and service lines shall be placed on firmly compacted select material for the full length. Where required, and at street crossings, gas piping shall be encased or designed to withstand any anticipated external loads as specified in ASME B31.8. Jack-and-bore method shall be used for routing gas piping under all existing streets. Saw-cutting of streets is not allowed, unless otherwise approved by the Contracting Officer.

26.2. Drips. Drips shall be installed at the low points, immediately following reduction from high pressure to medium pressure (at supply points) and at occasional low points throughout the system to provide for blowing out the lines.

26.3. Valves. Plug valves shall be installed so that interruptions to service can be confined to the building.

26.4. Service Lines. Lines shall not be placed under any buildings. Lines shall be placed with a minimum of 2 feet of earth cover. Vented protective casings shall be provided to protect lines from superimposed street or heavy traffic loads. Tracer wire shall be installed with polyethylene piping. Tracer wire shall be terminated in valve box and at riser. The Contractor shall relocate any portion of the existing gas main required to construct the new facility to comply with the directives found in this paragraph.

27. ARCHITECTURAL DESIGN REQUIREMENTS

27.1. General. SOF Bryant Hall renovation shall result in a facility that meets the functional requirements with a simple layout that allows for future changes in use.

27.2. Applicable Codes And Standards. Applicable codes and standards are listed in paragraph 8.

27.3. Functional Layout. The floor plan included in this solicitation represents an acceptable solution to the functional requirements for this facility. Coordinate mechanical room size and chase sizes to ensure proposed room size will accommodate proposed equipment and ductwork. Use of this floor plan is optional. Functional requirements are described in the Functional Room Requirements document at Appendix A. Arrange spaces in an efficient, functional manner with simple circulation. Provide flexibility that allows future modifications.

27.4. Accessibility. This facility shall be handicapped-accessible.

28. Fire Suppression System

28.1. Provide a file of the input data used in the computer program to design the fire suppression system as well as the output data.

29. Specific Mechanical and Plumbing Requirements

29.1. Required Plans, Diagrams, Schedules and Details on Unit Mechanical Drawings

30. MECHANICAL FLOOR PLAN

30.1. The floor plans shall show all principle architectural features of the building which will affect the mechanical design. The floor plans shall also show the following:

30.1.1. Room designations.
30.1.1.1. Mechanical legend and applicable notes.
30.1.1.2. Location of all ductwork or piping (double line ductwork required).
30.1.1.3. Location and capacity of all terminal units (i.e., registers, diffusers, grilles, hydronic baseboards).
30.1.1.4. Exhaust fan and range hood location.
30.1.1.5. Size of all ductwork and piping.
30.1.1.6. Thermostat location.
30.1.1.7. Location of heating/cooling plant (i.e., boiler, chiller, cooling tower, etc).
30.1.1.8. Location of all air handling equipment.
30.1.1.9. Return air paths (i.e., undercut doors, transfer grilles).
30.1.1.10. Flue piping size and location.
30.1.1.11. Piping diagram for forced hot water system (if used).
30.1.1.12. Fuel supply and return piping.

30.2. Equipment Schedule

30.2.1. Complete equipment schedules shall be provided. Schedule shall also include:

30.2.1.1. Capacity
30.2.1.2. Electrical characteristics
30.2.1.3. Efficiency (if applicable)
30.2.1.4. Manufacturer's name
30.2.1.5. Optional features to be provided
30.2.1.6. Physical size

30.2.2. Details: Construction details, sections, elevations, etc. shall be provided where required for clarification of methods and materials of design. Roof and exterior wall penetrations shall be detailed on the drawings.

30.3. Plumbing Floor Plan: The floor plan shall show all principal architectural features of the building which will affect the plumbing design. Separate plumbing plans will not be required if sufficient information can be shown on the mechanical plans to meet the requirements shown above. The floor plan shall also show the following:

30.3.1. Room designations.
30.3.2. Fixture Schedule.
30.3.3. Location of utility entrances.
30.3.4. Waste and water pipe location and size.
30.3.5. Fixture designations.

31. DESIGN ANALYSIS

31.1. Complete design calculations for mechanical systems. Include computations for sizing PM&E equipment, air duct design,

and U-factors for ceilings, roofs and exterior walls and floors. Contractor shall employ commercially available energy analysis techniques to determine the energy performance of all passive systems and features. Use of hourly energy load computer simulation (e.g., TRNSYS, DOE 2.1 Blast, etc.) is required. These calculations can be used to size the mechanical systems. Based on the results of calculations, provide a complete list of the materials and equipment proposed for heating and plumbing, with the manufacturer's published cataloged product installation specifications and roughing-in data. The heating and cooling equipment data shall include the manufacturer's wiring diagrams, installation specifications, ARI certification, and the standard warranty for the equipment.

32. SUSTAINABLE DESIGN

32.1. This facility has been designated a showcase for sustainable design, with a goal of achieving more than 25 points using the SPIRIT Project Rating Tool for Sustainable Design. Architectural contributions include building envelope characteristics, solar control and daylighting, indoor air quality, environmentally preferable materials selections, salvage/reuse opportunities, waste reduction, and close collaboration with all team members and User to synthesize successful sustainable design solutions.

32.2. Construction Type, Fire Protection and Life Safety. This facility shall comply with MILHDBK, 1008C, including EC1110-1-94 and International Building Code (I.B.C.), latest edition. The facility shall be fully sprinklered. See Appendix B for additional code information.

32.3. Exterior Construction. This facility shall be designed and constructed to provide a watertight durable facility consistent with industry standards and compliant with model building and energy codes. Appearance, materials and colors shall comply with the IDG. The following paragraphs are an overview of the exterior construction requirements.

32.4. Exterior Walls. Existing precast concrete and new windows, glazing and entrance system.

32.5. Roof. Roof shall be pitched minimum ¼″:12 slope. Roof covering shall be a modified bitumen roof system with a light colored cap sheet on tapered rigid insulation having a r factor of not less than 30 and be warranted per UFGS 07416, except manufacturer’s 20 year weather tightness warranty is not required. New roof drain system including overflow scuppers and new roof conductor piping shall be required as part of the design. The roof system design shall employ a walkway system from the point of roof access to all mechanical and communications equipment. The walkways shall be supported from structure or a secured pave system. Roof drain system shall be designed to incorporate accessible points of clean-out up and down the building. Roof detailing shall be in accordance with NRCA Roofing and Waterproofing Manual recommendations and standard details. The roof system shall meet F.M. and U.L. upfit requirements for location. Joint sealants used at building exterior shall have a service life for the exposure condition of at least ten years, retaining elasticity and seal.

32.6. Insulation. Provide a complete thermal envelope. All water and sprinkler pipes must be inside the thermal envelope. Insulation shall not be placed directly on acoustic tile ceiling panels.

32.7. Fireman Lock-Box. Provide 1 fireman lock box at Main Entry – Knox-Box Model #3270 with recessed mounting kit 3240 (www.knoxbox.com) and a fire alarm key – LSDA 300 flat key and cam lock, available at IDN – Armstrong, Inc., part #CL58 KA300 (800-726-3332; www.idaarmstrongs.com).

32.8. Screen Walls. Composite wall construction (grout-filled cavity between wythes) is not permitted.

32.9. Exterior Signage. Provide signage as required by the Fort Bragg Installation Guide and Appendix(s). Signage will include, but not be limited to:

32.9.1. Military Facility Identification sign
32.9.2. Site Directory sign
32.9.3. Primary Entrance sign
32.9.4. Pedestrian Directional signs
32.9.5. Parking signs
32.9.6. Traffic Control signs

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32.10. Doors and Windows. ~~All exterior glass must be treated for fragment retention.~~ All exterior glazing systems shall incorporate low-E technology. For insulated glass units the inner pane should be a minimum of ¼ inch annealed laminated glass. Single glazed doors should be a minimum of ¼-inch annealed laminated glass. Windows and storefront shall have prefinished commercial grade aluminum frames with high-performance organic coating finish and thermal breaks. Windows shall be Performance Class HC. Entry lobby doors shall be medium or wide stile storefront. All other exterior doors and frames shall be painted insulated hollow metal. All exterior doors shall have non-removable pin hinges and deadlocks. All exterior hollow metal frames shall be welded type construction. All windows and exterior glass (except in doors) shall have operable window treatments for solar control. Reflective (mirror) glass finish is not permitted. All windows shall be inoperable. Construction of all windows, glazing, and store fronts shall meet or exceed ~~"The Department of Defense Antiterrorism Construction Standards" draft version dated 2 October 2001~~ UFC 4-010-01 DoD "Minimum Antiterrorism Standards for Buildings" dated 7/31/02.

32.11. Exterior Soffits. Exterior soffits shall be EIFS or stucco. No metal or gypsum board soffits shall be allowed.

32.12. Exterior Finish. The entire exterior of SOF Bryant Hall shall be painted white in accordance with Exterior Finish Requirements in the Fort Bragg Installation Guide and Appendix.

32.13. Interior Construction. The following paragraphs are an overview of the interior construction.

32.14. Room Sizes. Room sizes shown on the concept floor plan and in Appendix A are approximate clear space. Adjustments to room sizes may be acceptable if furnishing and functioning of the rooms are unaffected.

32.15. Sound Control. Spaces requiring sound control shall have STC-50 ratings. This includes all door and ceiling treatments as needed to achieve this performance for the entire space.

32.16. "Secured" Classification: These spaces shall be enclosed on all sides so that physical intrusion into the space cannot be

accomplished without obvious physical evidence remaining. Partitions shall have continuous drywall finish or be constructed of masonry. Ceilings in these spaces must be drywall. Acoustic tile ceilings are not permitted. These requirements also apply to partitions surrounding concealed spaces such as raised floors. All penetrations shall have approved baffles installed to prevent inadvertent disclosure of conversations. Door must resist forceful entry. Acceptable doors are standard solid hardwood doors at least 1-3/4 inch thick. The door frame must be securely attached to the facility and fitted with a heavy-duty/high security strike plate and hinges installed with screws long enough to resist removal by prying. The door must be installed to resist removal of hinge pins by locating the hinge pins inside the room or by set screwing/welding the pins in place. Door must be equipped with a GSA-approved electro-mechanical lock meeting Federal Specification FF-L-2740.

32.17. Doors and Frames. Interior doors shall be solid core flush wood. Doors on the Sixth floor shall be solid wood 6-panel stile and rail. Doors forming part of a fire rated exit system may be metal to achieve required ratings. Door frames shall be metal.

32.18. Finishes. Finishes shall be durable and convey the appropriate aesthetics such as would be expected for a typical facility/space of this type in the commercial sector. Toilet and shower rooms shall have ceramic tile flooring and ceramic tile wainscot on walls (full height tile in shower areas. Sustainable design considerations shall be incorporated into finish selections and building aesthetics. See Appendix C Room Finish Requirements Schedule for additional information. Electrical and Communications Rooms shall have walls extended to the underside of the structural deck and no ceilings.

32.19. Ceramic Tile. Maximum water absorption shall be 0.50 percent. Floor tile minimum coefficient of friction wet or dry shall be 0.60. Floor tile shall be Class IV Heavy Traffic durability classification. Expansion joints shall be per TCA Handbook. Ceramic floor tile shall be thinset.

32.20. Acoustic Tile Ceiling. Acoustic units shall be no larger than 24″ by 24″ and meet CISCA design requirements. Coordinate with Seismic Design Requirements for this region.

32.21. Carpet. Carpet shall be tufted; multilevel or level loop; commercial 100% branded nylon continuous filament type 6 or 6/6 100% recyclable pile fiber; solution or yarn dyed; minimum 0.114 inch pile height; minimum two yarn ply; minimum 1/10 inch gauge; minimum 26 oz. per square yard pile yarn weight, not including weight of backing. Carpet shall be multicolored with at least three colors, random and/or tweed pattern. Avoid extremely bright colors, extremely light colors and high contrast patterns.

32.22. Casework and Trim. Cabinets and countertops shall comply with AWI Quality Standards, Section 400, Custom Grade. Finish shall be plastic laminate. Wood standing and running trim shall comply with AWI Section 300 Custom Grade.

32.23. Door Hardware. All door hardware shall meet ANSI 117.1. Locksets shall be lever operated and meet ANSI 156.2, Series 4000, Grade 1. Exit devices shall be rim type or surface vertical rod with touch bar and shall meet ANSI 156.3, Type 1, Grade 1 and shall bear a UL listing and meet criteria specified in NFPA 101. Use keyed removable mullions where possible at pairs of doors. Cylinders and cores shall have seven pin tumblers.

Cylinders shall be fully compatible with products identified in the Fort Bragg Installation Guide and Appendix and shall have interchangeable cores. All hardware shall be compatible and coordinate with door material, size, type, configuration and electronic operators/controls.

32.24. Fire Extinguisher Cabinets. Fire extinguishers are furnished and installed by Government. Designer shall determine required type and size of fire extinguishers and indicate this on Life Safety Plan. Provide recessed or semi-recessed fire extinguisher cabinets at occupied spaces and fire extinguisher brackets at unoccupied spaces to meet location, size and type requirements per NFPA (and ADAAG as applicable). All fire extinguisher cabinets shall be sized for 15 pound extinguisher minimum, and shall be lockable and shall have full-glass hinged door.

32.25. Wall and Corner Protection. Provide corner guards at all exterior corners in all corridors, waiting rooms and break rooms.

32.26. Ceiling and Access panels coordinated with Construction Type and Material, shall be provided in non-accessible ceiling below the following mechanical and plumbing devices: valves, flow measuring devices, mixing boxes, power operated dampers, access panel in ductwork, volume and balancing devices, water flow switches, sprinkler system drains and test connections, pressure switches, cleanouts.

33. INTERIOR DESIGN

33.1. Structural Interior Design.

33.1.1. Definition. The Structural Interior Design (SID) shall involve the selection and sampling of all applied building related finishes necessary to complete the buildings interior and exterior architecture. The SID submittal shall be submitted concurrent with the architectural design submittals. The SID requirements and format shall be in accordance with the Savannah District Interior Design Presentation Format.

33.1.2. Predefinition Conference. The Contractor shall lead a predefinition conference at Fort Bragg, NC. This meeting shall be attended by Government personnel responsible for this project to include facility user representatives, Fort Bragg Directorate of Public Works, and Savannah District personnel. The purpose of the predefinition conference is to present and discuss the SID color Scheme for the project. Actual exterior and interior materials, finishes and colors are to be provided for review and comment. The format for this presentation may be on 2′ x 3′ matte board. The Contractor may provide colored exterior elevations/perspectives of both the SID exterior and interior color schemes to assist in the discussion and presentation. At the end of the predefinition conference the Government will decide the final SID finishes that will be accepted for incorporation into the construction. The facility user representatives must provide concurrence with the SID prior to Contractor purchase and installation of finishes. Final interior and exterior finishes will be submitted in 8½″ x 11″ notebook format.

*5

33.1.3. In general, the SID should reflect a transitional, professional image coordinated with the requirements of the Fort Bragg Installation Guide and Appendix. All finishes are to be Class A. This section covers only the general color and minimum characteristics of the exterior and interior materials and products that are exposed to view in the finished construction. The word "color" as used herein includes surface color and pattern. Requirements for quality and method of installation are covered in appropriate sections of the specifications herein and which the General Contractor will submit after award. Specific locations where the various materials are required will be indicated during the 50% and 90% design after award submittals. The Contractor shall propose all colors not listed in Section 09000, Building Color And Finish Schedule. The vinyl flooring and rubber stair treads will be replaced.

33.1.4. Signage Requirements. Interior signage is an important item that is to be fully integrated with the architecture and building related finishes. All signage shall be in accordance with the Department of the Army technical manual, Signage, TM 5-807-10 and/or Ft. Bragg sign standards. All signs are to be from one manufacturer and shall match in color and style. All room sign copy is to be Helvetica medium with a ratio of height and width to meet Americans with Disabilities Act (ADA) requirements. Signs are to be provided for all interior doors. Installation shall be wall mounted, on the latch side of the door with the center of the sign installed 1500mm above the finish floor and 150 from the outside edge of the metal doorframe. Where conditions do not allow signs to be mounted directly adjacent to the door, install signs on the wall at the nearest point to the latch side. Signage for General Office areas shall be a modular plaque format with a minimum of three insert slides. All signs are to have a changeable room number sign and 150mm high. Copy for the first slide is to have a changeable integral, tactile, raised room number with corresponding, Grade 2 Braille indicating the room number. The second two slides are to be window insert slides to accommodate personnel changes or room name changes. Mechanical rooms and other building system room and service support rooms including restrooms are to have permanent room signs with copy that has raised room numbers and permanent room names. Copy is to be raised, tactile, letters and Grade 2 Braille indicating the room number and room name. All signs are to be permanently and mechanically attached to the building. Double-sided tape will not be accepted. Signage message shall be coordinated with the Government/user before ordering or installation. Provide Emergency Egress sign plaques that indicate “YOU ARE HERE” and the path of egress. These signs are to be fully coordinated with the Fort Bragg Fire Marshall at the 100% review Submittal design phase and before fabrication and installation. The Fire Marshall is to review the correct placement and quantity of these signs within the building and also review the proposed path of egress that will be graphically illustrated on the sign.

Suggested placements for these signs are to be determined before installation.

33.1.5. Reference To Manufacturer's Color and Product. Where color and product is shown as being specific to one manufacturer, an equivalent color by another manufacturer may be submitted for approval. Manufacturers and materials specified are not intended to limit the selection of equal colors, patterns and textures from other manufacturers. However the intent of the design is to remain consistent with this section of the contract.

33.1.6. Color Schedule. The Contractor shall prepare Section 09000, Building Color And Finish Schedule, which lists the colors, patterns and textures and products required for exterior and interior finishes, including both factory applied and field applied colors.

34. COMPREHENSIVE INTERIOR DESIGN
*6

34.1. The preparation of the Comprehensive Interior Design is part of the Base Bid. The procurement of the items specified in the Comprehensive Interior Design will be accomplished separate from this contract. The installation of these items will be an Option to the Base Bid as indicated in the Bidding Schedule. If awarded, the Contractor shall install the modular office furniture and other items listed in the Contractor-prepared CID. The CID Submittals shall be in accordance with the Savannah District Interior Design Presentation Format. The furniture shall be coordinated with the prepared and approved Furniture Placement drawings developed in the SID package. Installation shall include scheduling shipments from vendors, accepting delivery at the site, unloading, inventorying, securing and installing the items. Installation shall be accomplished by vendors approved by furniture/furnishings manufacturers.

34.2. Definition. The CID shall involve all the furniture-related components necessary to complete the interior environment. The necessary components shall include all loose furniture/furnishings/artwork.

34.3. CID Philosophy. The CID for this facility shall be coordinated in color, texture, pattern, size, form and function with building footprint and the SID. Furnishings submitted for approval shall reflect the image and style presented in the architecture to further support the corporate image. The Contractor shall select those CID items from UNICOR for which they can meet specifications. The UNICOR web site is: www.unicor.gov and the regional sales representative for UNICOR is Joe McCormick @ 770-982-3156. If they are unable to meet the specifications, the contractor shall coordinate approval of the waiver with UNICOR and prepare the basis of the waiver request for submission by the Government. All items of furniture/furnishings not available from UNICOR shall be selected from General Services Schedules (GSA). The GSA web site is: www.gsa.gov.

34.4. Format. The CID format shall be in accordance with the Savannah District Interior Design Presentation Format.

34.5. CID Coordination and Installation. The Contractor shall develop and fully coordinate the CID package with the SID package. The CID submittals shall run concurrent with the SID

submittals. The Contractor is required to purchase the CID package items and is required to schedule with all the CID vendors the delivery and installation of the CID. Phasing the delivery and installation of the CID package items shall be determined by the Contractor. The Contractor will procure the CID items.

34.6. Requirement Analysis. The Contractor shall interview the Government and determined the CID requirements. CID items and quantities shall be determined by but are not limited to: (1) the number of personnel to occupy the building, (2) job functions and related furniture/office equipment to support the job function (3) room functions (4) rank and grade.

34.7. CID Furnishing List. Typical CID items to specify for these buildings are:

34.7.1.1.1. Executive Wood Furniture
34.7.1.1.2. Support desks
34.7.1.1.3. Artwork
34.7.1.1.4. Bookcases
34.7.1.1.5. Bulletin Board, Porcelain Marker Boards
34.7.1.1.6. Chairs-all kinds, including stools
34.7.1.1.7. Desks-freestanding Technical support and Executive Level Quality
34.7.1.1.8. Desk-based systems furniture workstations-
34.7.1.1.9. Files-all kinds
34.7.1.1.10. Laboratory furniture
34.7.1.1.11. Lamps-all kinds
34.7.1.1.12. Podium/lecture stands
34.7.1.1.13. Storage-all kinds
34.7.1.1.14. Silk Plants
34.7.1.1.15. Tables-all kinds
34.7.1.1.16. Waste cans-various sizes

All specific/special items as required by the government/user

34.8. The Government will direct the Contractor as to the sources that will be used to ensure coordination with existing items. To the fullest extent possible, General Services Administration Sources will be specified.

35. FURNITURE ORDER FORMS

35.1. Furniture order forms for artwork, framing, draperies, or any other item for which construction is not standardized by the manufacturer, is to include as an attachment, construction specifications. If installation is required for an item, indicate this in the Remarks Section of the Furniture Order Form, and include a recommended source. The Justification Section of the Furniture Order Form is to contain the justification for a UNICOR waiver for this item if applicable.

36. STRUCTURAL DESIGN REQUIREMENTS

37.

37.1. Cold Formed Steel Framing.

37.2. Codes and References.

37.2.1. American Iron and Steel Institute

37.2.1.1. TI 809-07 Design of Cold-Formed Load Bearing Steel Systems

37.3. Additional Requirements.

37.3.1. Cold-formed steel members, their components, and connection material shall have G60 galvanized coating.

37.3.2. Cold-formed metal framing systems used for fascias, soffits, exterior brick back-up (if used), and architectural framing that is subject to the design loads specified in this section shall be designed by the engineer.

38. SUSTAINABLE DESIGN

*5

38.1. Sustainable Design Goal. The goal for this project is to achieve more than ~~50~~25 points using SPiRiT, the Army's project rating tool for sustainable design. SPiRIT is a modified version of the US Green Building Council's LEED project rating tool.

38.2. Mandatory Requirements. The SPiIRiT Points Summary, Appendix D, indicates what SPIRIT items are contract requirements for this project in the "Mandatory Points in RFP" column. This column also indicates the status of SPiRiT points that fall outside the scope of design and construction, such as features of the selected site.

- End of Section -

APPENDIX A
FUNCTIONAL ROOM REQUIREMENTS

SIXTH FLOOR					
SECURE TELECOM RM.			1	50	50
CG/CMDT- CG	SP				
Color Copier in Area, black and white copier, recycle box,					
Telephone will have to be added to elevator area for access by					
non-card carriers card swipe on stairwell for sixth floor					
WORK ROOM				100	100
counter space, storage for paper/toner, this is where color copier and					
b&w copiers, fax machine will be located					
CMDR/CMDT	P	MG	1	400	400
Red phone, t.v.					
P.T. W/ SHOWER			1	80	80
8' x 6' OKAY					
AID De CAMP	O	O3	1	60	60
red line,					
SECRETARY	O	GS09	1	100	100
CHAUFFEUR	O	E6	2	60	120
WAITING AREA			1	100	100
black line,					
CSM	P	E9	1	200	200
red line,					
PLANS & CAP MGR	P	GS13	1	110	110
CONF. RM.			1	450	450
* *VTC, screen, run in a circuit (bundled ISDN), need*					
serving area not near screen at back of room near kitchen					
extra outlets for coffee, warmers, computer projection system					
w/computer workstation possibly in podium system					
look at flat screen, color of room should be greyish-blue,					
the lighting must use diffusers, prefer speaker (conference style)					
phone, room needs to be lockable and sound proof					
KITCHEN			1	150	150
ref., sink, garbage disposal, small freezer, dishwasher,					
lockable storage cabinet, cook top, oven, work table/prep area,					
stackable washer and dryer and outlet for same, ice machine					
STORAGE			1	80	80
standard storage with a couple of electric outlets, may happen					
as split area 1/2 to conf. and 1/2 to kitchen					
DCDR/ACMDT-CG					
Add reception area of approx. 80 sf, black line, t.v.				80	80
DCDR/ACMDT	P	O6	1	200	200
red line, t.v., like commanders office					
SECRETARY	O	GSO7	1	100	100
t.v., works for DCDR and DCG needs co joined					
CHIEF of STAFF-CG	SP				
same as commander					
CHIEF of STAFF	P	O6	1	200	200
same as commander					
EXEC ADMIN ASST	O	E4	1	60	60
black line					
SECRETARY	O	GSO7	1	100	100
same as commander's secretary					

DCG (BG)-CG	P, SP	O7	1	300	300
red line, t.v., like commanders office					
DCG (Aide)	O	O3	1	60	60
SCHOOL SECRETARY-CG					
Needs to be as near as possible to the CG as they answer questions for him frequently					
SCHOOL SECRETARY	P	O4	1	150	150
SR VI NCO	O	E7	1	100	100
SR PERS SVC SGT	O	E7	1	80	80
TV outlet					
ADMIN SUPV	O	E6	1	60	60
ADMIN SP	O	E4	1	60	60
ADMIN CLK	O	E3	1	60	60
STORAGE ROOM			1	60	60
Lockable, shelving on three walls					
OP/FUTURES-CG					
CHIEF OPS/LOGS	P	O5	1	150	150
t.v outlet					
AUTOMATION CLERK		GS9	1	80	80
TTRS-SPECIALIST	O	GS9	1	80	80
NCOIC	P	E9	1	100	100
G2	P	O4	1	150	150
INTELLIGENCE		E7	4	80	320
2 four drawer safes (co-locate in E-7 area)					
INTELLIGENCE		E6	1	60	60
OPERATIONS SP	O	GS11	3	100	300
LOGISTICS SECTION-CG					
Would like to have a small library of book shelves along wall- up to six-3 shelf bookcases, either a lockable cabinet or small room to put office supplies for the entire floor, this area is where the FEDLOG workstation will go (a small computer work station with a special hard drive- half size computer type desk).					
LOG MAINT MGT	O	W3	1	110	110
G4, NCOIC	O	E7	1	80	80
LOGISTICS SP	P	GS13	1	110	110
LOGISTICS MGT	O	GS11	1	100	100
PROTOCOL-CG					
Color printer, this area although having open areas should be closed off to the outside,no modular walls between work stations, would like wet bar for coffee prep.with outlet, GFIC needs access to					
PROTOCOL OFF	O	GS11	1	100	100
possible secured telephone line,					
PROTOCOL SGT	O	E6	1	60	60
PROTOCOL SP	O	GS09	1	100	100
color printer					
STORAGE AREA/CONF.	P		1	150	150
Lockable, functions as storage area for mementos and flags, also functions as a conf. rm. with a table and six chairs					

RESOURCE STRATEGY OFC-CG						
	ADD STORAGE ROOM			1	150	150
	room should be lockable					
	COMMON ROOM			1	80	80
	For counter with type writers at seating level for office to type form's					
*	*GS11- Budget Analyst's-*					
	one for each					
	COMPTROLLER	P	O5	1	200	200
	TV outlet					
	MILITARY TRAVEL	O	E4	1	60	60
	co-locate with budget analyst					
	PROGRAM ANAL	P	GS12	1	110	110
	BUDGET ANAL	P	GS12	1	110	110
	MANAGEMENT ANAL	O	GS11	1	100	100
	co-locate with program analyst					
	BUDGET ANAL	O	GS11	7	100	700
	ADMIN SPT TECH	O	GSO6	1	60	60
	co-locate with program analyst					
	TRAVEL CLERK	O	GS05	1	60	60
	co-locate with budget analyst					
	ADMIN SPT CLK	O	GSO5	1	60	60
	co-locate with program analyst					
SPECIAL ADVISORS-CG		SP				
	This area will be enclosed and highly classified area, red phone					
	capability at each station ISID's in this area,					
	SPECIAL ADVISOR	O	GS15	4	150	600
	DEPUTY SPEC ADV	O	GS12	1	110	110
	S.C.I.F.			1	300	300
SUB TOTAL FLOOR S.F.						**8420**

	FIFTH FLOOR					
	KITCHEN/COMMON RM.			1	100	100
	COPY/MAIL ROOM			1	150	150
	SECURE TELECOM RM.			1	50	50
DIR of TNG & DOCTRINE						
*	*connectivity requirements for language server, this area needs to be*					
	enclosed and lockable					
	DIR, DOTD	P	O6	1	200	200
	t.v. outlet, additional fax line for this area					
	XO/DIR	P	O5	1	150	150
	OP SGT	P	E9	1	100	100
	SECRETARY	O	GSO6	1	60	60
	CONF. RM.			1	200	200
	have area accessible to outside offices not in enclosed and lockable					
	area.					

JT ARMY DOC/INT DIV					
Needs storage area- small open area off of secretaries area					
CH, JT ARMY DOC	P	O5	1	150	150
t.v. outlet, additional fax line for this area					
SUPV DOC DEV ANA	P	GS12	1	110	110
DOCTRINE DEV ANA	O	GS11	7	100	700
SECRETARY	O	GSO5	1	60	60
JT ARMY DOC/INT BR					
JT ARMY DOCTRINE ANA	O	O4	1	100	100
JT ARMY DOCTRINE ANA	O	W4	1	100	100
ARMY DOC/INT BR					
BRANCH CHIEF	O	O4	1	150	150
RANGER ANAL	O	O3	1	80	80
SO OFF/WRITER	O	O3	1	80	80
SIGN OFF ANAL	O	O3	1	80	80
INTEL OFF/ANAL	O	O3	1	80	80
CHEM OFF/ANAL	O	O3	1	80	80
LOF OFF/ANAL	O	O3	1	80	80
SF WRITER	O	W4	1	100	100
SR TNG DEV/WTR	O	E8	1	100	100
SF TNG & DOC DIV					
CH TNG DOC	P	O5	1	150	150
t.v. outlet					
SR TNG DEV/WTR	O	E8	1	100	100
DOCTRINE DEV ANAL	P	GS12	1	110	110
DOC DEV ANAL	O	GS11	1	100	100
INST SYS SPEC	O	GS11	2	100	200
SECRETARY	O	GSO5	1	60	60
separate fax line, area needs to be in front of GS12 and O5					
SF DOC BR					
BR CH DOCTRINE DIV	O	O4	1	150	150
DOCTRINE DEV OFF	O	W4	1	100	100
SR TNG DEV/WRITER	O	E7	4	60	240
SF COL TNG BR					
BR CH TNG DEV	O	O4	1	150	150
DEV OFF	O	O3	1	100	100
DEV OFF	O	W4	2	100	200
SF IND TNG BR					
DEV OFF	O	O4	2	150	300
DEV OFF	O	W4	1	100	100
DEV/WTR	O	W4	1	100	100
SR TNG DEV/WTR	O	E7	8	60	480
SO A/SKILLS BR					
enclosed and lockable with SP					
ADV SKILLS DEV OFF	O	W4	2	100	200
SR TNG DEV/WTR	O	E7	1	60	60
ADDED-UNKNOWN GRD.	O		2	60	120

COMMAND JUDGE ADVOCATE CG, SP					
CMD JUDGE ADVOCATE	P	O4	1	150	150
t.v. outlet					
PARALEGAL NCO	P	E5	1	100	100
SECRETARY/LIBRARY	O	GSO5	1	100	100
built in wall library system for large , separate fax line					
PARALEGAL NCO	O	E7	1	100	100
POSSIBLE PARALEGAL COMING OUT- 100 sf					
PERS REC BR	SP				
lockable and enclosed					
BR CHIEF	O	O4	1	150	150
SF DEV	O	W4	1	100	100
BR NCOIC	O	E8	1	100	100
OP SGT	O	E7	1	60	60
DOCTRINE DEV ANAL	O	GS12	2	110	220
SUB TOTAL FLOOR S.F.					**7160**

FOURTH FLOOR					
KITCHEN/COMMON RM.			1	100	100
COPY/MAIL ROOM			1	150	150
SECURE TELECOM RM.			1	50	50
TNG DEV D. needs additional storage area added to each of their areas **(secretarial)**					
DIR MGMT OFC (DMO)					
DIV CH/OP SP	P	GS12	1	110	110
t.v. outlet					
ADMIN SGT	O	E6	1	60	60
ADMIN SGT	O	E5	1	60	60
PROGRAM ANALYST	O	GS09	1	60	60
separate fax line					
SECRETARY	O	GSO5	1	60	60
MANAGEMENT ASST	O	GSO5	2	60	120
OFC AUTO CLK	O	GSO4	1	60	60
STATISTICIAN	P	GS11	1	100	100
SUPV WTR/ED	O	GS12	1	110	110
need closet for storage of magazine			*1*	*80*	*80*
stand alone MAC work station					
WTR/ED	O	GS11	1	100	100
stand alone MAC work station					
VIS INFO SP	O	GS11	1	100	100
stand alone MAC work station					
OFF. AUTO. CLK.	O	GSO4	1	60	60
AV PROD SP	O	GS12	2	100	200
Interior room, video production, sound proof, open area should be enclosed, need additional area for conferencing whole					
special electrical needs			*1*	*120*	*240*

TNG DEV DIV					
DIV CHIEF/EVAL	P	O5	1	150	150
t.v. outlet					
SF ANALYST	P	O4	1	100	100
SR TNG DEV/WTR	O	E8	1	80	80
DOCTRINE DEV ANAL	P	GS12	1	110	110
MGT & PROG ANAL	O	GS11	1	80	80
TNG SP/CONTRACT	O	GS09	1	80	80
SECRETARY	O	GSO5	1	60	60
add storage area			*1*	*80*	*80*
CONF. ROOM			1	200	200
TNG DEV BR #1					
CH SF ANALYST	O	O3	1	110	110
ANALYST OFF	O	W4	1	110	110
SR TNG DEV/WTR	O	E7	5	80	400
SUPV TNG SP	P	GS12	1	110	110
WRITER/EDITOR	O	GS11	1	80	80
TNG SP	O	GS11	3	80	240
TNG SP	O	GS11	1	80	80
INST SYS SP	O	GS11	3	80	240
TNG DEV BR #2					
SF ANALYST	O	O3	1	110	110
SR TNG DIV/WTR	O	E7	4	80	320
WTR-ED	O	GS11	1	80	80
TNG SP	O	GS11	4	80	320
INST SYS SP	O	GS11	4	80	320
EDITORIAL ASST	O	GSO5	1	60	60
TNG DEV BR #3					
***** *this is area where language server connection is located*					
PYOP ANALYST	O	O3	1	110	110
CA ANALYST	O	O3	1	110	110
TNG DEV NCO	O	E8	2	80	160
SR TNG DEV/WTR	O	E7	1	80	80
SUPV TNG SP	P	GS12	1	110	110
WRITER/EDITOR	O	GS11	2	80	160
TNG SP	O	GS11	5	80	400
INST SYS SP	O	GS11	2	80	160
ILLUSTRATOR	O	GS09	1	80	80
TNG MGMT BR					
SYS EVAL NCO	O	E7	1	80	80
SUPV TNG SP	P	GS12	1	110	110
DATA BASE MGR	O	GS11	1	80	80
PROG SP	O	GS11	1	80	80
COMPUTER SP	O	GS11	2	80	160
***** *this where ASAT server connection goes*					
PROGRAM ANAL	O	GS11	1	80	80
TNG SP	O	GS11	2	80	160
INST SYS SP	O	GS11	2	80	160
INST SYS SP	O	GS09	1	80	80
SUB TOTAL FLOOR S.F.					**7700**

THIRD FLOOR					
KITCHEN/COMMON RM.			1	100	100
COPY/MAIL ROOM			1	150	150
SECURE TELECOM RM.			1	50	50
DEPARTMENT OF QUALITY ASSURANCE					
this area needs to have walls around group with lockable capabilities, walls should be moveable					
EVAL OFF	P	O5	1	150	150
TM CHIEF	O	W4	2	110	220
SYS EVAL NCO	O	E7	9	80	720
SR EVALUATOR	P	GS12	1	110	110
needs to be next to eval. off.					
STATISTICIAN	O	GS11	1	80	80
INST SYS SP	O	GS11	4	80	320
ED TECH	O	GSO7	1	80	80
CA/C MO DOC DIV					
DEV OFF	P	O5	1	150	150
t.v. outlet					
DOCTRINE DEV ANAL	P	GS12	1	110	110
INST SYS SP	O	GS11	2	80	160
SECRETARY	O	GSO5	1	60	60
CA/CMO DOC BR					
CH/CA/PO/SOIS	O	O4	1	110	110
CA DEV OFF	O	O3	1	100	100
SR TNG DEV/WTR	O	E7	4	80	320
CA/CMO IN/COLL TNG BR					
CA DEV OFF	O	O5	1	150	150
SR TNG DEV/WTR	O	E7	2	80	160
PY TNG & DOC DIV					
DIV CH/WRITER	P	O5	1	150	150
DOC DEV ANAL	P	GS12	1	110	110
DOC DEV ANAL	O	GS11	1	80	80
INST SYS SP	O	GS11	1	80	80
DOC MGT ASST	O	GS09	1	80	80
SECRETARY	O	GSO5	1	60	60
PYOP DOC BR					
BR CH/WRITER	O	O4	1	110	110
SR TNG DEV/WTR	O	E7	2	80	160
PYOP COLL TNG BR					
BR CH/WRITER	O	O4	1	110	110
SR TNG DEV/WTR	O	E7	3	80	240
PYOP IND TNG BR					
PYOP DEV OFF	O	O3	1	110	110
MEDIA DEV DIV					
additional outlets in this area, plotter room					
SUPV INFO SP	P	GS13	1	150	150
SECRETARY	O	GSO5	1	60	60

DESIGN BR					
SUPV VIS INFO SP	P	GS12	1	110	110
VIS INFO SP	O	GS11	2	80	160
VIS INFO SP	O	GS09	1	80	80
VIS INFO SP	O	GSO7	4	80	320
PLOTTERS, COMPUTERS	O		1	200	200
INST SYS SP	O	GS11	1	80	80
VIS INFO SP	O	GS09	1	80	80
EDITORIAL BR					0
WRITER/EDITOR	O	GS11	4	80	320
EDITORIAL ASST	O	GSO7	3	80	240
SUB TOTAL FLOOR S.F.					**6390**

SECOND FLOOR					
KITCHEN/COMMON RM.			1	100	100
COPY/MAIL ROOM			1	150	150
SECURE TELECOM RM.			1	50	50
FILE STORAGE/EXPANSION/ CONFERENCE ROOM			1	520	520
DIR of RESERVE COMPONENT-CG					
560 sf- need to have a cube or two with phone access for the reservists to call out					
DIR/USAR ADVISOR	P	O6	1	200	200
t.v. outlet					
CHIEF ADVISOR	P	E9	1	100	100
MOB PLANNER	O	GS09	1	80	80
SECRETARY	O	GSO6	1	60	60
needs to be next Dir/USAR Advisor					
AGR	O		2	60	120
DIR of NATIONAL GUARD-CG					
880 sf- t.v. outlet in the admin. Area					
ARNG ADVISOR	P	O5	1	200	200
t.v. outlet					
ARNG LIAISON OFF	O	W4	1	110	110
SR OP & TNG NCO	P	E9	1	100	100
move next to ARNG ADV.					
ADMIN SUPV	O	E7	2	80	160
next to E9 and O5					
NG INSTRUCTORS	O	E8	1	80	80
NG INSTRUCTORS	O	E7	2	60	120
* *may bump up to 4 total instructors*					
NG LIAISON	P	O4	1	110	110
next to the instructors as he supervises the instructors					
HHC, COMMAND GROUP					
HHC CMDR	P	O3	1	110	110
1SG	P	E8	1	100	100
OPERATIONS NCO	O	E7	1	80	80
t.v. outlet					
SUPPLY SGT	O	E5	1	60	60
ADMIN SGT	O	E4	1	60	60
SUPPLY ROOM			1	200	200

PROPONENCY					
DIR, PROP	P	O5	1	150	150
t.v. outlet					
ASSISTANT DIR.	P	GS12	1	110	110
CH, PYOP PROP (RED)	P	O5	1	150	150
add storage room for large filing cabinets			*1*	*150*	*150*
MGR SF BRANCH	O	O4	1	100	100
CH, CA PROP (RED)	O	O4	1	100	100
MGR SF WO	P	W5	1	100	100
SR CAREER MGT NCO (RED	O	E8	1	80	80
SR CAREER MGT NCO	O	E8	1	80	80
MIL PERS SP (RED)	O	GS11	1	80	80
MIL PERS CLK	P	GSO6	1	100	100
MIL PERS CLK	O	GSO6	1	60	60
MIL PERS CLK	O	GSO6	1	60	60
SECRETARY	O	GSO5	1	60	60
EEO					
EEO NCO	P	E7	1	100	100
SERVICE ADVISORS					
CHIEF ADVISOR	P	O5	1	150	150
MARINE ADV	P	O4	1	110	110
SERVICE ADV	O	E7	3	80	240
LIAISON RECEPTION			1	100	100
RE-ENLISTMENT					
area should be enclosed and an area for lockable storage, copier					
REENLISTMENT SPEC.	O	E7	6	80	480
t.v. outlet, separate fax line					
REENLISTMENT SPEC.	O	E6	1	80	80
REENLISTMENT STAGING AREA					
SUPPORT BATTALION, 1st SWTG(A)					
area needs to be added for conf. room			*1*	*200*	*200*
BN CDR	P	O5	1	200	200
t.v. outlet					
BN XO	P	O4	1	150	150
BN CSM	P	E9	1	110	110
MGMT SPT TECH	O	GSO7	1	80	80
SECRETARY	O	GSO5	1	60	60
BUDGET CLK	O	GSO4	1	60	60
S1/S4 HHD					
SR PER SVC SGT	O	E7	1	80	80
FOOD OP MGT NCO	O	E7	1	80	80
SUPPLY SGT	O	E7	1	80	80
SUPPLY SGT	O	E6	1	60	60
PERS ADMIN SP	O	E4	1	60	60
MIL PERS CLK	O	GSO4	1	60	60

S3					
OP SGT	P	E8	1	100	100
OP SGT	O	E7	1	80	80
TRANS MGT SGT	O	E7	1	80	80
TRANS MGT COORD	O	E4	2	60	120
SR OP MGR	O	GS09	1	80	80
SUSTAIN OP	O	GSO7	1	80	80
SUPPORT OP	O	GSO7	1	80	80
DATA BASE MGR	O	GSO5	1	60	60
TRANS OP	O	GSO5	1	60	60
SAFETY PERSONNEL					
SAFETY	P	GS13	1	120	120
SUB TOTAL FLOOR S.F.					**7650**

FIRST FLOOR					
KITCHEN/COMMON RM.			1	100	100
COPY/MAIL ROOM			1	150	150
SECURE TELECOM RM.			1	50	50
INFORMATION MANAGEMENT OFFICE					
950 sf- area should be enclosed with partitions					
SUPPORT TEAM CH	P	GS12	1	110	110
COMPUTER SP	O	GS11	2	80	160
COMPUTER SP	O	GS09	4	100	400
INFO SYS ASST	O	GS11	1	100	100
OFC AUTO CLK	O	GS05	1	60	60
in front of area					
MAINT. AREA-COMPUTERS	O		1	100	100
co-located with computer sp. GS09 with two single line phones and add. Data outlets					
STORAGE AREA-LOCKABLE			1	120	120
co-located with maintenance area					
GUARD FORCE					
LDR SECURITY GUARD	P	GSO7	1	150	150
SECURITY GUARD-wk room	O		1	80	80
CONTROL/MONITORS	P		1	100	100
CO A, SPT BN					
CO CDR	P	O3	1	110	110
t.v. outlet					
ASST PERS OFF	O	W4	1	100	100
FIRST SGT	P	E8	1	100	100
PERS SVC SGT	O	E6	1	80	80
SUPPLY SGT	O	E5	1	60	60
MIL PERS CLK	O	GSO5	1	60	60
ADMIN CLK	O	GSO4	1	60	60
SUPPLY CLK	O	GSO4	1	60	60

PERS SERV CTR					
SR PERS SVC SGT	P	E7	1	100	100
PERS SVC SGT	O	E6	1	60	60
PERS ADMIN SGT	O	E5	1	60	60
PERS ADMIN SP	O	E4	1	60	60
PERS ADMIN CLK	O	E3	3	60	180
MIL PERS CLK	O	GSO5	3	60	180
PERS SVC SGT	O	E7	1	60	60
PERS SVC SGT	O	E6	1	60	60
PERS ADMIN SGT	O	E5	1	60	60
PERS ADMIN SP	O	E4	1	60	60
PERS ADMIN CLK	O	E3	2	60	120
MIL PERS CLK	O	GSO5	3	60	180
WAITING/COUNTER			1	150	150
ACADEMIC RECORDS					
SPV ACAD REC TECH	P	GS08	1	100	100
ACAD RCDS CLK	O	GSO5	5	60	300
RECORD STORAGE			1	200	200
STUDENT RECORDS					
enclose area around entire group					
CHIEF, STUDENT RCDS	P	GSO7	1	100	100
LEAD, MIL PNL CLK	O	GSO6	1	60	60
MIL PERS CLK	O	GSO5	3	60	180
NCOIC, STU RCDS	O	E6	1	60	60
move next to chief, student records					
STUDENT PAC					
CHIEF, STUDENT PAC	P	GS09	1	110	110
enclose area around entire group					
PERSONNEL CLERKS	O	GS07	6	80	480
FAC. MANAGER					
although the Supv. Facility Mgr. And Fac. Asst. will work in an open area, the entire facilty manager area needs to be enclosed					
SUPV FAC MGR	O	GS12	1	120	120
FAC ASST.	O	GS11	1	105	105
MAIL ROOM	O	E4	2	60	120
MAIL STORAGE/PROC.			1	100	100
add card swipe for door that comes back into Bryant Hall					
PAO	O	O4	1	110	110
this entire area needs to be enclosed within this area you will need to have an editing room t.v. outlet, two fax telephone lines, in open area will need to have extra outlets and circuits					
ASST PAO	O	GSO7	1	80	80
Editing Room/Tape Storage			*1*	*100*	*100*
this area will require extra electrical outlets and circuits					

SUB TOTAL FLOOR S.F.		**5965**
* *In basement the thru door will be card swiped for IMO group only*		
TOTAL PERSONNEL/BUILDING S.F.	**452**	**43285**

S.P.	Sound Proof (STC45)
CG	Command Group
P	Private Office
O	Open Office

OTHER POTENTIAL PROGRAM REQUIREMENTS- NOT INCLUDED IN PROGRAM

FAMILY READINESS GROUP					
needs to be near the front door area near the restrooms, this entire area needs to be enclosed					
DIRECTOR	P	VOL.	1	150	150
with small conference area of her office, will need data drops in her t.v. outlet					
IN PROCESSING CTR.	O	VOL.	4	60	240
telephone outlet for each work station					
RECEPTION	O				
t.v. outlet					
copier in open area					
work station along with black and red drops					
CHILD CARE/DAY ROOM	P			400	400
t.v. outlet, sound proofing					
CONFERENCE/CLASSROOM				500	500
U- shaped desk/conference room standard size conference room tables w/ 4X8 storage area					

APPENDIX B
FIRE PROTECTION / LIFE SAFETY CODE ANALYSIS

APPENDIX B
FIRE PROTECTION/LIFE SAFETY CODE ANALYSIS

NOTE TO DESIGNER: This document is a preliminary analysis used for concept development. It does not contain all requirements and does not relieve the designer of complete code and criteria review, compliance and documentation responsibilities during proposal preparation and final design development.

REFERENCES:
Military Handbook MIL HDBK 1008c, Fire Protection for Facilities Engineering, Design and Construction, 10 June 1997
Engineering Circular EC 1110-1-94, Classification of Type of Construction, 31 July 2001
International Building Code, 2000 edition
Americans with Disabilities Act
ANSI 117.1, 1998 Accessible and Usable Buildings and Facilities
NFPA 101, Life Safety Code, 2000
NFPA 10, Standard for Portable Fire Extinguishers, 1998

BUILDING DESCRIPTION:
Existing six-story concrete framed building with a partial basement level and small penthouse level, circa 1970's. Approximately Square Feet

AUTOMATIC SPRINKLER SYSTEM: Fully Sprinklered

IBC OCCUPANCY: B Business, IBC Section 304

NFPA 101 OCCUPANCY: Business (Chapter 26)

CONSTRUCTION TYPE (IBC Chapter 6): Type IB-Non-combustible.

FIRE-RESISTIVE RATING REQUIREMENTS FOR BUILDING ELEMENTS (IBC Table 601):
Structural Frame-2 Hours (Existing Concrete Frame)
Floor-to-Floor-2 Hours
Roof Construction-1 Hour

FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS (IBC Table 602):
Non-Combustible, Existing Pre-Cast Concrete

EXTERIOR WALL AND OPENING PROTECTION (IBC Table 704.8):Unprotected.

Unlimited area with fire separation greater than 30 feet.

FIRE RATED SEPARATIONS (IBC Table 714.2):
Shaft enclosures: One Hour (IBC Table 714.2)
Records, Storage: One Hour (MIL HDBK 1008c 4.10.5).

ALLOWABLE AREA

IBC (Table 503)	37,000 sq. ft. per floor
Actual Area	12,000 sq. ft. per floor (81,600 sq. ft.-overall)
Allowable Height	11 Stories, 160 feet
Actual Height	6 Stories, 94 feet

OCCUPANT LOAD (IBC Table 1003.2.2.2):

Occupancy	Area	Occupant Load
Business	12,000 sq ft	1 per 100 gross sq ft

EGRESS REQUIREMENTS (NFPA 101)

CAPACITY (IBC Table 1003.2.3 with sprinkler):

Stairways	.2 inches per occupant
Other egress	.15 inches per occupant

MINIMUM CORRIDOR WIDTH (IBC 1004.3.2.2): 44 inches but not less than required by 1003.2.3

NUMBER OF EXITS (IBC 1005.2.1):

Occupant Load	Minimum Number of Exits
1-500	2
500-1000	3

MAXIMUM DEAD END (IBC 1004.3.2.3 exception 2):
50 feet at Business

MAXIMUM COMMON PATH OF TRAVEL (IBC 1004.2.5):
100 feet with <31 occupant load

MAXIMUM TRAVEL DISTANCE (IBC Table 1004.2.4):
300 feet at Business with sprinkler

INTERIOR FINISHES:
WALL AND CEILING FINISHES (MIL HDBK 1008c 2.7.1):
Class A in Exits and Exit Passageways.
Class A, B or C all other areas.
Class A materials shall not exceed FS 25 and SD 50.
Class B materials shall not exceed FS 75 and SD 100.

Class C materials shall not exceed FS 200 and SD 200.
Cellular Plastics not permitted.

FLOOR FINISHES (NFPA 101 26.3.3.3, 10.2.8.2):
Class I or Class II in Corridors and exits.

PORTABLE FIRE EXTINGUISHERS (NFPA 10):
Maximum travel to fire extinguisher: 75 feet

APPENDIX C

SUSTAINABLE PROJECT RATING TOOL (SPiRiT)

Sustainable Project Rating Tool (SPiRiT)

Version 1.4

U. S. Army Corps of Engineers
U. S. Army Assistant Chief of Staff for Installation Management

April 2001

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NOTES

1) This Sustainable Project Rating Tool (SPiRiT) is derived from The U. S. Green Building Council LEED 2.0 (Leadership in Energy and Environmental Design) Green Building Rating System TM.

2) The SPiRiT numbering scheme parallels, but does not match LEED 2.0. LEED does not number major sections, which it calls 'Credit Categories,' ex. 'Sustainable Sites,' rather it numbers criteria or 'credits' within each major section. SPiRiT credit numbers match those of LEED where there is a 1:1 comparison. Where additional credits have been added they fall at the end of major sections.

3) The SPiRiT Credits all follow the format: Intent, Requirement and Technologies/Strategies.

Intent: A statement of the primary goal for the credit;
Requirement: Quantifiable conditions necessary to achieve stated intent;
Technologies/Strategies : Suggested technologies, strategies and referenced guidance on the means to achieve identified requirements.

4) Projects are evaluated for each SPiRiT credit which are either 'Prerequisites' or result in a point score:
Prerequisites: These credits are a statement of minimum requirements and must be met. No further points will be awarded unless the minimum is achieved. These credits are recognizable by an 'R' in the number scheme, ex. 1.R1, and a 'Reqd.' in the score column.
Point Score: These credits are evaluated and result in a point score. Where the potential score is greater than 1, no partial points are granted.

5) SPiRiT Sustainable Project Certification Levels:

SPiRiT Bronze	25 to 34 Points
SPiRiT Silver	35 to 49 Points
SPiRiT Gold	50 to 74 Points
SPiRiT Platinum	75 to 100 Points

6) SPiRiT credits have been developed to address facility life cycle phases including programming, design, construction, and commissioning. Additional rating tools will be developed to address installation/base master planning and facilities operations and maintenance, rehabilitation, recycling, and disposal.

7) POC for U. S. Army Corps of Engineers:
Mr. Harry Goradia
U. S. Army Corps of Engineers
ATTN: CEMP-ET
7701 Telegraph Road
Alexandria, VA 22315-3862
Phone 703-428-6460, FAX 703-428-7903
Email harry.goradia@hq02.usace.army.mil

POC for U. S. Army Installations:
Mr. John Scharl
U. S. Army Assistant Chief of Staff for Installation Management, Directorate of Facilities & Housing
ATTN: DAIM-FDF
7701 Telegraph Road, Bldg #2594 (Room 146B),
Alexandria, VA 22315-3800
Phone (703) 428-7614, FAX (703) 428-0197
Email scharja@hqda.army.mil

8) Sustainable Project Rating Tool (SPiRiT) Authors are:
Stephen N. Flanders (Lead), U. S. Army Engineering Research & Development Center (ERDC-CRREL)
Richard L. Schneider, U. S. Army Engineering Research & Development Center (ERDC-CERL)
Donald Fournier, U. S. Army Engineering Research & Development Center (ERDC-CERL)
Annette Stumpf, U. S. Army Engineering Research & Development Center (ERDC-CERL)

9) Army/USACE employees are members of the USGBC with membership privileges accessible via the USGBC web site, http://www.usgbc.org/. For information on membership and access to available LEED resources to support use of SPiRiT and sustainable design in your projects, contact Richard Schneider at (217) 373-6752 or richard.l.schneider@erdc.usace.army.mil (Annette Stumpf at (217) 352-6511 ext. 7542 or annette.l.stumpf@erdc.usace.army.mil alternate).

10) For the latest information on SPiRiT and for access to guidance, tools and resources supporting sustainable design initiatives, visit the CERL 'Sustainable Design and Development Resource' website, http://www.cecer.army.mil/SustDesign. There you may also join the CERL Sustainable Design ListServ to be directly notified of information pertinent to sustainable design.

Sustainable Sites

Reqd.

1.R1 Erosion, Sedimentation, and Water Quality Control (1)

Intent: Control erosion and pollutants to reduce negative impacts on water and air quality.

Requirement: ❑ Design a site sediment and erosion control plan and a pollution prevention plan that conforms to best management practices in the EPA's Storm Water Management for Construction Activities, EPA Document No. EPA-833-R-92-001, Chapter 3, OR local Erosion and Sedimentation Control standards and codes, whichever is more stringent. The plan shall meet the following objectives:

- Prevent loss of soil during construction by storm water runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse.
- Prevent sedimentation of storm sewer or receiving streams and/or air pollution with dust and particulate matter.
- Prevent hazardous material discharge into storm water systems.
- Prevent petroleum oils and lubricants (POL) discharge into storm water systems.

Technologies /Strategies: The EPA standard lists numerous measures such as silt fencing, sediment traps, oil grit separators, construction phasing, stabilization of steep slopes, maintaining vegetated ground cover and providing ground cover that will meet this prerequisite.

1.C1 Site Selection (1)

Intent: Avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site. Select site based on functional adjacencies/relationships and land use compatibility.

Requirement: ❑ Do not develop buildings on portions of sites that meet any one of the following criteria: **1**

- Prime training or maneuver land.
- Land whose elevation is lower than 5 ft. above the 100-year flood elevation as defined by FEMA.
- Land that provides habitat for any species on the Federal or State threatened or endangered list.
- Within 100 feet of any wetland as defined by 40 CFR, Parts 230-233 and Part 22, OR as defined by local or state rule or law, whichever is more stringent.

❑ Select site based on functional adjacencies/relationships and land use compatibility. **1**

- Select sites close to existing roads and utilities or use an existing structure to minimize the need for new infrastructure.
- Select site in area of high density.
- Site facilities based on the strength of their relationships to other facilities/land-uses to limit travel distances. The stronger the relationship/functional interaction, the closer the distance between two facilities.
- Select for distance to installation/base transit systems and access to pedestrian ways and bike paths.
- Select for development previously used or developed suitable and available sites.

Technologies /Strategies: Screen potential building sites for these criteria and/or ensure that these criteria are addressed by the designer
Screen potential building sites for these criteria and/or ensure that these criteria are addressed by the designer during the conceptual design phase. Utilize landscape architects, ecologists, environmental engineers, civil engineers, and similar professionals for the screening process. New wetlands constructed as part of stormwater mitigation or other site restoration efforts are not affected by the restrictions of this prerequisite.

(1) Adapted material not reviewed or endorsed by U. S. Green Building Council.

Sustainable Sites (Continued)

1.C2 Installation/Base Redevelopment (1)

Intent: Channel development to installation/base cantonment areas with existing infrastructure, protecting greenfields and preserving habitat and natural resources.

Requirement:
- ❑ Increase localized density to conform to existing or desired density goals by utilizing sites that are located within existing cantonment areas of high development density. **1**
- ❑ Select sites close to existing roads and utilities or use an existing structure to minimize the need for new infrastructure. **1**

Technologies /Strategies: During the site selection process give preference to previously developed sites with installation/base cantonment redevelopment potential such as facility reduction program cleared sites.

1.C3 Brownfield Redevelopment (1)

Intent: Rehabilitate damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land.

Requirement: ❑ Develop on a site classified as a brownfield and provide remediation as required by EPA's Brownfield Redevelopment program requirements OR Develop a brownfield site (a site that has been contaminated by previous uses). **1**

Technologies /Strategies:

Screen potential damaged sites for these criteria prior to selection for rehabilitation.

Utilize EPA OSWER Directive 9610.17 and ASTM Standard Practice E1739 for site remediation where required.

1.C4 Alternative Transportation (1)

Intent: Reduce pollution and land development impacts from automobile use.

Requirement:
- ❑ Locate building within ½ mile of installation/base transit systems. **1**
- ❑ Provide suitable means for securing bicycles, with convenient changing/shower facilities for use by cyclists, for 5% or more of building occupants. **1**
- ❑ Locate building within 2 miles of alternative-fuel refueling station(s). **1**
- ❑ Size parking capacity not to exceed minimum installation/base cantonment requirements AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants, OR, add no new parking for rehabilitation projects AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants. **1**

Technologies /Strategies: Select sites near public installation/base transit served by safe, convenient pedestrian pathways.

(1) Adapted material not reviewed or endorsed by U. S. Green Building Council.

1.C5 Reduced Site Disturbance (1)

Intent: Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

Requirement: ❑ On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to 40 feet beyond the building perimeter, 5 feet beyond primary roadway curbs, walkways, and main utility branch trenches, and 25 feet beyond pervious paving areas that require additional staging areas in order to limit compaction in the paved area; OR, on previously developed sites, restore a minimum of 50% of the remaining open area by planting native or adapted vegetation. **1**

❑ Reduce the development footprint (including building, access roads and parking) to exceed the installation/base's/base's master plan local zoning's open space requirement for the site by 25% or in accordance with installation/base policy on open space set asides, whichever is greater. **1**

Technologies /Strategies: Note requirements on plans and in specifications. Establish contractual penalties for destruction of trees and site Note requirements on plans and in specifications. Establish contractual penalties for destruction of trees and site areas noted for protection. Reduce footprints by tightening program needs and stacking floor plans. Establish clearly marked construction and disturbance boundaries. Delineate laydown, recycling, and disposal areas. Use areas to be paved as staging areas. Work with local horticultural extension services, or native plant societies, or installation/base agronomy staff to select indigenous plant species for site restoration and landscaping.

1.C6 Stormwater Management (1)

Intent: Limit disruption of natural water flows by minimizing storm water runoff, increasing on-site infiltration and reducing contaminants.

Requirement: Implement a stormwater management plan that results in:

❑ No net increase in the rate or quantity of stormwater runoff from undeveloped to developed conditions; OR, if existing imperviousness is greater than 50%, implement a stormwater management plan that results in a 25% decrease in the rate and quantity of stormwater runoff. **1**

❑ Treatment systems designed to remove 80% of the average annual post development total suspended solids (TSS), and 40% of the average annual post development total phosphorous (TP), by implementing Best Management Practices (BMPs) outlined in EPA's Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA -840-B-92-002 1/93). **1**

Technologies /Strategies: Significantly reduce impervious surfaces, maximize on-site stormwater infiltration, and retain pervious and Significantly reduce impervious surfaces, maximize on-site stormwater infiltration, and retain pervious and vegetated areas. Capture rainwater from impervious areas of the building for groundwater recharge or reuse within building. Use green/vegetated roofs. Utilize biologically-based and innovative stormwater management features for pollutant load reduction such as constructed wetlands, stormwater filtering systems, bioswales, bio-retention basins, and vegetated filter strips. Use open vegetated swales to reduce drainage velocity and erosion, reduce system maintenance, increase vegetative variety and support wildlife habitat where space permits.

1.C7 Landscape and Exterior Design to Reduce Heat Islands (2)

Intent: Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

Requirement: ❑ Provide shade (within 5 years) on at least 30% of non-roof impervious surface on the site, including parking lots, walkways, plazas, etc., OR, use light-colored/ high-albedo materials (reflectance of at least 0.3) for 30% of the site's non-roof impervious surfaces, OR place a minimum of 50% of parking space under-ground OR use open-grid pavement system (net impervious area of LESS than 50%) for a minimum of 50% of the parking lot area. **1**

❑ Use ENERGY STAR Roof compliant, high-reflectance AND low emissivity roofing (initial reflectance of at least .65 and three-year-aged reflectance of at least .5 when tested in accordance with ASTM E408) for a minimum of 75% of the roof surface; OR, install a "green" (vegetated) roof for at least 50% of the roof area. **1**

Technologies /Strategies: Employ design strategies, materials, and landscaping designs that reduce heat absorption of exterior materials. Note albedo/reflectance requirements in the drawings and specifications. Provide shade (calculated on June 21, noon solar time) using native or climate tolerant trees and large shrubs, vegetated trellises, or other exterior structures supporting vegetation. Substitute vegetated surfaces for hard surfaces. Explore elimination of blacktop and the use of new coatings and integral colorants for asphalt to achieve light colored surfaces.

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1.C8 Light Pollution Reduction (1)

Intent: Eliminate light trespass from the building site, improve night sky access, and reduce development impact on nocturnal environments.
Requirement: ❑ Do not exceed Illuminating Engineering Society of North America (IESNA) footcandle level requirements as stated in the Recommended Practice Manual: Lighting for Exterior Environments, AND design interior and exterior lighting such that zero direct-beam illumination leaves the building site.
1
Technologies
/Strategies:
Consult IESNA Recommended Practice Manual: Lighting for Exterior Environments for Commission Internationle de l'Eclairage (CIE) zone and pre and post curfew hour descriptions and associated ambient lighting level requirements. Ambient lighting for pre-curfew hours for CIE zones range between .01 footcandles for areas with dark landscapes such as parks, rural, and residential areas, and 1.5 footcandles for areas with high ambient brightness such as installation/base areas with high levels of nighttime activity. Design site lighting and select lighting styles and technologies to have a minimal impact off-site and minimal contribution to sky glow. Minimize lighting of architectural and landscape features. Exterior lighting should be consistent with security lighting requirements.

1.C9 Optimize Site Features

Intent: Optimize utilization of the site's existing natural features and placement of man-made features on the site.
Requirement: ❑ Perform both of the following: **1**

- Maximize the use of free site energy.
- Plan facility, parking and roadways to "fit" existing site contours and limit cut and fill.

Technologies
/Strategies:
Evaluate site resources to ascertain how each can enhance the proposed project and visa versa. Work to maximum advantage of the site's solar and wind attributes. Use landscaping to optimize solar and wind conditions and to contribute to energy efficiency; Locate and orient the facility on the site to optimize solar and wind conditions.

1.C10 Facility Impact

Intent: Minimize negative impacts on the site and on neighboring properties and structures; avoid or mitigate excessive noise, shading on green spaces, additional traffic, obscuring significant views, etc.
Requirement: ❑ Cluster facilities to reduce impact, access distance to utilities and sufficient occupant density to support mass transit.
1
❑ Collaborate with installation/base and community planners to identify and mitigate potential impacts of the project beyond site boundaries, and transportation planners to insure efficient public transport.
1
Technologies
/Strategies:
Involve local/regional planners and community members in installation/base master planning processes. Recognize the context and the impact of a project beyond site boundaries, and integrate it with the larger installation/base/community context/land use.

1.C11 Site Ecology

Intent: Identify and mitigate all existing site problems including contamination of soil, water, and air, as well as any negative impacts caused by noise, eyesores, or lack of vegetation, enhancing or creating new site habitat.
Requirement: ❑ Develop site environmental management and mitigation plan. **1**
Technologies
/Strategies:
Understand site and surrounding ecosystem interdependence and interconnectivity. Plan landscaping scheme to incorporate biodiversity. Preserve/enhance existing trees, hydrological features, ecosystems, habitats, and cultural resources. Increase the existence of healthy habitat for native species. Reintroduce native plants and trees where they have been destroyed by previous development.
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2.C1 Water Efficient Landscaping (2)

Intent: Limit or eliminate the use of potable water for landscape irrigation.

Requirement: ❑ Use high efficiency irrigation technology, OR, use captured rain or recycled site water to reduce potable water consumption for irrigation by 50% over conventional means.

1

❑ Use only captured rain or recycled site water for an additional 50% reduction (100% total reduction) of potable water for site irrigation needs, OR, do not install permanent landscape irrigation systems.

1

Technologies /Strategies:

Develop a landscaping water use baseline according to the methodology outlined in the LEED Reference Guide. Specify water-efficient, native or adapted, climate tolerant plantings. High efficiency irrigation technologies include micro irrigation, moisture sensors, or weather data based controllers. Feed irrigation systems with captured rainwater, gray water, or on-site treated wastewater.

2.C2 Innovative Wastewater Technologies (2)

Intent: Reduce generation of wastewater and potable water demand, while increasing local aquifer recharge.

Requirement: ❑ Reduce the use of municipally provided potable water for building sewage conveyance by a minimum of 50%, OR, treat 100% of wastewater on site to tertiary standards. **1**

Technologies /Strategies:

Develop a wastewater baseline according to the methodology outlined in the LEED Reference Guide. Implement decentralized on-site wastewater treatment and reuse systems. Decrease the use of potable water for sewage conveyance by utilizing gray and/or black water systems. Non-potable reuse opportunities include, toilet flushing, landscape irrigation, etc. Provide advanced wastewater treatment after use by employing innovative, ecological, on-site technologies including constructed wetlands, a mechanical recirculating sand filter, or aerobic treatment systems.

2.C3 Water Use Reduction (1)

Intent: Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

Requirement: ❑ Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting Energy Policy Act (EPACT) of 1992 fixture performance requirements.

1

❑ Exceed the potable water use reduction by an additional 10% (30% total efficiency increase). **1**

Technologies /Strategies:

Develop a water use baseline including all water consuming fixtures, equipment, and seasonal conditions according to methodology guidance outlined in the LEED Reference Guide. Specify water conserving plumbing fixtures that exceed Energy Policy Act (EPACT) of 1992 fixture requirements in combination with ultra high efficiency or dry fixture and control technologies. Specify high water efficiency equipment (dishwashers, laundry, cooling towers, etc.). Use alternatives to potable water for sewage transport water. Use recycled or storm water for HVAC/process make up water. Install cooling tower systems designed to minimize water consumption from drift, evaporation and blowdown.

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3.0 Energy and Atmosphere Score 28

3.R1 Fundamental Building Systems Commissioning (1) Reqd.

Intent: Verify and ensure that fundamental building elements and systems are designed, installed and calibrated to operate as intended.

Requirement: ❑ Implement all of the following fundamental best practice commissioning procedures.

- Engage a commissioning authority.
- Develop design intent and basis of design documentation.
- Include commissioning requirements in the construction documents.
- Develop and utilize a commissioning plan.
- Verify installation, functional performance, training and documentation.
- Complete a commissioning report.

Technologies /Strategies:

Introduce standards and strategies into the design process early, and then carry through selected measures by clearly stating target requirements in the construction documents. Tie contractor final payments to documented system performance. Perform additional commissioning in accordance with the DOE Building Commissioning Guide, Version 2.2. Refer to the LEED Reference Guide for detailed descriptions of required elements and references to additional commissioning guides. Specify pre-occupancy baseline IAQ testing at time of commissioning. Test for indoor air concentrations of CO, CO2, total VOCs and particulates. Test to assure that adequate ventilation rates have been achieved prior to initial occupancy.

3.R2 Minimum Energy Performance (1) Reqd.

Intent: Establish the minimum level of energy efficiency for the base building and systems.

Requirement: ❑ Design to meet building energy efficiency and performance as required by TI 800-01 (Design Criteria).

Technologies /Strategies:

Use building modeling and analysis techniques to establish and document compliance. ASHRAE/IESNA 90.1-1999 provides guidance for establishing building base case development and analysis. Refer to the LEED Reference Guide for a wide variety of energy efficiency strategy resources.

Use a professionally recognized and proven computer program or programs that integrate architectural features with air-conditioning, heating, lighting, and other energy producing or consuming systems. These programs will be capable of simulating the features, systems, and thermal loads used in the design. Using established weather data files, the program will perform 8760 hourly calculations. BLAST, DOE-2 or EnergyPlus are acceptable programs for these purposes.

3.R3 CFC Reduction in HVAC&R Equipment (2) Reqd.

Intent: Reduce ozone depletion.

Requirement: ❑ Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phaseout conversion.

Technologies /Strategies:

Specify only non-CFC-based refrigerants in all base building HVAC&R systems.

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3.C1 Optimize Energy Performance (1)

Intent: Achieve increasing levels of energy performance above the prerequisite standard to reduce environmental impacts associated with excessive energy use.

Requirement: ❑ Reduce design energy usage (DEU) compared to the energy use budget (EUB) in joules per square meter per year for regulated energy components as described in the requirements of Chapter 11 of the TI 800-01 (Design Criteria), as demonstrated by a whole building simulation.

- 1 Point will be awarded for every reduction in design energy use of 2.5% for both new and existing facilities for a maximum score of 20 points.

20

Regulated energy components include HVAC systems, building envelope, service hot water systems, lighting and other regulated systems as defined by ASHRAE.

Technologies /Strategies:

Develop and use building modeling and analysis techniques to establish a base case that meets the minimum prerequisite standard. ASHRAE/IESNA 90.1-1999 provides guidance for establishing building base case development and analysis. Perform interactive energy use analysis for selected design elements that affect energy performance and document compliance.

Unit of measure for performance shall be annual energy usage in joules per square meter. Life-Cycle energy costs shall be determined using rates for purchased energy, such as electricity, gas, oil, propane, steam, and chilled water and approved by the adopting authority. Refer to the LEED Reference Guide or Whole Building Design Guide for a wide variety of energy efficiency resources and strategies including conservation measures, electromechanical energy efficiency technologies (for example ground-source heat pumps), passive heating and cooling strategies, solar hot water, and daylighting.

Life-Cycle costing will be done in accordance with 10 CFR 436.

Consider installation of an Energy Management and Control System (EMCS), which is compatible with exiting installation systems to optimize performance. Use sensors to control loads based on occupancy, schedule and/or the availability of natural resources use (day light or natural ventilation).

3.C2 Renewable Energy (1)

Intent: Encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.

Requirement: ❑ Supply a net fraction of the building's total energy use through the use of on-site renewable energy systems.

% of Total Annual Energy Usage in Renewables

5% **1**

10% **2**

15% **3**

20% **4**

Technologies /Strategies:

Employ the use of on-site non-polluting-source renewable technologies contributing to the total energy requirements of the project. Consider and use high temperature solar and/or geothermal, photovoltaics, wind, biomass (other than unsustainably harvested wood), and bio-gas. Passive solar, solar hot water heating, ground-source heat pumps, and daylighting do not qualify for points under this credit. Credit for these strategies is given in Energy & Atmosphere Credit 1: Optimizing Energy Performance.

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3.0 Energy and Atmosphere (Continued)

3.C3 Additional Commissioning (2)

Intent: Verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.

Requirement: ❑ In addition to the Fundamental Building Commissioning prerequisite, implement the following additional commissioning tasks:

1

1. Conduct a focused review of the design prior to the construction documents phase.
2. Conduct a focused review of the construction documents when close to completion.
3. Conduct a selective review of contractor submittals of commissioned equipment.
4. Develop a system and energy management manual.
5. Have a contract in place for a near-warranty end or post occupancy review.

Items 1, 2, and 3 must be performed by someone other than the designer.

Technologies /Strategies:

Introduce standards and strategies into the design process early, and then carry through selected measures by clearly stating target requirements in the construction documents. Tie contractor final payments to documented system performance. Refer to the LEED Reference Guide for detailed descriptions of required elements and references to additional guidelines.

3.C4 << Deleted >> (1)

3.C5 Measurement and Verification (1)

Intent: Provide for the ongoing accountability and optimization of building energy and water consumption performance over time.

Requirement: ❑ Comply with the installed equipment requirements for continuous metering as stated in selected Measurement and Verification Methods - Option B: Retrofit Isolation of the US DOE's International Performance Measurement and Verification Protocol (IPMVP) for the following:

1

- Lighting systems and controls.
- Constant and variable motor loads.
- Variable frequency drive (VFD) operation.
- Chiller efficiency at variable loads (kW/ton).
- Cooling load.
- Air and water economizer and heat recovery cycles.
- Air distribution static pressures and ventilation air volumes.
- Boiler efficiencies.
- Building specific process energy efficiency systems and equipment.
- Indoor water risers and outdoor irrigation systems.

Technologies /Strategies:

Design and specify equipment to be installed in base building systems to allow for comparison, management, and optimization of actual vs. estimated energy and water performance. Employ building automation systems to perform M&V functions where applicable. Tie contractor final payments to documented M&V system performance and include in the commissioning report. Provide for ongoing M&V system maintenance and operating plan in building operations and maintenance manuals. Consider installation/base of an Energy Management and Control System (EMCS), which is compatible with exiting installation/base systems to optimize performance.

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3.0 Energy and Atmosphere (Continued)

3.C6 Green Power (1)

Intent: Encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.

Requirement: ❑ Engage in a two year contract to purchase the amount of power equal to projected building consumption generated from renewable sources that meet the Center for Resource Solutions (CRS) Green-E requirements.

1

Technologies /Strategies:

Purchase power from a provider that guarantees a fraction of its delivered electric power is from net nonpolluting renewable technologies. Begin by contacting local utility companies. If the project is in an open market state, investigate Green Power and Power Marketers licensed to provide power in that state. Grid power that qualifies for this credit originates from solar, wind, geothermal, biomass, or low-impact hydro sources. Low-impact hydro shall comply with the Low Impact Hydropower Certification Program.

3.C7 Distributed Generation

Intent: Encourage the development and use of distributed generation technologies, which are less polluting than grid-source energy.

Requirement: ❑ Reduce total energy usage and emissions by considering source energy implications and local cogeneration and direct energy conversion. Generate at least 50% of the building's projected annual consumption by on-site distributed generation sources.

1

Technologies /Strategies:

Investigate the use of integrated generation and delivery systems, such as co-generation, fuel cells, micro-turbines and off-peak thermal storage.

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4.R1 Storage & Collection of Recyclables (1) Reqd.

Intent: Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.
Requirement: ❑ Provide an easily accessible area that serves the entire building that is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, and metals.
Technologies
/Strategies:
Establish a waste management plan which meets requirements of the installation/base environmental and/or solid waste management plans in cooperation with users to encourage recycling. Reserve space for recycling functions early in the building occupancy programming process and show areas dedicated to collection of recycled materials on space utilization plans. Broader recycling support space considerations should allow for collection and storage of the required elements and newspaper, organic waste (food and soiled paper), and dry waste. When collection bins are used, bin(s) should be able to accommodate a 75% diversion rate and be easily accessible to custodial staff and recycling collection workers. Consider bin designs that allow for easy cleaning to avoid health issues.

4.C1 Building Reuse (1)

Intent: Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste, and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.
Requirement: Reuse large portions of existing structures during renovation or redevelopment projects.
❑ Maintain at least 75% of existing building structure and shell (exterior skin and framing excluding window assemblies).
1
❑ Maintain an additional 25% (100% total) of existing building structure and shell (exterior skin and framing excluding window assemblies). **1**
❑ Maintain 100% of existing building structure and shell AND 50% non-shell (walls, floor coverings, and ceiling systems).
1
Technologies
/Strategies:
Evaluate retention of existing structure. Consider facade preservation, particularly in installation/base areas. During programming and space planning, consider adjusting needs and occupant use patterns to fit within existing building structure and interior partition configurations. Identify and effectively address energy, structural, and indoor environmental (lead & asbestos) issues in building reuse planning and deconstruction documents. Percentage of reused non-shell building portions will be calculated as the total area (s.f.) of reused walls, floor covering, and ceiling systems, divided by the existing total area (s.f.) of walls, floor covering, and ceiling systems.

4.C2 Construction Waste Management (1)

Intent: Divert construction, demolition, and land clearing debris from landfill disposal. Redirect recyclable material back to the manufacturing process.
Requirement: Develop and implement a waste management plan, quantifying material diversion by weight:
❑ Recycle and/or salvage at least 50% (by weight) of construction, demolition, and land clearing waste. **1**
❑ Recycle and/or salvage an additional 25% (75% total by weight) of the construction, demolition, and land clearing debris.
1
Technologies
/Strategies:
Develop and specify a waste management plan which meets requirements of the installation/base environmental and/or solid waste management plans that identifies licensed haulers and processors of recyclables; identifies markets for salvaged materials; employs deconstruction, salvage, and recycling strategies and processes, includes waste auditing; and documents the cost for recycling, salvaging, and reusing materials. Source reduction on the job site should be an integral part of the plan.
The plan should address recycling of corrugated cardboard, metals, concrete brick, asphalt, land clearing debris (if applicable), beverage containers, clean dimensional wood, plastic, glass, gypsum board, and carpet; evaluate the cost-effectiveness of recycling rigid insulation, engineered wood products and other materials; hazardous materials storage and management; and participation in manufacturers' “take-back” programs to the maximum extent possible. Refer to the LEED Reference Guide for guidelines and references that provide waste management plan development and implementation support including model bid specifications.
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4.C3 Resource Reuse (2)

Intent: Extend the life cycle of targeted building materials, reducing environmental impacts related to materials manufacturing and transport.

Requirement: ❑ Specify salvaged or refurbished materials for 5% of building materials. **1**

❑ Specify salvaged or refurbished materials for 10% of building materials. **1**

Technologies /Strategies:

Commonly salvaged building materials include wood flooring/ paneling/cabinets, doors and frames, mantels, iron work and decorative lighting fixtures, brick, masonry and heavy timbers. See the LEED Reference Guide for calculation tools and guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars* (see exclusions) of the salvaged or refurbished material.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: In total dollar calculations, exclude; labor costs; all mechanical and electrical material and labor costs; and project overhead and fees. *If the cost of the salvaged or refurbished material is below market value, use replacement cost to estimate the material value, otherwise use actual cost to the project.

4.C4 Recycled Content (1)

Intent: Increase demand for building products that have incorporated recycled content material, reducing the impacts resulting from extraction of new material.

Requirement: ❑ Specify a minimum of 25% of building materials that contain in aggregate a minimum weighted average of 20% post-consumer recycled content material, OR, a minimum weighted average of 40% post-industrial recycled content material.

1

❑ Specify an additional 25% (50% total) of building materials that contain in aggregate, a minimum weighted average of 20% post consumer recycled content material, OR, a minimum weighted average of 40% post-industrial recycled content material.

1

Technologies /Strategies:

Specify building materials containing recycled content for a fraction of total building materials. Select products and materials with supporting information from the AIA Resource Guide or the EPA Environmentally Preferable Purchasing (EPP) Program. Common building materials and products with recycled content include; wall, partition, and ceiling materials and systems; insulation; tiles and carpets; cement, concrete, and reinforcing metals; structural and framing steel. For products/materials not listed, selection should be made on the basis of EPP criterion and/or:

- Toxicity;
- Embodied energy;
- Production use of water, energy and ozone depleting substances (ODSs);
- Production limits on toxic emissions and effluents;
- Minimal, reusable or recycled/recyclable packaging;
- Impact on indoor environmental quality (IEQ);
- Installation that limits generation of waste;
- Materials that limit waste generation over their life;
- EPA guideline compliance; and
- Harvested on a sustainable yield basis.

See the LEED Reference Guide for a summary of the EPA guidelines and calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars (see exclusions) of the material that contain recycled content.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees)

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4.0 Materials and Resources (Continued)

4.C5 Local/Regional Materials (2)

Intent: Increase demand for building products that are manufactured locally, reducing the environmental impacts resulting from transportation, and supporting the local economy.

Requirement: ❑ Specify a minimum of 20% of building materials that are manufactured regionally within a radius of 500 miles. **1**

❑ Of these regionally manufactured materials, specify a minimum of 50% that are extracted, harvested, or recovered within 500 miles.

1

Technologies /Strategies:

Specify and install regionally extracted, harvested, and manufactured building materials. Contact the state and local waste management boards for information about regional building materials. See the LEED Reference Guide for calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars (see exclusions) of material that is locally or regionally manufactured.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees.

4.C6 Rapidly Renewable Materials (2)

Intent: Reduce the use and depletion of finite raw and long cycle renewable materials by replacing them with rapidly renewable materials.

Requirement: ❑ Specify rapidly renewable building materials for 5% of total building materials. **1**

Technologies /Strategies:

Rapidly renewable resources are those materials that substantially replenish them-selves faster than traditional extraction demand (e.g. planted and harvested in less than a 10 year cycle) and do not result in significant biodiversity loss, increase erosion, air quality impacts, and that are sustainably managed. See the LEED Reference Guide for calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars (see exclusions) of materials that are considered to be rapidly renewable.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees.

4.C7 Certified Wood (2)

Intent: Encourage environmentally responsible forest management.

Requirement: ❑ Use a minimum of 50% of wood-based materials certified in accordance with the Forest Stewardship Council guidelines for wood building components including but not limited to framing, flooring, finishes, furnishings, and non-rented temporary construction applications such as bracing, concrete form work and pedestrian barriers.

1

Technologies /Strategies:

Refer to the Forest Stewardship Council guidelines for wood building components that qualify for compliance to the requirements and incorporate into material selection for the project.

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5.0 Indoor Environmental Quality (IEQ) Score 17

5.R1 Minimum IAQ Performance (1) Reqd.

Intent: Establish minimum IAQ performance to prevent the development of indoor air quality problems in buildings, maintaining the health and well being of the occupants.

Requirement: ❑ Meet the minimum requirements of voluntary consensus standard ASHRAE 62-1999, Ventilation for Acceptable Indoor Air Quality and approved Addenda.

Technologies /Strategies:

Include proactive design details that will eliminate some of the common causes of indoor air quality problems in buildings. Introduce standards into the design process early. Incorporate references to targets in plans and specifications. Ensure ventilation system outdoor air capacity can meet standards in all modes of operation. Locate building outdoor air intakes (including operable windows) away from potential pollutants/contaminant sources such as sporulating plants (allergens), loading areas, building exhaust fans, cooling towers, sanitary vents, dumpsters, vehicular exhaust, and other sources. Include operational testing in the building commissioning report. Design cooling coil drain pans to ensure complete draining. Include measures to control and mitigate radon buildup in areas where it is prevalent. Limit humidity to a range that minimizes mold growth and promotes respiratory health.

5.R2 Environmental Tobacco Smoke (ETS) Control (2) Reqd.

Intent: Prevent exposure of building occupants and systems to Environmental Tobacco Smoke (ETS).

Requirement: ❑ Zero exposure of nonsmokers to ETS by prohibition of smoking in the building, OR, by providing a designated smoking room designed to effectively contain, capture and remove ETS from the building. At a minimum, the smoking room shall be directly exhausted to the outdoors with no recirculation of ETS-containing air to the non-smoking area of the building, enclosed with impermeable structural deck-to-deck partitions and operated at a negative pressure compared with the surrounding spaces of at least 7 Pa (0.03 inches of water gauge). Performance of smoking rooms shall be verified using tracer gas testing methods as described in ASHRAE Standard 129-1997. Acceptable exposure in non-smoking areas is defined as less than 1% of the tracer gas concentration in the smoking room detectable in the adjoining non-smoking areas. Smoking room testing as described in the ASHRAE Standard 129-1997 is required in the contract documents and critical smoking facility systems testing results must be included in the building commissioning plan and report or as a separate document.

Technologies /Strategies:

Prohibit smoking in the building and/or provide designated smoking areas outside the building in locations where ETS cannot reenter the building or ventilation system and away from high building occupant or pedestrian traffic.

5.C1 IAQ Monitoring (1)

Intent: Provide capacity for indoor air quality (IAQ) monitoring to sustain long term occupant health and comfort.

Requirement: ❑ Install a permanent carbon dioxide (CO_2) monitoring system that provides feedback on space ventilation performance in a form that affords operational adjustments, AND specify initial operational set point parameters that maintain indoor carbon dioxide levels no higher than outdoor levels by more than 530 parts per million at any time.

1

Technologies /Strategies:

Install an independent system or make CO_2 monitoring a function of the building automation system. Situate monitoring locations in areas of the building with high occupant densities and at the ends of the longest runs of the distribution ductwork. Specify that system operation manuals require calibration of all of the sensors per manufacturer recommendations but not less than one year. Include sensor and system operational testing and initial set point adjustment in the commissioning plan and report. Also consider periodic monitoring of carbon monoxide (CO), total volatile organic compounds (TVOCs), and particulates (including PM10).

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5.C2 Increase Ventilation Effectiveness (2)

Intent: Provide for the effective delivery and mixing of fresh air to building occupants to support their health, safety, and comfort.

Requirement: ❑ For mechanically ventilated buildings, design ventilation systems that result in an air change effectiveness (E) greater than or equal to 0.9 as determined by ASHRAE 129-1997. For naturally ventilated spaces demonstrate a distribution and laminar flow pattern that involves not less than 90% of the room or zone area in the direction of air flow for at least 95% of hours of occupancy.

1

Technologies /Strategies:

Employ architectural and HVAC design strategies to increase ventilation effectiveness and prevent short-circuiting of airflow delivery. Techniques available include use of displacement ventilation, low velocity, and laminar flow ventilation (under floor or near floor delivery) and natural ventilation. Operable windows with an architectural strategy for natural ventilation, cross ventilation, or stack effect can be appropriate options with study of inlet areas and locations. See the LEED Reference Guide for compliance methodology guidelines.

5.C3 Construction IAQ Management Plan (2)

Intent: Prevent indoor air quality problems resulting from the construction/renovation process, to sustain long term installer and occupant health and comfort.

Requirement: Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows:

❑ During construction meet or exceed the minimum requirements of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, AND protect stored on-site or installed absorptive materials from moisture damage, AND replace all filtration media immediately prior to occupancy (Filtration media shall have a Minimum Efficiency Reporting Value (MERV) of 13 as determined by ASHRAE 52.2-1999).

1

❑ Conduct a minimum two-week building flushout with new filtration media at 100% outside air after construction ends and prior to occupancy, OR, conduct a baseline indoor air quality testing procedure consistent with current EPA protocol for Environmental Requirements, Baseline IAQ and Materials, for the Research Triangle Park Campus, Section 01445.

1

Technologies /Strategies:

Specify containment control strategies including protecting the HVAC system, controlling pollutant sources, interrupting pathways for contamination, enforcing proper housekeeping and coordinating schedules to minimize disruption. Specify the construction sequencing to install absorptive materials after the prescribed dry or cure time of wet finishes to minimize adverse impacts on indoor air quality. Materials directly exposed to moisture through precipitation, plumbing leaks, or condensation from the HVAC system are susceptible to microbial contamination. Absorptive materials to protect and sequence installation include; insulation, carpeting, ceiling tiles, and gypsum products. Appoint an IEQ Manager with owner's authority to inspect IEQ problems and require mitigation as necessary.

5.C4 Low-Emitting Materials (2)

Intent: Reduce the quantity of indoor air contaminants that are odorous or potentially irritating to provide installer and occupant health and comfort.

Requirement: Meet or exceed VOC limits for adhesives, sealants, paints, composite wood products, and carpet systems as follows:

❑ Adhesives must meet or exceed the VOC limits of South Coast Air Quality Management District Rule #1168 by, AND all sealants used as a filler must meet or exceed Bay Area Air Resources Board Reg. 8, Rule 51.

1

❑ Paints and coatings must meet or exceed the VOC and chemical component limits of Green Seal requirements. **1**

❑ Carpet systems must meet or exceed the Carpet and Rug Institute Green Label Indoor Air Quality Test Program.

1

❑ Composite wood or agrifiber products must contain no added urea-formaldehyde resins. **1**

Technologies /Strategies:

Evaluate and preferentially specify materials that are low emitting, non-irritating, nontoxic and chemically inert. Request and evaluate emissions test data from manufacturers for comparative products. Ensure that VOC limits are clearly stated in specifications, in General Conditions, or in each section where adhesives, sealants, coatings, carpets, and composite woods are addressed.

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5.C5 Indoor Chemical and Pollutant Source Control (1)

Intent: Avoid exposure of building occupants to potentially hazardous chemicals that adversely impact air quality.

Requirement: ❑ Design to minimize cross-contamination of regularly occupied areas by chemical pollutants: **1**

▪ Employ permanent entryway systems (grills, grates, etc.) to capture dirt, particulates, etc. from entering the building at all high volume entryways, AND provide areas with structural deck to deck partitions with separate outside exhausting, no air recirculation and negative pressure where chemical use occurs (including housekeeping areas and copying/print rooms), AND provide drains plumbed for appropriate disposal of liquid waste in spaces where water and chemical concentrate mixing occurs.

Technologies /Strategies:

Design to physically isolate activities associated with chemical contaminants from other locations in the building, providing dedicated systems to contain and remove chemical pollutants from source emitters at source locations. Applicable measures include eliminating or isolating high hazard areas; designing all housekeeping chemical storage and mixing areas (central storage facilities and janitors closets) to allow for secure product storage; designing copy/fax/printer/printing rooms with structural deck to deck partitions and dedicated exhaust ventilation systems; and including permanent architectural entryway system(s) to catch and hold particles to keep them from entering and contaminating the building interior.

Consider utilization of EPA registered anti-microbial treatments in carpet, textile or vinyl wall coverings, ceiling tiles or paints where microbial contamination is a concern. Utilize “breathable” wall finishes where circumstances require, to reduce moisture build-up and prevent microbial contamination. Minimize selection of fibrous materials, e.g. insulation, carpet and padding and flexible fabrics, whose exposed surfaces when exposed to the air stream or occupied space can contribute significant emissions and absorb and re-emit other contaminants over time.

5.C6 Controllability of Systems (2)

Intent: Provide a high level of individual occupant control of thermal, ventilation, and lighting systems to support optimum health, productivity, and comfort conditions.

Requirement: ❑ Provide a minimum of one operable window and one lighting control zone per 200 s.f. for all occupied areas within 15 feet of the perimeter wall.

1

❑ Provide controls for each individual for airflow, temperature, and lighting for 50% of the non perimeter, regularly occupied areas.

1

Technologies /Strategies:

Provide individual or integrated controls systems that control lighting, airflow, and temperature in individual rooms and/or work areas. Consider combinations of ambient and task lighting control and operable windows for perimeter and VAV systems for non perimeter with a 1:1: 2 terminal box to controller to occupant ratio.

5.C7 Thermal Comfort (2)

Intent: Provide for a thermally comfortable environment that supports the productive and healthy performance of the building occupants.

Requirement: ❑ Comply with ASHRAE Standard 55-1992, Addenda 1995 for thermal comfort standards including humidity control within established ranges per climate zone.

1

❑ Install a permanent temperature and humidity monitoring system configured to provide operators control over thermal comfort performance and effectiveness of humidification and/or dehumidification systems in the building.

1

Technologies /Strategies:

Integrated envelope and HVAC system design strategies that achieve thermal comfort conditions based on mean radiant temperature, local air velocity, relative humidity, and air temperature. Install and maintain a temperature and humidity monitoring system for key areas of the building (i.e., at the perimeter, and spaces provided with humidity control). This function can be satisfied by the building automation system. Specify in system operation manuals that all sensors require quarterly calibration. Include criteria verification and system operation in commissioning plan and report.

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5.0 Indoor Environmental Quality (IEQ) (Continued)

5.C8 Daylight and Views (2)

Intent: Provide a connection between indoor spaces and the outdoor environment through the introduction of sunlight and views into the occupied areas of the building.

Requirement: ❑ Achieve a minimum Daylight Factor of 2% (excluding all direct sunlight penetration) in 75% of all space occupied for critical visual tasks, not including copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas. Exceptions include those spaces where tasks would be hindered by the use of daylight or where accomplishing the specific tasks within a space would be enhanced by the direct penetration of sunlight.

1

❑ Direct line of sight to vision glazing from 90% of all regularly occupied spaces, not including copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas.

1

Technologies /Strategies:

Implement design strategies to provide access to daylight and views to the outdoors in a glare-free way using exterior sun shading, interior light shelves, and /or window treatments. Orient buildings to maximize daylighting options. Consider shallow or narrow building footprints. Employ courtyards, atriums, clerestory windows, skylights, and light shelves to achieve daylight penetration (from other than direct effect or direct rays from the sun) deep into regularly occupied areas of the building.

5.C9 Acoustic Environment /Noise Control

Intent: Provide appropriate acoustic conditions for user privacy and comfort.

Requirement: ❑ Minimize environmental noise through appropriate use of insulation, sound-absorbing materials and noise source isolation.

1

Technologies /Strategies:

Evaluate each occupied environment and determine the appropriate layout, materials and furnishings design.

5.C10 Facility In-Use IAQ Management Plan

Intent: Insure the effective management of facility air quality during its life.

Requirement: ❑ Perform all of the following: **1**

- Develop an air quality action plan to include scheduled HVAC system cleaning.
- Develop an air quality action plan to include education of occupants and facility managers on indoor pollutants and their roles in preventing them.
- Develop an air quality action plan to include permanent monitoring of supply and return air, and ambient air at the fresh air intake, for carbon monoxide (CO), carbon dioxide (CO_2), total volatile organic compounds (TVOCs), and particulates (including PM10).

Technologies /Strategies:

Provide action plan for periodic system maintenance, monitoring, occupant/manager training.

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6.C1 Holistic Delivery of Facility

Intent: Encourage a facility delivery process that actively engages all stakeholders in the design process to deliver a facility that meets all functional requirements while effectively optimizing tradeoffs among sustainability, first costs, life cycle costs and mission requirements.

Requirement: ❑ Choose team leaders that are experienced in holistic delivery of facilities. **1**

❑ Train the entire team in the holistic delivery process. The team must include all stakeholders in the facility delivery, including the users, the contracting staff, the construction representatives, project manager, and design/engineering team members.

1

❑ Identify project goals and metrics. **1**

❑ Plan and execute charrettes with team members at critical phases of the facility delivery. **1**

❑ Identify and resolve tradeoffs among sustainability, first costs, life cycle costs and mission requirements through charrettes and other collaborative processes. **2**

❑ Document required results for each phase of project deliverables that achieve the project goals and are measurable throughout the facility life span.

1

Technologies /Strategies:

Develop performance specifications or choose competitive range of products that meet environmental criteria.

Use automated modeling and analysis tools to assess site and facility design alternatives.

Conduct life-cycle cost analysis (LCCA) in the design process according to the Federal Facilities Council Technical Report, Sustainable Federal Facilities: A Guide To Integrating Value Engineering, Life Cycle Costing, and Sustainable Development, FFC # 142, 2000.

Conduct a full ecological assessment to include soil quality, water resources and flows, vegetation and trees, wildlife habitats and corridors, wetlands, and ecologically sensitive areas to identify the least sensitive site areas for development. Evaluate space utilization/functions to reduce overall space requirements, considering networking, flextime, flexi-place, dual-use, and other strategies to reduce space requirements/optimize facility size.

7.C1 Operation and Maintenance

Intent: Encourage the development of a facility delivery process that enhances efficient operation and maintenance of the facility.

Requirement: ❑ Develop a facility operations and maintenance program to include: **2**

- Commissioning instructions for all facility systems.
- Comprehensive facility operations and maintenance instructions for system operation, performance verification procedures and results, an equipment inventory, warrantee information, and recommended maintenance schedule. The instructions should include a comprehensive, preventive maintenance program to keep all facility systems functioning as designed.
- A periodic training program for occupants, facilities managers, and maintenance staff in all facility operations and maintenance activities.
- Instructions on sustainable cleaning and pest control practices.
- Develop a comprehensive site/facility recycling/waste management plan.

❑ Provide surfaces, furnishings, and equipment that are appropriately durable, according to life cycle cost analysis.
1

Technologies
/Strategies:

Maintain facility elements, systems and subsystems on a routine maintenance schedule to ensure integrity and longevity.

Perform scheduled cleaning and maintenance activities with nontoxic environmentally preferable cleaning products and procedures. Keep air ducts clean and free of microorganisms through a structured program of preventive maintenance. Clean lighting systems following a regular maintenance schedule to ensure optimum light output and energy efficiency.

Use pesticides and herbicides sparingly and only when necessary with preference to natural methods and materials over poisons and toxic agents.

Use automated monitors and controls for energy, water, waste, temperature, moisture, and ventilation monitors and controls. Turn off the lights, computers, computer monitors, and equipment when not in use. Enable power-down features on office equipment.

7.C2 Soldier and Workforce Productivity and Retention

Intent: Provide a high-quality, functional, healthy and safe work environment to promote soldier and workforce productivity and retention.

Requirement: ❑ Provide a high quality indoor environment to enhance user/occupant quality of life (QOL). **1**

❑ Provide a highly functional work environment to promote user/occupant work productivity. **1**

❑ Provide a healthy and safe work environment to sustain QOL and productivity. **1**

Technologies
/Strategies:

Use a registered/certified interior designer to provide stimulating interior environments with pleasant colors, surface treatments, room proportions and ceiling heights, external views, natural lighting, and quality detailing for interior furnishings, equipment, materials and finishes. Use IES standards to provide light to occupied space with variations in level, comfortable contrasts, natural color rendition, natural/man-made, and adequate controls to optimize light aesthetic qualities. Provide occupant control of individual work areas configuration, and lighting, thermal and ventilation systems.

Collaborate with end users to identify functional and technical requirements and to perform adjacency studies. Configure occupied space to address the specific workers/occupants functions and activities that will be carried out there. Meet TI 800-01 Design Guide requirements. Design and configure occupied space, and select furniture and equipment using human ergonomics. Identify existing user amenities, such as dining, recreation, socialization, shopping and child care facilities. Identify what amenities should be incorporated into the project or provided in the future, nearby facility. Provide ventilation air in sufficient volume free from natural and man made contaminants.

8.C1 Functional Life of Facility and Supporting Systems

Intent: Assess the functional life of a facility and its supporting systems to optimize the infrastructure investment.
Requirement: ❑ Identify how long the designed function is likely to occupy the current facility. **1**
❑ Identify how long the envelope, structure, HVAC, plumbing, communications, electrical, and other systems are likely to last before requiring replacement or upgrade. Consider economic, functional and physical obsolescence.
1
Technologies
/Strategies:
Assess the typical or likely lifespan of the function(s) to be accommodated to forecast eventual adaptation to a different use(s). Assess the life spans of the various building systems/components to forecast their revision/replacement during the facility lifespan and design in a manner that facilitates revision/replacement. Consider the life span of the weapon systems, doctrines, or other programs supported by the facility.
Use life cycle data and other sources to identify the life span of the embodied systems.

8.C2 Adaptation, Renewal and Future Uses

Intent: Encourage facility design that is responsive to change over time to maximize accommodation of future uses without creating waste and insuring maximum useful life of products.
Requirement: ❑ Identify possible future uses for the facility; consider alternatives that expand the list of possible future uses. AND Design the building to accommodate as wide a range of future uses, as practical. AND Design the installation of building systems to accommodate foreseeable change with a minimum amount of disruption, cost, and additional materials.
1
❑ Build the smallest facility necessary to meet current mission functional requirements, using the most efficient shape and form, while taking into consideration expansion capabilities and potential future mission requirements. AND Design the facility for recycling of materials and systems.
1
Technologies
/Strategies:
Create durable, long-lasting and adaptable facility shell and structural system. Create an adaptable, flexible facility design using open planning, service corridors, interstitial space, access floors, demountable walls/partitions, modular furniture and other adaptable space configuration/utilization strategies.
Select materials that are recyclable, avoiding composite materials, such as reinforced plastics and carpet fibers and backing. Consider selecting materials and labeling construction materials with identification information to facilitate recycling. Use pre-cut/pre-fabricated materials and use standard lengths and sizes (dimensional modularity) in design. Design facility systems and subsystems for reconfiguration and/or disassembly/recycling using reversible/reusable connectors.

Maximum

Points

0 Max 20

1.R1 ❑ Erosion, Sedimentation and Water Quality Control [Required]
1.C1 ❑ Site Selection 2
1.C2 ❑ Installation/Base Redevelopment 2
1.C3 ❑ Brownfield Redevelopment 1
1.C4 ❑ Alternative Transportation 4
1.C5 ❑ Reduced Site Disturbance 2
1.C6 ❑ Stormwater Management 2
1.C7 ❑ Landscape and Exterior Design to Reduce Heat Islands 2
1.C8 ❑ Light Pollution Reduction 1
1.C9 ❑ Optimize Site Features 1
1.C10 ❑ Facility Impact 2
1.C11 ❑ Site Ecology 1

2.0 Water Efficiency (W) Score 0 Max 5

2.C1 ❑ Water Efficient Landscaping 2
2.C2 ❑ Innovative Wastewater Technologies 1
2.C3 ❑ Water Use Reduction 2

3.0 Energy and Atmosphere (E) Score 0 Max 28

3.R1 ❑ Fundamental Building Systems Commissioning [Required]
3.R2 ❑ Minimum Energy Performance [Required]
3.R3 ❑ CFC Reduction in HVAC&R Equipment [Required]
3.C1 ❑ Optimize Energy Performance 20
3.C2 ❑ Renewable Energy 4
3.C3 ❑ Additional Commissioning 1
3.C4 ❑ <<Deleted>>
3.C5 ❑ Measurement and Verification 1
3.C6 ❑ Green Power 1
3.C7 ❑ Distributed Generation 1

0 Max 13

4.R1 ❑ Storage & Collection of Recyclables [Required]
4.C1 ❑ Building Reuse 3
4.C2 ❑ Construction Waste Management 2
4.C3 ❑ Resource Reuse 2
4.C4 ❑ Recycled Content 2
4.C5 ❑ Local/Regional Materials 2
4.C6 ❑ Rapidly Renewable Materials 1
4.C7 ❑ Certified Wood 1

0 Max 17

5.R1 ❑ Minimum IAQ Performance [Required]
5.R2 ❑ Environmental Tobacco Smoke (ETS) Control [Required]
5.C1 ❑ IAQ Monitoring 1
5.C2 ❑ Increase Ventilation Effectiveness 1
5.C3 ❑ Construction IAQ Management Plan 2
5.C4 ❑ Low-Emitting Materials 4
5.C5 ❑ Indoor Chemical and Pollutant Source Control 1
5.C6 ❑ Controllability of Systems 2
5.C7 ❑ Thermal Comfort 2
5.C8 ❑ Daylight and Views 2
5.C9 ❑ Acoustic Environment /Noise Control 1
5.C10 ❑ Facility In-Use IAQ Management Plan 1

0 Max 7

6.C1 ❑ Holistic Delivery of Facility 7

0 Max 6

7.C1 ❑ Operation and Maintenance 3

7.C2 ❑ Soldier and Workforce Productivity and Retention 3

0 Max 4

8.C1 ❑ Functional Life of Facility and Supporting Systems 2

8.C2 ❑ Adaptation, Renewal and Future Uses 2

Total Score 0 Max 100

SPiRiT Bronze 25 to 34 Points

SPiRiT Silver 35 to 49 Points

SPiRiT Gold 50 to 74 Points

SPiRiT Platinum 75 to 100 Points

Please forward any comments that you may have on this Sustainable Project Rating Tool, preferably by Email, to:

Mr. Harry Goradia
U. S. Army Corps of Engineers
ATTN: CEMP-ET
7701 Telegraph Road
Alexandria, VA 22315-3862
Phone 703-428-6460
FAX 703-428-7903
Email harry.goradia@hq02.usace.army.mil

SPiRiT Para.

APPENDIX D
SPIRIT REQUIREMENTS AND SUMMARY TABLE

APPENDIX D

SPIRIT REQUIREMENTS AND SUMMARY TABLE

	Installation Communications Facility SPIRIT Requirements and Summary Table	Maximum points possible	Mandatory points in RFP	Proposal points
PAR	**FEATURE**			**REMARKS**
NOTE: SEE SPIRIT TEXT FOR FULL DESCRIPTION OF REQUIREMENTS FOR EACH ITEM. COMPLIANCE IS REQUIRED IF "R" OR A NUMBER GREATER THAN ZERO APPEARS IN THE MANDATORY POINTS COLUMN				
1.R1	Sediment/Erosion Control Plan	R	R	RFP requirement
1.C1	Avoid undesirable sites	1	0	N/A
	Site adjacencies/compatibility	1	0	N/A
1.C2	Increase density	1	0	N/A
	Minimize new infrastructure	1	0	N/A
1.C3	Brownfield	1	0	N/A
1.C4	Proximity to transit system	1	0	N/A
	Bike racks & showers	1	0	
	Proximity to alternative fuel station	1	0	N/A
	Parking capacity, carpool parking	1	0	
1.C5	Limited site disturbance , restoration	1	0	N/A
	Reduced footprint	1	0	
1.C6	Stormwater runoff rate	1	0	
	Stormwater treatment	1	0	
1.C7	Reduce site heat islands	1	0	N/A
	Reduce roof heat islands	1	0	N/A
1.C8	Reduce light pollution	1	0	N/A
1.C9	optimize site features	1	0	N/A
1.C10	Cluster facilities	1	0	N/A
	Mitigate offsite impacts	1	0	N/A
1.C11	Site Ecology	1	0	N/A
2.C1	High efficiecy irrigation/recycle site water	1	0	
	no irrigation	1	0	
2.C2	Innovative wastewater technologies	1	0	
2.C3	20% Water use reduction	1	0	
	30% Water use reduction	1	0	
3.R1	Building commissioning	R	R	RFP requirement
3.R2	Minimum energy performance	R	R	RFP requirement
3.R3	CFC Reduction	R	R	RFP requirement
3.C1	Optimize energy performance	20	0	
3.C2	5% Onsite renewable energy	1	0	
	10% onsite renewable energy	2	0	
	15% onsite renewable energy	3	0	
	20% onsite renewable energy	4	0	
3.C3	Additional commissioning	1	0	
3.C5	Measurement and verification	1	0	
3.C6	Green power	1	0	N/A
3.C7	Distributed generation	1	0	
4.R1	Storage & collection of recyclables	R	R	RFP requirement
4.C1	Building reuse	3	0	RFP requirement
4.C2	Reduce construction waste	1	0	

APPENDIX D

SPIRIT REQUIREMENTS AND SUMMARY TABLE

	Reduce construction waste addl	1	0	
4.C3	Salvage/reused materials	1	0	
	Salvage/reused materials addl	1	0	
4.C4	Materials recycled content	1	0	
	Addl materials recycled content	1	0	
4.C5	Regionally manufactured materials	1	0	
	Regionally extracted materials	1	0	
4.C6	Rapidly renewable materials	1	0	
4.C7	Certified wood	1	0	
5.R1	Minimum IAQ performance	R	R	RFP requirement
5.R2	Environmental tobacco smoke	R	R	RFP requirement
5.C1	IAQ monitoring	1	0	
5.C2	Increase ventilation effectiveness	1	0	
5.C3	SMACNA/absorptive mtls/filtration	1	0	
	Flushout/baseline IAQ test	1	0	
5.C4	Adhesive/sealant VOC	1	1	RFP requirement
	Green Seal paints & coatings	1	1	RFP requirement
	CRI Green Label carpet	1	1	RFP requirement
	No urea/formaldehyde resins	1	1	RFP requirement
5.C5	Indoor pollutant source control	1	0	
5.C6	Operable windows, perimeter light controls	1	0	
	Non-perimeter controls	1	0	
5.C7	ASHRAE thermal comfort stds	1	1	RFP requirement
	Temperature/humidity monitoring	1	0	
5.C8	75% daylighting	1	0	N/A
	90% outdoor view	1	0	
5.C9	Noise control	1	0	N/A
5.C10	IAQ management plan	1	0	
6.C1	Team leader experience	1	0	N/A
	Train team	1	1	
	Identify project goals	1	1	
	Charettes	1	1	
	Resolve tradeoffs	1	1	
	Document results	1	1	
7.C1	Develop O&M plan	2	2	RFP requirement
	Durable materials	1	0	N/A
7.C2	Quality indoor environment	1	0	N/A
	Functional work environment	1	0	N/A
	Healthy work environment	1	0	N/A
8.C1	Determine functional life	1	0	
	Determine building life	1	0	
8.C2	Design for future uses	1	0	N/A
	Minimize building size	1	0	N/A
	TOTAL	100		26 minimum required

APPENDIX E
GEOTECHNICAL INFORMATION

(NOT APPLICABLE)

APPENDIX F
ENVIRONMENTAL AND ASBESTOS INFORMATION

LEAD AND ASBESTOS SURVEY REPORT
BRYANT HALL
FT. BRAGG, NC

Prepared For:

Mr. Dean Morr
Steven & Wilkinson of South Carolina, Inc.
1501 Main Street
Columbia, SC 29201

Prepared By:

Diversified Environmental Technologies, Inc.
7001 St. Andrews Rd. Unit 359
Columbia, SC. 29212

May 31, 2002

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SIEVENS & WILKINSON
COLUMBIA, S. C.

I. EXECUTIVE SUMMARY

Diversified Environmental Technologies, Inc. (DETI) was retained by Steven & Wilkinson to perform an asbestos and lead building inspection at Bryant Hall, Ft. Bragg, NC. The purpose of the survey was to identify accessible asbestos-containing materials (ACMs) and lead containing coatings using non-destructive sampling protocol. The on site inspection was performed in May, 2002 by Robert Weismann, Project Manager, NC Licensed Asbestos Inspector #12049 and EPA trained Lead Paint Inspector. The onsite inspection also identified universal and hazardous materials (i.e.: florescent bulbs, PCB ballasts, hydraulic fluids, mercury switches, and others)

ASBESTOS:

Homogenous areas were identified and 47 bulk samples were collected from suspect ACM materials within the structure.

Two materials were identified by the survey as containing asbestos greater than 1% and therefore are regulated as ACM:

- The biege, tan 1' x 1' ceiling tiles located in the hallways of the 2nd-6th floors were analyzed as containing 5% amosite type asbestos. There is approximately 7660 square feet of this **friable** ACM located in the building. Seven samples were collected of this material, #'s 15, 16, 17, 18, 19, 31 and 32. These identified ACM's must be removed, transported and disposed of prior to renovations to the building by a NC licensed asbestos abatement contractor with properly licensed personnel.

- The black mastic under the floor tile was found to contain 5% chrysotile type asbestos. Seven samples were collected of this material, #'s7, 8, 9, 10, 11, 38 and 39. There is approximately 63,200 square feet of this ACM in the building. **This material is non-friable and, therefore, does not have to be removed by a NC licensed asbestos abatement contractor if the material is not broken, sanded, grinded or abraded to generate airborne emissions of dust.** Contractor's who work around this material during renovation activities must be notified that this ACM is present under the OSHA Hazard Communication Standard.

LEAD COATINGS:

There were 9 paint chip samples taken from suspected lead containing coatings (paint). The paint was not found to contain > 0.5 % lead and is not considered lead paint by the EPA and HUD. The paint was found to contain > 0.06% and is considered lead paint according to the Consumer Product Safety Council. Some construction and demolition landfills will not accept this waste. Prior to disposal of this material the landfill should be notified to determine compliance and proper handling for disposal.

II. INTRODUCTION

The survey consisted of a visual inspection of the interior and exterior of the building and bulk sampling of the building for suspect asbestos-containing materials (ACMs) and lead containing paint. Bulk samples were collected using non-destructive techniques in selected representative locations within the structure.

The objectives of the survey were to:

- Perform a visual inspection of the building to identify and quantify accessible friable and non-friable suspect ACMs and lead based coatings;
- Collect and analyze bulk samples of suspect materials for asbestos and paint chip samples for lead content and identification;
- Inspect all accessible areas of the building;
- Ensure the technical quality of all work by using NC licensed Asbestos Inspectors and EPA trained Lead Based Paint Inspectors;
- Consolidate data and findings into a report format;

III. METHODOLOGIES

A. Visual Inspection for ACM

Accessible building materials were visually inspected using the methods presented in the Federal AHERA regulations (40 CFR, Part 763) as a guideline. While AHERA is only directly applicable to public schools, the principles presented under the Final Rule are generally accepted as the industry standard for ACM inspections. Suspect ACMs were also physically assessed for friability, condition and disturbance factors.

B. Bulk Sampling for ACM

Bulk samples of all accessible homogeneous materials in identified functional spaces were collected. Samples were collected for each separate homogeneous material. A homogeneous material is defined as a surfacing material, thermal system insulation, or miscellaneous material that is uniform in use, color and texture. Examples of homogeneous materials at the site include:

- Floor tile
- Ceiling tiles

- Sheetrock and Joint Compound

A functional space is defined as a spatially distinct unit within a building that contains identifiable populations of building occupants. Examples of functional spaces include:

- Offices
- Passageways

The functional space concept is helpful in determining the use and occupancy of building areas containing confirmed ACMs. Knowing the types of occupants and their use of an area may influence the selection of an asbestos management option and/or corrective action. If multiple corrective actions are necessary, the occupancy and use of individual areas may also become important factors when establishing the priority, or ranking, of each corrective action.

Samples were collected using wet methods to minimize fiber release. The suspect ACMs were sampled using a knife or other similar coring device suitable to the type of material sampled, to cut through its entire thickness to ensure that a cross-section of the material has been obtained. The material was then placed in an appropriately labeled container, which was sealed and submitted to the laboratory for analysis. A unique sample numbers was assigned to each sample.

C. Asbestos Bulk Sample Analysis

A total of (47) asbestos bulk samples were collected. Bulk samples were analyzed by Air Quality Laboratories located at 4301 N.W. 63rd street, Oklahoma City, Ok. 73116. The laboratory is accredited under the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program (NVLAP), for the analysis of asbestos bulk material samples.

All asbestos samples were analyzed using Polarized Light Microscopy with Dispersion Staining (PLM/DS) techniques in accordance with the methodology approved by the U.S. Environmental Protection Agency (EPA). The percentage of asbestos present in the samples was determined on the basis on visual area estimation. As set forth in the Code of Federal Regulations, 40 CFR Part 763, Appendix A to Subpart F, Section 1.2 and 1.7.2.4, the lower limit of reliable detection for asbestos using the PLM method is approximately one percent (1%) by volume.

When "None Detected" (ND) appears in this report, it should be interpreted as meaning no asbestos was observed in the sample material above the reliable limit of detection for the PLM method (1%).

D. Sample Analysis for Lead in Paint

DETI took (9) bulk samples for lead based paint. The samples were collected on historically painted components such as doorframes, window frames, and walls. The samples were sent to Air Quality Laboratories located at 4301 N.W. 63rd street, Oklahoma City, Ok. for subsequent analysis. EPA Method SW-846 Atomic Absorption was utilized in performing analysis of paint chip samples. See Appendix B for the Laboratory Analysis Reports.

IV. DISCUSSION

A. Background

Asbestos is a common term for a group of naturally occurring mineral fibers. Due to its durability and insulating quality it was used in a wide variety of building products including structural fireproofing, pipe and duct insulation, plasters, roofing, floor tile and linoleum. Adverse health effects have been associated with the inhalation of airborne asbestos fibers by asbestos industry workers. The asbestos fibers that are tightly bound in building materials however do not represent an exposure hazard unless disturbed in such a way that releases airborne fibers (i.e., cutting, drilling or sanding). By June of 1978, the U.S. EPA had effectively banned the use of asbestos in spray application products such as structural fireproofing and acoustical ceilings, pipe-lagging, joint compounds and spackle. Asbestos is still used in the manufacture of non-friable products such as vinyl floor tile and roofing materials.

The U.S. Department of Housing and Urban Development (HUD) defines lead based paint as a paint film with a concentration above the level of 0.5 percent lead by weight (>0.5% Pb) by weight when measured by laboratory analysis. This definition of lead based paint is described in the HUD document "Lead Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing". The United States Environmental Protection Agency (EPA) is promulgating regulations which will adopt this standard, therefore this is considered the Federal Lead Standard.

In South Carolina, DHEC states that painted debris with less than a total lead concentration of 0.06% (i.e. not lead based paint) can be disposed of at a Construction and Demolition (C&D) Landfill. A copy of the test results must be presented to the C&D Landfill. The painted debris can be disposed of at a Municipal Solid Waste Landfill (MSWLF) without testing, however, individual landfills may require testing and a copy of the results.

OSHA promulgated the "Lead in Construction Standard: Interim Final Rule" (29 CFR 1926.62) in June of 1993 which governs employee exposure to leaded materials. OSHA considers any paint film sample, which contains a detectable amount of lead as lead containing paint. OSHA considers lead containing paint a health hazard, especially when disturbed by construction type activity. When working with leaded materials, workers must be provided awareness

training regarding lead and its effects on the body, appropriate respiratory protection, blood lead levels performed, etc., until a Negative Exposure Assessment is performed which documents exposure levels below the Action Level of 30 micrograms per cubic meter (ug/m^3).

B. Current Regulations

The following is a summary of current Federal and State regulations which contain requirements related to the performance of building surveys for asbestos and lead coatings. These summaries are not intended to be all-inclusive and do not contain every aspect of the regulations discussed.

U.S. EPA National Emission Standard for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61

Under the NESHAPs regulation, no visible emissions are allowed during building demolition or renovation activities, which involve regulated asbestos-containing materials. For this reason all buildings must be surveyed for asbestos-containing materials prior to demolition or renovation. The EPA, and/or the local Air Quality Management District, which implements EPA actions, must be notified prior to any building demolition even if no asbestos-containing materials are present. Regulated asbestos-containing material (RACM) is defined as any friable material with an asbestos content of greater than one percent.

Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 763, Subpart E

AHERA requires performance of asbestos surveys and the development of Asbestos Management Plans for all of the nation's primary and secondary schools. Although this regulation applies to primary and secondary schools only, the procedures mandated under AHERA are considered the industry standard.

NC DHHC Standards of Performance for Asbestos Projects, Regulation 61-86.1

Stipulates requirements for notification, inspection, work practices, licensing, storage, transportation, disposal, labeling, air sampling and record keeping for asbestos abatement projects in North Carolina.

29 CFR 1926.62 Lead in Construction Standard

Outlines requirements for worker protection, training, medical surveillance, air sampling, work procedures, labeling storage and disposal relating to lead materials in construction activities.

40 CFR 260 RCRA Hazardous Waste Regulations

Standards to determine applicability of hazardous waste definitions to lead containing waste. Outlines labeling, storage, containerizing transportation and record keeping requirements for waste. Defines Toxicity Characteristic Leaching Process (TCLP) analysis method to determine regulated lead content of waste.

C. Corrective Action Options

DETI evaluated the condition and location of confirmed ACMs encountered during the survey to make recommendations for corrective action (if appropriate). Corrective action options range from managing the material in place to complete removal. Corrective actions are designed to ensure the safety of all individuals who either work in the vicinity of the ACMs or perform duties, which have the potential for ACM disturbance. Selection of an appropriate corrective action is based upon the physical nature of the material, the potential for disturbance of the material, the configuration and functional use of the structure, local environmental conditions, and regulations. Final recommendations for corrective action are based on the professional expertise and judgement of the Diversified Environmental Technologies, Inc., Inspector/Management Planner, using the EPA AHERA Final Rule as a guideline. The corrective actions listed below outline the four types of control options recognized as acceptable by the U.S. EPA.

Corrective Action Option I: Asbestos Management Plan and Operations and Maintenance Program (O & M Program)

Should already be in place or be placed in service.

Corrective Action Option II: Encapsulation

Encapsulation refers to the spraying of the ACM with a sealant. Encapsulants are typically of the bridging (surface coating) or penetrative variety. The primary function of an encapsulant is to penetrate the ACM, adhere to the substrate and form a tough skin over the material. Additionally, the encapsulant can withstand minimal impact, is flexible, flame retardant, resists deterioration over time, and is generally not considered to be toxic. Care must be taken to ensure that the added weight of the encapsulant does not cause the base material to delaminate from its substrate surface due to the force of gravity.

Corrective Action Option III: Enclosure

Enclosure involves the construction of airtight[2] walls, ceilings or conduits around the ACM. Design of the enclosure must address the potential release of fibers during construction, structural integrity to withstand the added weight of the enclosures, accessibility of utilities, and local fire and building codes.

Corrective Action Option IV: Removal

Removal involves, to the greatest extent practical, the complete removal, disposal, and

---

2 No enclosure will be totally airtight; however, the enclosure must be designed to greatly reduce air movement across the enclosure boundary.

replacement, if necessary, of the ACM. Removal usually also requires encapsulation of the remaining structure to lock down residual fibers which may exist. Removal is generally required prior to renovation and/or demolition activities that would directly impact the ACM.

V. SURVEY FINDINGS

The findings of the inspection and hazard assessment indicate the presence of the following regulated ACM's and lead based paint:

A. Asbestos-Containing Materials

Two materials were identified by the survey as containing asbestos greater than 1% and therefore are regulated as ACM:

- The biege, tan 1' x 1' ceiling tiles located in the hallways of the 2nd-6th floors were analyzed as containing 5% amosite type asbestos. There is approximately 7660 square feet of this **friable** ACM located in the building. Seven samples were collected of this material, #'s 15, 16, 17, 18, 19, 31 and 32. These identified ACM's must be removed, transported and disposed of prior to renovations to the building by a NC licensed asbestos abatement contractor with properly licensed personnel.

- The black mastic under the floor tile was found to contain 5% chrysotile type asbestos. Seven samples were collected of this material, #'s7, 8, 9, 10, 11, 38 and 39. There is approximately 63,200 square feet of this ACM in the building. **This material is non-friable and, therefore, does not have to be removed by a NC licensed asbestos abatement contractor if the material is not broken, sanded, grinded or abraded to generate airborne emissions of dust.** Contractor's who work around this material during renovation activities must be notified that this ACM is present under the OSHA Hazard Communication Standard.

B. Lead in paint chip sample results

- The paint was not found to contain > 0.5 % lead and is not considered lead paint by the EPA and HUD. The paint was found to contain > 0.06% and is considered lead paint according to the Consumer Product Safety Council. Some construction and demolition landfills will not accept this waste. Prior to disposal of this material the landfill should be notified to determine compliance and proper handling for disposal.

C. Universal and Hazardous Materials

- The A/C system including the air handlers, chill water units, ductwork and thermostats were replaced in 1994.
- The light fixtures including the light bulbs, ballasts and housings are under a maintenance contract and are replaced and properly disposed of as needed.

Report Prepared By:

Chuck Koch, CIH, MPH
NC SAM 90105
NC Inspector 11286
NC Project Designer 40365

Robert Weismann
NC Inspector 12049

Air Quality Laboratories

4301 N.W. 63rd St., Suite 201 • Oklahoma City, OK 73116
Phone: (405) 767-0660 • Fax: (405) 767-0661

Bulk Asbestos Analysis Report

AQL Set ID: 0208061
Date Received: June 14, 2002
Received By: Allison Bateman

Client: Chuck Koch
DETI
7001 St. Andrews Rd., #359
Columbia, SC 29212

Date Analyzed: June 18, 2002
Analyzed By: M. Kendall/S. Bromley
NVLAP Lab ID: 101580-0

Account Number: 141

Project: Ft. Bragg, Bryant Hill
Project Location: N/A
Project No.: N/A

Sample Date: N/A
Sampled By: N/A

AQL ID	Client ID	Color & Description	Composition	Asbestos Content	Non-Asbestos Fibers
1	1	Beige 2x3 Ceiling Tile	Homogenous	NAD	Cellulose 25% Glass Fiber 15%
2	2	Beige 2x3 Ceiling Tile	Homogenous	NAD	Cellulose 25% Glass Fiber 15%
3	3	Beige 2x3 Ceiling Tile	Homogenous	NAD	Cellulose 25% Glass Fiber 15%
4	4	Black Coveboard	Layered	NAD	**
		Brown Mastic		NAD	**
5	5	Black Coveboard	Layered	NAD	**
		Brown Mastic		NAD	**
6	6	Black Coveboard	Layered	NAD	**
		Brown Mastic		NAD	**
7	7	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**
8	8	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**
9	9	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**
10	10	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**
11	11	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**

Air Quality Laboratories

4301 N.W. 63rd St., Suite 201 • Oklahoma City, OK 73116
Phone: (405) 767-0660 • Fax: (405) 767-0661

Bulk Asbestos Analysis Report
AQL Set ID: 0206061

AQL ID	Client ID	Color & Description	Composition	Asbestos Content	Non-Asbestos Fibers
12	12	Beige 2x3 Ceiling Tile	Homogenous	NAD	Cellulose 25% Glass Fiber 15%
13	13	Beige 2x3 Ceiling Tile	Homogenous	NAD	Cellulose 25% Glass Fiber 15%
14	14	Beige 2x3 Ceiling Tile	Homogenous	NAD	Cellulose 25% Glass Fiber 15%
15	15	Beige 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
16	16	Beige 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
17	17	Beige 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
18	18	Beige 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
19	19	Beige 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
20	20	Black Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
21	21	Black Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
22	22	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
23	23	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
24	24	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
25	25	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
26	26	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
27	27	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**

Air Quality Laboratories

4301 N.W. 63rd St., Suite 201 • Oklahoma City, OK 73116
Phone: (405) 767-0660 • Fax: (405) 767-0661

Bulk Asbestos Analysis Report
AQL Set ID: 0206061

AQL ID	Client ID	Color & Description	Composition	Asbestos Content	Non-Asbestos Fibers
28	28	Gray Coveboard	Layered	NAD	**
		Yellow Mastic		NAD	**
29	29	Black Coveboard	Layered	NAD	**
		Brown Mastic		NAD	**
30	30	Black Coveboard	Layered	NAD	**
		Brown Mastic		NAD	**
31	31	Tan 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
32	32	Tan 12x12 Ceiling Tile	Homogeneous	Amosite 5%	Glass Fiber 40%
33	33	White Joint Compound	Homogeneous	NAD	**
34	34	White Joint Compound	Homogeneous	NAD	**
35	35	White Joint Compound	Homogeneous	NAD	**
36	36	White Joint Compound	Homogeneous	NAD	**
37	37	White Joint Compound	Homogeneous	NAD	**
38	38	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**
39	39	Gray Floor Tile	Layered	NAD	**
		Black Mastic		Chrysotile 5%	**
40	40	Beige 2x3 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%
41	41	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%
42	42	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%
43	43	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%
44	44	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%
45	45	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%

Air Quality Laboratories

4301 N.W. 63rd St., Suite 201 • Oklahoma City, OK 73116
Phone: (405) 767-0660 • Fax: (405) 767-0661

Bulk Asbestos Analysis Report
AQL Set ID: 0206061

AQL ID	Client ID	Color & Description	Composition	Asbestos Content	Non-Asbestos Fibers
46	46	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%
47	47	Beige 2x2 Ceiling Tile	Homogeneous	NAD	Cellulose 25% Glass Fiber 15%

Reviewed & Approved

June 19, 2002

Date of Report

Air Quality Laboratories is a NVLAP-accredited PLM laboratory (Lab Code 101880-0). This report relates only to the specific items tested. NVLAP accreditation applies only to bulk sample analysis performed according to EPA 600/M4-82-020. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This report may not be reproduced except in full, without the written approval of the laboratory

0206061

Diversified Environmental Technologies, Inc

Company: DETI Phone: 8035155952 Fax: 803 407-7705	Address: Columbia, SC, 29212 7001 St. Andrews Rd #359	P.O.#:

Project Information	Analysis Type	Turnaround Time							Air Filter Info	
		6-8 hr	12 hr	24 hr	48 hr	72 hr	5 day	other		
Job Name: Ft. Bragg Bryant Hall	EM/AHERA								MCE	
Job No.:	EM/LEVEL II								PC	
	EM/BULK								25mm	
Job Desc.:	EM/DUST								37mm	
	EM/WATER								0.45µm	
	CM								0.80µm	
Job Manager: Rob Weisman	LM PLM						X		Other:	
	EAD									
	THER:									

Results to: PLM Samples

Return Samples Yes___ No X

Invoice to:

Phone:

Fax:

Written Report To:

Pager:

Comments: Fax Results to 803 407-7705

Sample I.D.	Sample Location (Indoor(I)/Outdoor(O) - Indoor(I)Area/(P)ersonal/(E)xposure)	Start Time	Stop Time	Total Time	X	Liters/Min.	=	Liters/Min.	Date Collected
1	Ceiling tile in Basement								
2	2x3								
3	↓ ↓								
4	Black Coveboard w/Brown Mastic								
5	↓ ↓								
6									
7	Floor tile w/mastic								
8	↓ ↓								
9									
10									
11	↓ ↓								
12	2x3 Ceiling tile 6th floor								
13	↓ ↓								
14									
15	12x12 Ceiling tile in hallway								
16	↓ ↓								
17									
18									
19	↓ ↓								
20	Black Coveboard w/mastic								
21	↓ ↓								

Relinquished By (Signature)	Date	Received By (Signature)	Date
		Abateman	6-14-02

0720601

Diversified Environmental Technologies Inc

Company: DETE Phone: 803 548-5952 Fax: 803 407-7705	Address: 7001 St Andrews Rd #359 Columbia SC 29212	P.O.#:

Project Information	Analysis Type	Turnaround Time							Air Filter Info	
		6-8 hr	12 hr	24 hr	48 hr	72 hr	5 day	other		
Job Name: Ft. Bragg Bryant Hall	EM/AHERA								MCE	
Job No.:	EM/LEVEL II								PC	
	EM/BULK								25mm	
	EM/DUST								37mm	
Job Desc.:	EM/WATER								0.45µm	
	CM								0.80µm	
Job Manager: Rob Weisman	LM PLM						X		Other:	
	EAD									
	THER:									

Results to: PLM Samples	Return Samples Yes___ No X
Invoice to:	Phone:
	Fax:
Written Report To:	Pager:

Comments: fax Results to 803 407-7705

Sample I. D.	Sample Location (I)nside/(O)utside/(B)lank/(P)ersonal/(E)xcursion	Start Time	Stop Time	Total Time	X	Liters/ Min.	=	Liters/ Min.	Date Collected
22	Blue Coveboard w/mastic								
23									
24									
25									
26									
27	Blue Coveboard w/mastic								
28									
29	Black Coveboard w/mastic								
30									
31	12x12 Ceiling tile								
32									
33	Joint Compound								
34									
35									
36									
37									
39	Floor tile								
39									
40	2x3 Ceiling tile								
41	2x2 Ceiling tile								
42									

Relinquished By (Signature)	Date	Received By (Signature)	Date
[signature]		Abatemen 9:15am	6-14-02

02 0600 61

Diversified Environmental Technologies Inc

Company: DETI Phone: 803 913-5952 Fax: 803-407-7705	Address:	P.O.#:

Project Information	Analysis Type	Turnaround Time 6-8 hr	12 hr	24 hr	1 hr	72 hr	5 day	other	Air Filter Info	
Job Name: Ft. Bragg Bryant Hall	TEM/AHERA								MCE	
Job No.:	TEM/LEVEL II								PC	
	TEM/BULK								25mm	
	TEM/DUST								37mm	
Job Desc.:	TEM/WATER								0.45um	
	PCM								0.80um	
Job Manager: Rob Weisman	PLM						X		Other:	
	LEAD									
	OTHER:									

Results to: PLM Samples

Return Samples Yes___ No___

Invoice to:

Phone:

Fax:

Written Report To:

Pager:

Comments: Fax Results to 803 407-7705

Sample I.D.	Sample Location (Inside/Outside/Basement/Personal/Exposure)	Start Time	Stop Time	Total Time	X	Liters/Min.	=	Liters/Min.	Date Collected
43	2x2 Ceiling tiles								
44	↓								
45	↓								
46	↓								
47	↓								

Relinquished By (Signature)	Date	Received By (Signature)	Date
[illegible]		Abateman	6-14-02

Air Quality Laboratories

4301 N.W. 63rd St., Suite 201 • Oklahoma City, OK 73116
Phone: (405) 767-0660 • Fax: (405) 767-0661

Environmental Chemistry Analysis Report

AQL Set ID: 0206060
Date Received: June 14, 2002
Received By: Cathy Brooks

Client: Chuck Koch
D.E.T.I.
7001 St. Andrews Rd., Ste. 359
Columbia, S.C. 29212

Sample Date: June 13, 2002
Sampled By: N/A

Account Number: 141

AIHA Lab ID: 156944

Project: Ft. Bragg Bryant Hall
Project Location: N/A
Project No.: N/A

AQL ID	Client ID	Parameter	Method	Detection Limit	Result	Unit	Analyst	Date/Time Analyzed
1	L-1	Lead	EPA 6010	0.0003	0.26	%	NP	1205 06/18/02
2	L-2	Lead	EPA 6010	0.0003	0.22	%	NP	1205 06/18/02
3	L-3	Lead	EPA 6010	0.0003	0.24	%	NP	1205 06/18/02
4	L-4	Lead	EPA 6010	0.0003	0.17	%	NP	1205 06/18/02
5	L-5	Lead	EPA 6010	0.0003	0.13	%	NP	1205 06/18/02
6	L-6	Lead	EPA 6010	0.0003	0.14	%	NP	1205 06/18/02
7	L-7	Lead	EPA 6010	0.0003	0.12	%	NP	1205 06/18/02
8	L-8	Lead	EPA 6010	0.0003	0.32	%	NP	1205 06/18/02
9	L-9	Lead	EPA 6010	0.0003	0.21	%	NP	1205 06/18/02

Cathy Brooks
Reviewed & Approved

June 18, 2002
Date of Report

This report applies only to the specific items tested. It is not indicative of the qualities of apparently identical or similar products or procedures and may not reflect other conditions present. It is not the intent of this report to make any statements regarding potential health effects or suggest any remedial procedures. This report shall not be reproduced, except in full, without the written approval of the laboratory.

O'Donnell

Diversified Environmental Technologies, Inc.

7001 St. Andrews Rd, Unit 359, Columbia, SC 29212
FAX (803) ~~749-2694~~ Phone (803) ~~749-2820~~
407-7705 513-5952

REQUEST FOR ANALYTICAL SERVICES
AND CHAIN-OF-CUSTODY FORM

Page _____ of _____

Date Submitted: 13 June 02 Analysis Due Date: 3-5 day turn

Project Number: _____ Project Name: FT Bragg Bryant Hall

Requested Analysis: ~~Polarized Light Microscopy (EPA-R-93/116)~~
ASTM D335-85A Lead in Paint by AA Spectrophotometry ✓
~~EPASW846 Method 1311 (TCLP) with Lead Analysis by EPA 7420~~

SAMPLE INFORMATION

ID#	DESCRIPTION	LOCATION	RESULT
L-1	White Paint	5th floor bathroom	
L-2	White Paint	↓	
L-3	White Paint	↓	
L-4	~~Blue~~ Blue Paint	5th floor Doorframe	
L-5	Blue Paint	3rd floor Doorframe	
L-6	Grey Paint	6th floor Doorframe	
L-7	Grey Paint	5th floor Doorframe	
L-8	Black Paint	5th floor Doorframe	
L-9	Black Paint	3rd floor Doorframe	

CHAIN OF CUSTODY

	Name	Date	Time
Samples Collected by:	Rod Weisman	12 Jun 02	
Transportation:	Fed Ex		
Lab Acceptance:	O'Donnell	June 14, 02	9:15

NORTH CAROLINA
ASBESTOS ACCREDITATION

Charles M Koch CIH
7001 St Andrews Rd Unit 35
Columbia, SC 29212

SSN		EXPIRATION	
520-86-8314		10-31-2002	
DOB	SEX	HT	WT
04-06-1962	M	5'10"	215
CLASS		#	EXP
DESIGNER		40365	[illegible]
INSPECTOR		11286	[illegible]
SUPER AIR MONIT		90105	

NORTH CAROLINA
ASBESTOS ACCREDITATION

SSN		EXPIRATION	
595-18-6392		10-31-2002	
DOB	SEX	HT	WT
05-23-1967	M	5'6"	240
CLASS		#	EXP
AIR MONITOR		80714	10-02
INSPECTOR		12049	05-02

Robert J Weismann
7001 St Andrews Rd #359
Columbia, SC 29212

The

American Board of Industrial Hygiene®

ABIH®

organized to improve the practice of Industrial Hygiene
proclaims that

Charles M. Koch

having met all requirements through
education, experience, and examination,
is hereby certified in the

COMPREHENSIVE PRACTICE
of
INDUSTRIAL HYGIENE

and has the right to use the designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH

July 22, 1994
date

Chair ABIH

6418
certificate number

Secretary ABIH

2002
US Army Corps of Engineers
Mobile District
Design Manual

Chapter 10
Interior Design

MOBILE

DISTRICT

CHAPTER 10

2002 INTERIOR DESIGN

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CHAPTER 10

2002 INTERIOR DESIGN

10.1 GENERAL INTERIOR DESIGN PROJECT REQUIREMENTS

10.1.1 Purpose

The purpose of “Chapter 10 Interior Design” is to provide general and technical information that applies to both building related and furniture related interior design projects. It covers the requirements for developing design criteria and project presentations. Following the instructions in this chapter and coordinating Chapter 10 with Chapter 9 "Architecture" and the other building related engineering chapters in the Mobile District Design Manual will ensure the practice and benefit of interior design is fully integrated into the project and the project delivery process used to solicit for the design, construction and “outfitting” of a facility.

10.1.2 Overview

The Mobile District has two categories for interior design services and two primary project delivery processes to solicit for the design, construction and “outfitting” of facilities. Exhibit 10-1a describes the two categories for interior design services. Exhibit 10-1b describes the two project delivery processes. The percentage level of design criteria and presentation information for building related and furniture related submittals vary within each project delivery process. However, 100% building related and furniture related interior designs shall be accomplished at the end of the project delivery process regardless of which type of solicitation is used.

Exhibit 10-1a	Two Categories for Interior Design Services
SID	• **Structural Interior Design (SID)** is the selecting and sampling of all the building's interior features. The SID submittal will include SID finish samples, interior floor plans, and detail drawings showing finish placement, finish schedules, interior signage schedules and material specifications. The SID is purchased and installed by the General Construction Contractor using Military Construction (known as MILCON, MCP, MCA) Funds
CID	• **Comprehensive Interior Design (CID)** is the selection and illustration of all interior furnishings required to "outfit" a facility. The CID includes samples of furniture finishes, furniture placement plans, illustrated order forms and a comprehensive cost estimate. The CID is to be fully coordinated with the SID, architectural layout, and building engineered system designs to ensure a fully integrated SID/CID project is developed to meet User/Project requirements. The CID design, like the SID design, is funded with MILCON funds when part of DD 1391. However, procurement and installation of the CID package is funded with operations & maintenance (O&M) funding requested by the User Group and funded by their Command. Although packaged in a "book set" the SID and CID are two separate and distinct projects when executing them.

Exhibit 10-1b	Project Delivery Process
PPTO	• **Price Performance Trade Off(PPTO)** When the PPTO project delivery process is used, 100% of the SID/CID will be developed by a single interior design source in the prescribed formats discussed herein. The single source may be either a government in-house interior design source or an Architecture-Engineering (A-E) interior design source.
D-B RFP	• **Design Build Request for Proposal (D-B RFP)** When the D-B project delivery process is used, the SID/CID project becomes a "two-step" process and will require the services of two different interior design sources to develop the SID/CID in the prescribed format herein. • **Step 1:** During the first step, either a government or A-E interior design source will provide nominal (10%-35%), partial (35%-50%) or full (100%)SID/CID design criteria. Two sections within the D-B RFP will require Interior Design criteria and instructions. The two sections are (1) Section 01010 "Design Criteria" and (2) Section 01012 "Design After Award". • **Step 2:** The second step occurs after award of the RFP D-B contract. During the design phase after award of the D-B contract, the D-B Contractor's interior design source will respond to the D-B RFP SID/CID instructions provided in Sections 01010 and 01012. When the design phase of the project is complete, 100% SID/CID submittals will be completed as well.

10.1.3 CID Procurement Criteria Review

As early as possible and before starting a PPTO or D-B RFP project, a CID procurement criteria discussion is to be held in conjunction with the facility design criteria review meeting. Answers to the following questions are to be used to develop the overall project solicitation instructions and possible bid options for development and installation of the CID.

Exhibit 10-1c	**CID Procurement Criteria Review**
Review Questions	• Will a CID package be part of the project design? (See the DD 1391) • Will the CID be government procured, contractor installed? • Will the CID be installed after the building is complete? • Which Contracting Group will buy the furniture? • Will systems furniture be procured with the building and the remaining CID procured by the User under a different action?
Attendees	• District Project Management • District Project Architect/Engineer • District Interior Designer • A-E Interior Designer • A-E Project Manager • User • Major Command Representative • Installation Contracting Specialist if not using General Services Administration

10.1.4 Reviews and Revisions

Reviews of SID/CID projects are to be performed by the Government regardless of the project delivery process. Chapter 10 is to be used by the Government reviewer as the basis for the SID/CID technical review comments.

Revisions and updates will require hard copy and digital copies of the SID/CID to be refreshed and resubmitted at the next formal submission unless otherwise required by the reviewer.

It is the responsibility of the in-house interior designer or A-E interior designer to request the return of SID/CID binders for updating and revision. Revisions will incorporate accepted comments and provide updated information as the project proceeds to the next phase of design. Some Air Force Major Commands require “in-process” updating to revise finishes that were disapproved at the formal submittal level. Their requests are to be met.

10.2 SID/CID REQUIREMENTS AND INFORMATION

SID/CID projects shall always be "packaged" and delivered as a “book set” but are two distinct products and shall not be cross-referenced. Both SID and CID packages shall use a “hard copy” and “digital” format. Ninety percent (90%) of the SID/CID project will be developed and reviewed electronically. The remaining ten percent (10%) will be “hard copy”. The “hard copy” products are the SID/CID binders and Color Boards.

10.2.1 Hard Copy SID/CID Deliverable Format Requirements.

Hard copy deliverables for both SID/CID projects will use the same presentation format for binders and color boards. The SID/CID binders become the “book set” envelope. The binders will hold the “hard copy” SID/CID color Boards and the digital project data (CD-ROM). Do not merge the SID and CID color samples together on the same board. Building related finishes are packaged separately and “stand alone” from furniture related finishes. Requirements for SID/CID binders and color boards are shown in Exhibits 10-2a and 10-2b.

Exhibit 10-2a	**SID/CID Binder and Labels**
Size	• Three Ring Binders to be 8-1/2" x 11"(210 x 280 mm)
Features	• Inside pocket inserts for CD-ROM submittals and review comments • Clear outside cover and spine for project label inserts
Project Identification	**Outside Cover and Spine** • % Design Phase, Volume Number (i.e. Vol.1 of 3) • "Structural" or "Comprehensive" Interior Design title • Project Title • Project Location • Date • Design Agents or A-E Firm and Design Build Contractor
Side Marks for Distribution	• Typical side mark distributions are (EN-DR), (BCE), (Resident Office)(User) etc. • The project specific distribution list may be obtained from the Project Manager.

Exhibit 10-2b	**SID/CID "Material, Finish & Color" Sample Boards**
Size	• Color Boards shall be an 8-1/2" x 11" module • Fold out color boards should have a maximum spread of 640 mm (25-1/2”).
Header	• Room/Area Color Scheme or Furniture Category
Footer	• Project name, Project Location, no dates
Samples	• Actual samples only • Duplications of samples are not required. • Label samples consistent with drawings, specifications and illustrated order forms (IFO) codes
Photos of Samples	• Photos are not allowed on any project including MILCON medical projects.

10.2.2 Digital Deliverables for SID/CID Projects

This paragraph provides a general list of SID/CID Deliverables and general guidance for developing these deliverables. Digital deliverables for SID projects are shown in Exhibit 10-2c. The CID digital deliverables are shown in Exhibits 10-2d. Computer software requirements are discussed in paragraph 10.2.3. Furniture Systems drawings and specifications requirements are discussed in paragraph 10.7.

Exhibit 10-2c	**SID Digital Drawings and Specification Deliverables**
SID Drawings	• Building related floor plans, floor patterns plans • Building related elevations and details • Finish Schedules • Interior signage plans and schedules
Drawing Standards	• Based on DoD Tri-Services CADD Standards • SID Sheet Letter **"I"**
SID Specifications	• UFGS 09915 "Color Schedule" (exterior and interior) • Carpet, Resilient Floor Coverings, Ceramic Tile, Terrazzo, industrial floor coatings • Wall base (all kinds) • Wall paint, wall coverings (all kinds) • Ceiling Tiles, Grid, Ceiling treatments • Plastic Laminates, solid surfacing • Auditorium Seating (Fixed) • Blinds or attached Widow Treatments • Stage Curtains and Hardware • Visual Communication Boards • Trim, Signage, Operable Doors, • Toilet Partitions, Lockers • Built-in Casework • Elevator Cab interior finishes
Specifications Standards	• Based on DoD Tri Services Standards • Unified Facility Guide Specifications (UFGS) are used. • Contact EN-DW for specification software. • Use UFGS Section 09915 Color Schedule to list all SID finishes, colors and manufacturers in lieu of putting this information on the "I" or "A" drawings.
Jewel Box & CD-ROM Labels	• *EN-DW will provide the title block • *EN-DW will consolidate all building related drawings • *EN-DW will press the CD-ROM and add the labels • The Ready To Advertise (RTA) CD-ROM (building related contract (drawings & specifications) may be requested from *EN-DW and submitted in the inside pocket of the SID binder.

* EN-DW= Mobile District Engineering Divisions Project Support Section

Exhibit 10-2d	CID Digital Drawings and Specification Deliverables
CID Composite Furniture Placement Drawings	• Based on DoD Tri-Services CADD Standards, "I" Drawings. • Composite Furniture Placement Plans (FPP) are working drawings showing all furniture systems and freestanding furniture and equipment specified in the CID package. • FPP validates the building layout ensuring the furniture and equipment within the room functions to meet User requirements. • All furniture items and furniture systems will be identified with a location code that is fully coordinated with the CID package discussed in paragraph 10.7 • Room numbers are to appear on the FPP drawings. • The FPP drawings, showing the proposed furniture layouts are to be at a scale of 1:100 (1/4 inch = 1 foot), (1/4 inch = 1 foot,) unless otherwise specified. • Coordination notes referencing the electrical plans are to be added to FPPs to locate Power, Voice and Data (PVD) connections/junction box locations as they relate to CID items. • See UFGS Section 12705 Furniture Systems for shop drawings submittal requirements detailing furniture systems designs and installations. • Artwork Placement Plans are to show typical elevation drawings dimensioning the vertical and horizontal location of the artwork. If large quantities of artwork are specified such as for medical projects, provide these drawings in a separate "stand-alone" electronic folder and name the folder "Artwork drawings". Provide working drawings and Adobe.PDF drawings in the 100% CID. • Other Drawings: Provide detailed drawings related to items that require cutting and fitting and are not being installed during the building's construction. Provide any necessary instructions on the Illustrated Order Form (IOF) for that item(s). Provide working drawings and Adobe.PDF drawings on the 100% CID CD-ROM. • See Paragraph 10.4 for developing FPP drawings into the required Adobe.PDF files and inserts.
CID Specifications	• Use UFGS Section 12705 Furniture Systems when specifying and bidding Furniture Systems is required. • Illustrated Order Forms (IFO) are used to specify freestanding furniture and equipment. • IFO formats are discussed in paragraph 10.4.
Jewel Box & CD-ROM Labels	• Label the CID CD jewel box and CD with the project information used on the hard copy SID/CID binders. • Unlike the RTA SID CD-ROM, the Ready to Procure (RTP) CID CD-ROM (furniture related contract) is consolidated and pressed by the project's Interior Designer of Record will be submitted in the inside pocket of the CID binder. EN-DW will not be responsible for the CID.

10.2.2.1 CID Digital Folder/File Structure

The digital CID data used to create the "electronic CID binder" shall be organized in a file structure to differentiate between Portable Document Files (Adobe.PDF), CADD files, and MS Excel files. The Master Adobe.PDF Folders can be linked together to facilitate easy viewing between Adobe.PDF SID electronic data submitted and coordinated through EN-DW and will not appear in the CID CD-ROM. The CID file structure shall be as follows:

Exhibit 10-2e Final Electronic CID Binder Folder/File Structure

PROJECT FOLDER

#1 SUB-FOLDER

CID PROCUREMENT FORMS (RECORD COPY)

Adobe.PDF Read Only submittal of the comprehensive CID MS Excel files.
Submitted @ 35%,50%,100% & Final Design

#2 SUB-FOLDER

CID COMPOSITE FURNITURE PLACEMENT PLANS (FPP) (Record Copy)

Adobe.PDF Read Only Drawings of the .dwg or .dgn files.

Submitted @ 35,50 100% & Final Design Do not merge Ms Excel Files in this folder.

Provide sub-folders for Artwork drawings
And Interior Signage drawings when part of the CID.

#3 **SUB-FOLDER**

CID Color Boards (For Information only-Electronic Record Copy)

Adobe.PDF Read Only Image of the Hard Copy Color Boards.
Submitted @ Final Design

#4 **SUB-FOLDER**

CID MS Excel Folder

Working files of all the CID MS Excel files
(00-Project Title Page.xls thru 17-Window Treatments.xls)

Submitted @ Final Design

#5 **SUB-FOLDER**

CID CADD Drawings Folder

All FPP Working files

Submitted @ Final Design

10.2.3 Computer Software Requirements

SID and CID digital deliverables are to be developed and viewed using five (5) computer software programs with no exceptions. The five software programs relate to: (1) CADD drawings, (2) Unified Facility Guide Specifications (UFGS), (3) CID procurement data (other than drawings), (4) viewing the SID/CID Record Copy and (5) writing the digital data to CDs. All digital data files shall be delivered in a format that is directly readable and compatible with the CADD, MS Excel and Adobe Acrobat software and platforms without conversions.

Exhibit 10-2f	**Software Requirements**
1. CADD Working Drawings	SID/CID working CADD drawings shall be developed in the latest version of AutoCAD (.dwg) or Microstation (.dgn). Customer requirements will dictate which software version to use. AutoCAD is the preferred CADD program for developing CID (furniture related) drawings.
2. Unified Facility Guide Specifications (UFGS)	SID specifications will be edited using SpecsIntact software. Contact the office of EN-DW to obtain project specific software programs available for downloading.
3. CID Procurement Ordering data (Other than drawings)	CID Procurement Ordering data shall be developed in the latest version of MS Excel (.xls). The required 18 editable working files are ready for copy and downloading on the Mobile District Public FTP web site. The Website address is ftp://ftp.sam.usace.army.mil/pub. Open the folder marked "INTERIOR DESIGN" for the editable CID .xls files and copy to your hard drive.
4. SID/CID Record Copy	The SID/CID digital record copy shall be developed and viewed in the latest version of Adobe Acrobat Read/Write portable document format (Adobe.PDF). Working CADD drawings are to be "printed" in black and white (no color output) Adobe.PDF format. CID MS Excel.xls files are to be "printed" in the Adobe.PDF format.
5. CD's and Jewel Box	Write CDs using Easy CD Writer written in "Data/Data CD" platform. Don't use Direct CD with DVD driver to write the CD. Write to CD-Recordable discs.
General Notes For CID Digital Files	Do not write digital data information using "DIRECT CD with .udf or .ulf extensions". No additional drivers or programs shall be installed on the hard drives of reviewers. Projects submitted in .udf or .ulf extensions will automatically be disapproved. All submittals are to be directly opened and viewed through AutoCAD or Microstation, MS Excel and Adobe Acrobat Read software programs.

10.3 SID SPECIFIC INSTRUCTIONS

This paragraph gives instructions for developing SID criteria and assembling sequence of the SID package for the PPTO and the D-B RFP project delivery process. A matrix is provided for each project delivery process to summarize submittal deliverables. Carefully read and follow the instructions before beginning a project. SID submittals will run concurrent with the architectural submittal regardless of the design delivery process.

10.3.1 SID Deliverable Matrixes

There are four matrixes to use for SID projects. The project delivery process used for the project solicitation will determine which SID matrix to use. The Exhibit 10.3a list the project specific SID Matrixes.

Exhibit 10.3a	**Project Specific SID Matrixes**
Project Delivery Process	**Matrix Description**
PPTO **Exhibit 10.3b**	**SID PPTO Deliverable Matrix** • Gives the sequence of assembly • Gives Format requirements and • “Project Phase” specific submittal requirements. • Not all projects will have a formal 65% design review phase. If that is the case, those items may move to the 100% submittal phase. • **MILCON Medical Projects will follow this matrix.**
D-B RFP Exhibit 10.3c	**SID D-B RFP Section 01010 “Design Criteria" Matrix** • Gives the sequence of assembly • Gives Narrative requirements • It is important that the User be involved in the development of the interior design criteria to ensure their project requirements are fully integrated into the D-B RFP solicitation. The D-B Contractor will only provide what is required of him/her after the award of the contract
D-B RFP Exhibit 10.3g	**SID & CID D-B RFP Section 01012 “Design After Award" Matrix** • Gives the standard clause to “cut and paste” into D-B RFP "Section 01012 Design After Award". • The standard clause may require modification to meet project specific requirements. A project specific requirement may include the purchase and installation of the CID.
D-B RFP After Award Exhibit 10.8a	**SID D-B Contractor’s Deliverables** • Gives instructions for the pre-definition SID/CID presentation after award of the D-B Contract. • Gives the sequence of assembly for design 50%,100% and final designs.
Coordination of the CID	It is important to reference paragraph 10.4 for CID PPTO and D-B RFP project specific criteria to ensure coordination of SID and CID products.

10.3.2 SID PPTO Projects

SID PPTO projects will require 100% of the SID to be developed by one interior design source. During the project development process, the project interior designer will be required to write the SID CD-ROM. The CD will be submitted in the front pocket of the SID binder at each submittal phase. These preliminary contract documents will be submitted in the Adobe.PDF Read Only format.

When the project is complete and Ready to Advertise (RTA) all the contract drawings and specifications, including SID drawings and specification, will be sent to the Mobile District. The District's project support section, EN-DW, will write the final RTA Project CD-ROM. The project interior designer will be required to obtain copies of the RTA CD-ROM from EN-DW and include it in the front pocket of the SID Binder before the final SID binders are distributed.

EXHIBIT 10.3b	**SID-PPTO Deliverable Matrix** This applies to MILCON Medical Projects * Hard Copy Presentation ** Digital Data Presentation					
ITEM	DESCRIPTION	10%-15% S-2	30%-35% S-3	50%-60% S-4	100% S-5	RTA S-6
1.	* COVER SHEET/SPINE LABEL		X	X	X	X
2.	* TABLE OF CONTENTS (SID) *Include the CID table of contents if part of the "packaged book set".*		X	X	X	X
3.	** NARRATIVE of SID OBJECTIVES (printed to a Adobe.PDF file)	X	X	X	X	X
4.	*INTERIOR FINISHES-COLOR BOARDS		X	X	X	X
5.	* INTERIOR SIGNAGE-COLOR BOARDS		X	X	X	X
6.	**DRAWINGS- Floor plans, Room Finish Schedule, etc. (Black and White out put Adobe.PDF format)		X	X	X	X
7.	**INTERIOR SIGNAGE ILLUSTRATIONS PLANS AND SCHEDULES (Black and White out put Adobe.PDF format)				X	X
8.	** UFGS SPECIFICATIONS (printed to the Adobe.PDF format)				X	X
9.	** Ready to Advertise (RTA) CD with all drawings and specifications. Obtain from EN-DW.					X

10.3.3 SID D-B RFP Projects

The SID D-B RFP project delivery process requires the project interior designer to edit two sections of the D-B RFP solicitation. The two sections are:

- RFP Section 01010 “Design Criteria”
- RFP Section 01012 “Design after Award”

Coordination of interior design information with architectural and engineering narratives is critical and necessary to ensure no overlapping or conflicting criteria occurs in the D-B RFP.

10.3.3.1 Instructions for Writing D-B RFP SECTION 01010 “DESIGN CRITERIA"

When developing the SID design criteria in a D-B RFP title the paragraph “Structural Interior Design”. Narratives within this paragraph should discuss the following objectives:

- SID objectives for health safety and welfare
- SID Color Scheme objectives and aesthetic goals
- Project specific criteria
- The “Color Schedule” (Exhibit 10.3d)
- Preliminary Room Finish Schedule (Exhibit 10.3e)
- Interior Signage Requirements

Exhibit 10-3c provides guidance the sequence of the paragraphs and relate only to “Structural Interior Design”. The project interior designer, project architect and other engineering disciplines that address finishes are to fully coordinate the SID selections and placement of materials, color, textures and patterns with the customer to ensure complete customer satisfaction. Compare and coordinate all SID information with the architectural and engineering design criteria to eliminate conflicts and/or redundant design criteria. Ensure that all exposed building related materials and fixtures requiring finishes are addressed.

10.3.3.2 Unified Facility Guide Specifications (UFGS) for D-B RFPs

When edited UFGS **are** part of the D-B RFP solicitation the interior designer is to complete to the fullest extend possible UFGS Section “09915 Color Schedule” and supporting UFGS.

When UFGS **are NOT** provided in the D-B RFP to establish minimum quality and performance characteristics, add quality minimums to the a modified “Color Schedule” and included it in the Structural Interior Design criteria D-B RFP Section 01010 “Design Criteria”. For example, add the minimum face weight, yarn type and carpet construction method in the Carpet paragraph to establish a basis for quality such as (CPT-1: 32 oz, tufted, graphic pattern, 100% solution dyed nylon; Manufacturer Shaw, Style number 6087, Color 800 Blue).

When UFGS **are** NOT provided in the D-B RFP, list the UFGS by Section number and title and require the D-B Contractor to edit them during the design phase after award.

For example:

x.x.x Unified Guide Specification Requirements

The Contractor shall edit and submit the following specifications as defined in D-B RFP Section 01012 "Design After Award":

UFGS Section 06580a	**Solid Polymer Fabrication**
UFGS Section 09310a	**Ceramic Tile**
UFGS Section 09510a	**Acoustical Ceilings**
UFGS Section 09650a	**Resilient Flooring**
UFGS Section 09680a	**Carpet**
UFGS Section 09915a	**Color Schedule**
UFGS Section 10100a	**Visual Communication Boards**
UFGS Section 10260a	**Wall and Corner Protection**
UFGS Section 10440a	**Interior Signage**

10.3.3.3 Color Schedule

SID materials, finishes and colors **not** discussed or required in the D-B RFP Section 01010 "Structural Interior Design" criteria **may not** be provided by the Construction Contractor during the construction phase of the project without additional funds and a "change order". Therefore, it is important that a edited version of the UFGS Section "09915 Color Schedule" and UFGS list be included in the RFP design criteria to ensure as much information about the quality, material, finish and color of interior finishes is provided in the solicitation. A modified "cut and paste" version of the UFGS Section 09915 "Color Schedule" is provided in Exhibit 10.3d. Project interior designers are to edit this schedule fully to ensure the SID is fully integrated in the D-B RFP solicitation.

10.3.3.4 Room Finish Schedule

A preliminary "Room Finish Schedule" is be provided in the D-B RFP Section 01010 "Structural Interior Design" criteria and used in combination with the "Color Schedule" to further define the SID in the D-B RFP. Providing a preliminary "Room Finish Schedule" in a graphic form is more efficient than using narrative. The "Room Finish Schedule" shall be edited to establish minimum finishes for each room type within the facility. The "Room Finish Schedule" may be a "table" like the "cut and paste" one provided in Exhibit 10.3e or it may be a drawing as illustrated in Exhibit 10-3f. If a drawing is used, verify that other drawings are part of the D-B RFP solicitation. To establish minimum finish requirements indicate floor, wall base, walls and ceiling finishes if a "table" is used. The "Color Schedule" may be used include specific details needed to establish additional minimum finishes for casework, interior signage, crown moldings, tile patterns and other details.

10.3.3.5 D-B RFP Color Boards

SID color boards are only required on D-B RFP project using 100% project criteria. The interior designer will not need to develop SID color Boards when only nominal or partial criteria is used in the D-B RFP.

EXHIBIT 10-3c	SID-D-B RFP Section 01010 "Design Criteria" Matrix * Hard Copy Presentation ** Digital Data Presentation			
ITEM	**Description/sequence of information included in the RFP "Section 01010 Design Criteria"**	NOMINAL PROJECT CRITERIA 10%-30%	PARTIAL PROJECT CRITERIA 35%-50%	FULL PROJECT CRITERIA 100%
1. * **	See Exhibit 10-3b when Full SID Project Criteria is used in the D-B RFP. Full project criteria will include 100% SID Color boards and SID binders, drawings and specifications.			X
1. ** 1.a ** 1.b ** 1.c **	Interior Design Narrative. Provide D-B RFP SID narratives that address the following objectives in this sequence: x.1 The SID objectives and general description/parameters of the interior color scheme. x.2 Discussion of special spaces and finish requirements of these spaces; discussion of details of finishes required such as crown molding, chair rails, flush mounted corner guards etc. to further explain the Color Schedule and Room Finish Schedule. x.3 Discussion of interior signage plan that addresses the major signage categories (building directories, floor directories, room/office identification, safety signs, graphic symbols, visual communication and display boards, corridor numbering and other project specific interior sign requirements.	X	X	
2. **	x.4 Color Schedule. Completed UFGS 09915A Color Schedule if specifications are included in the RFP. Reference this specification in the RFP "01010" to coordinate SID criteria. -Or- x.4 "Cut/paste" and edit Exhibit 10-3d Color Schedule and include it after the discussion of the interior signage. (ITEM 1.c-above)	X	X	
3. **	x.5 Room Finish Schedule. To fullest extent possible complete a Room Finish Schedule to indicate the level of finishes for all rooms in the project. The Room Finish Schedule can be placed as a "table" in "Section 01010 Design Criteria" after the Color Schedule or it can be a developed as a drawing.	X	X	
4. **	Insert the Standard CID Clauses directly after the Room Finish Schedule Table. (See Exhibit 10-3a).	X	X	

Exhibit 10-3d Color Schedule for D-B RFP Section "01010"

----------Cut and paste into the Section 01010 ----------
-------remove the gray shading-------

x.x.1 COLOR SCHEDULE

This section covers only the color of the exterior and interior materials and products that areas exposed to view in the finished construction. The word "color" as used herein includes surface color, pattern and texture. Requirement for quality and method of installation are covered in other appropriate sections of the specifications. Specific locations where the various materials are required or items not designated for color in this RFP shall be determined after the award of the Design-Build Contract.
The color schedule lists the colors, patterns, and textures required for exterior and interior finishes, including both factory applied and field applied colors.

x.x.2 REFERENCE TO MANUFACTURER'S COLOR

Where color is shown as being specific to one manufacturer, an equivalent color by another manufacturer may be submitted as a deviation and acceptance is required. Manufacturers and materials specified are not intended to limit the selection of equal color from other manufacturers.

x.x.3 Exterior Walls

Exterior wall colors shall apply to exterior wall surfaces including recesses at entrances and projecting vestibules. Conduit shall be painted to closely match the adjacent surfaces color. Wall color shall be provided to match the colors listed as follows:

a. Brick: [___]
b. Mortar: [____]
c. Paint: [____]
d. Concrete Masonry Units (Integrally Colored): [____]
e. Metal Wall Panels, Hardware, and Associated Trim: [_]
f. Insulation and Finish System: [____]
g. Precast Concrete: [____]
h. Glass and Glazing: [_____]

x.x.4 Exterior Trim and Miscellaneous Finishes

Exterior trim shall be provided to match the colors listed below.

a. Doors and Door Frames: [___]
b. Windows (million, sash. Trim, and sill): [____]
c. Wood Stain: [____]
d. Fascia: [____]
e. Downspouts, Gutter, Louvers, and Flashings: [____]
f. Handrails: [___]
g. Soffits and Ceilings: [_____]
h. Signage: [____]
i. Overhangs: [_____]
j. Caulking and Sealants: [_____]

k. Stamped Concrete:[ ]

x.x.5 Exterior Roof

Roof color shall apply to exterior roof surfaces including sheet metal flashings and coping, mechanical units, roof trim, pipes, conduits, electrical appurtenances, and similar items. Roof color shall be provided to match the colors listed below.

a. Metal: [____]
b. Shingles: [____]
c. EPDM: [____]
d. Terra Cotta Tiles [% of colors]
e. Roof Penetrations [Match roof color]

x.x.6 Interior Floor Finishes

Flooring materials shall be provided to match the colors listed below.

a. Carpet: [____]
b. Carpet Tile: [_____]
c. Vinyl Composition Tile: [____]
d. Sheet Vinyl: [___]
e. Raised Pattern Rubber Tile: [____]
f. Stair Treads, Kick Strips, and Risers: [____]
g. Quarry Tile: [____]
h. Ceramic Tile: [_____]
i. Porcelain Tile: [_____]
j. Terrazzo Tile: [_____]
k. Grout: [_____]
l. Plastic Laminate: [_____]
m. Static [Dissipative] [Conductive] tile:
n. Concrete: [____]
o. Raised Floor Manufacturer: [_____]

x.x.7 Interior Base Finishes

Base materials shall be provided to match the colors listed below:

a. Resilient Base And Edge Strips: [____]
b. Quarry Tile: [____]
c. Ceramic Tile: [___]
d. Porcelain Tile: [____]
e. Grout: [____]
f. Coved Sheet Vinyl: [_____]
g. Glazed Structural Units: [_____]
h. Prefaced Concrete Masonry Units: [_____]
i. Brick: [____]
j. Mortar: [____]
k. Painted: [____]
l. Wood: [____]

x.x.8 Interior Wall Finishes

Interior Wall color shall apply to the entire wall surface, including reveals, vertical furred spaces, grilles, diffusers, electrical and access panels, and piping and conduit adjacent to wall surfaces unless other wise specified. Items not specified in other paragraphs shall be painted to match adjacent wall surface. Wall materials shall be provided to match the color listed below.

a. Paint: [_____]
b. Vinyl Wall Covering: [____]
c. Fabric Wall Covering: [_____]
d. Ceramic Tile: [____]
e. Ceramic Tile Grout: [____]
f. Acoustical Wall Covering: [_____]
g. Brick: [____]
h. Metal Liner Panels: [_____]
i. Glazed Structural Units: [____]
j. Prefaced Concrete Masonry Units: [_____]
k. Mortar: [_____]
l. Columns: [_____]

x.x.9 Interior Ceiling Finishes

Ceiling color shall apply to ceiling surfaces including soffits, furred down areas, grilles, diffusers, registers, and access panels. Ceiling color shall also apply to joist, underside of roof deck, and conduit and piping where joists and deck are exposed and required to be painted. Ceiling
Materials shall be provided to match the colors listed below.

a. Acoustical Tile and Grid: [___]
b. Paint: [_____]
c. Structural Framing: [_____]
d. Metal Deck: [_____]

x.x.10 Interior Trim

Interior trim shall be provided to match the colors listed below.

a. Doors: [_____]
b. Door Frames: [_____]
c. Windows (mullion, sash, trim and stool): [____]
d. Window Sills: [_____]
e. Fire Extinguisher Cabinets: [____]
f. Handrails: [_____]
g. Ladders: [_____]
h. Metal Stairs: [_____]
i. Wood Stain: [_____]
j. Wood Base, Wood Chair rails, Wood Crown Molding: [_____]

x.x.11 Interior Window Treatments
Window treatments shall be provided to match the color listed below.

a. Horizontal Blinds: [Wood/Metal]
b. Vertical Blinds: [____]
c. Drapery Hardware: [_____]
d. Roller Shades: [_____]
e. Electric Shades: [_____]

x.x.12 Interior Miscellaneous

Miscellaneous items shall be provided to match the colors listed below.

a. Toilet partitions and Urinal Screen: [_____]
b. Casework: [____]
c. Reception Counter Tops and Base: [_____]
d. Interior Signage Message Color:
e. Interior Signage Background Color:
f. Lockers: [____]
g. Corner Guards: [_____]
h. Operable Partitions: [____]
i. Electrical Device Cover Plates and Panels: [____]
j. Casework: [_____]
k. Shower Curtain: [_____]
l. Auditorium Seating: [_____]

----------end of Exhibit 10.2.d ----------

Exhibit 10-e Room Finish Schedule for D-B RFP Section "01010"

------cut and paste into Section 01010 ----------

x.x.x Preliminary Room Finish Schedule.

NOTE: This preliminary Room Finish Schedule provides a basis for material, finish and color placement. Further development of this schedule is required after the award of the contract. This Room Finish Schedule is to be used in conjunction with other design criteria and schedules in this contract.

ROOM NAME	FLOOR	BASE	WALLS	CEILINGS	REMARKS

----------end of Exhibit 10.3e----------

Exhibit 10-3f Room Finish Schedule "I" Drawing

MATERIAL (MAT.), FINISH (FIN.) AND COLOR (COL.) SCHEDULE

ROOM NO.	ROOM NAME	FINISH FLOOR		BASE		WAINSCOT		HEIGHT	NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING		HEIGHT	REMARKS
		MAT.	FIN. & COL.	MAT.	FIN. & COL.	MAT.	FIN. & COL.	HW	MAT.	FIN. & COL.	CHAIR RAIL	MAT.	FIN. & COL.	CHAIR RAIL	MAT.	FIN. & COL.	CHAIR RAIL	MAT.	FIN. & COL.	CHAIR RAIL	MAT.	FIN. & COL.	0'-0"	

MATERIAL (MAT.), FINISH (FIN.) AND COLOR (COL.) LEGEND SEE SPECIFICATION C9915 COLOR SCHEDULE FOR MORE DETAIL INFORMATION ON EXTERIOR AND INTERIOR COLOR, FINISH AND MANUFACTURER

MARK	FINISH FLOOR MATERIAL	MARK	FINISH FLOOR FINISH & COLOR	MARK	WALL BASE FINISH & COLOR	MARK	WALL FINISH & COLOR	MARK	CEILING FINISH & COLOR
CONC		CPT-1	CARPET					P-1	PAINTED, EGGSHELL FINISH
		CPT-2	CARPET TILE					ATC-1	ACOUSTICAL CEILING TILE
MARK	BASE/ WALL MATERIAL	CPT-3	CARPET TILE	PT-4	PORCELAIN TILE	P-2	PAINTED, EGGSHELL FINISH	"	UNFINISHED
GWB	GYPSUM WALL BOARD	CPT-4	CARPET TILE	FT-5	PORCELAIN TILE	AD-1	ARCHITECTURAL ORNAMENT	EXP	EXPOSED
EXC	EXPOSED CONCRETE	PT-1	PORCELAIN TILE	RB-1	RUBBER BASE				
CMU	EXPOSED CONC. MASONRY	PT-2	PORCELAIN TILE	RB-2	RUBBER BASE				
CM	CULTURED MARBLE	PT-3	PORCELAIN TILE						
MARK	CEILING MATERIAL								
EXP	EXPOSED								
GWB	GYPSUM WALL BOARD	SV-1	SHEET VINYL						
ACT	ACOUSTICAL CEILING TILE	SC	SEALED CONC. (CLEAR)						

10.3.4. Instructions for Writing the SID/CID D-B RFP SECTION 01012 “DESIGN AFTER AWARD"

The standard clause used in the D-B RFP Section 01012 “Design After Award” is in Exhibit 10-3g. This standard clause is a "bridge" clause because is involves both the SID and CID instructions to the D-B Construction Contractor. Some modification to this clause may be needed to meet project specific requirements. For example, if a CID is not required, then revise the standard clause by deleting the CID submittal requirements.

EXHIBIT 10-3g	**SID/CID-RFP “Section 01012 Design After Award” Matrix** ** Digital Data Presentation **-------Cut and Paste--------**			
ITEM	The standard clause to use in the RFP "Section 01012- Design After Award”.	NOMINAL PROJECT CRITERIA 10%-30%	PARTIAL PROJECT CRITERIA 35%-50%	FULL PROJECT CRITERIA 100%
STANDARD CLAUSE Cut/Paste **	x.1 The Contractor shall provide the SID and CID in accordance with 2002 Chapter 10 “Interior Design” of the Mobile District Design Manual. Instructions to the Contractor are provided in paragraph 10.8 and Exhibit 10.8a	X	X	X

10.4 CID SPECIFIC INSTRUCTIONS

This paragraph gives information and instructions for developing CID criteria and assembling sequence of the CID package for the PPTO and D-B RFP project delivery processes. A matrix is provided for each project delivery process to summarize submittal deliverables. Carefully read and follow the instructions before beginning a project. Exhibit 10-4a provides a summary of the CID matrixes to use. When a CID is part of the D-B RFP design process and the D-B RFP Sections 01010 “Design Criteria” and Section 01012 “Design After Award” requires CID information and standards clauses previously discussed.

Paragraph 10.4.2 thru 10.4.17 gives specific “step-by-step” instructions and development sequence of the digital CID package. The electronic CID package will begin with the documenting the procurement information in MS Excel workbooks and end with the MS Excel workbooks transposed into a Adobe.PDF files and which are then assembled into an Adobe.PDF “folder” that is opened and viewed through Adobe Reader.

Carefully read and follow the instructions before beginning a CID project. CID submittals will run concurrent with the architectural submittals regardless of the project delivery process.

10.4.1 CID Deliverables

There are four matrixes to use when a CID is part of the overall project delivery process. The project delivery process used for project development will determine which CID matrix to use. Exhibit 10.4a list the project delivery process and corresponding CID Matrix to use.

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Exhibit 10-4a	**Project Specific CID Matrixes**
Project Delivery Process	**Matrix Description**
PPTO Matrix Exhibit 10.4b	**CID PPTO Deliverable Matrix** • Gives the sequence of assembly of the CID CD-ROM • Tells what information is to be provided and the format the information is to be provided. • Not all projects will have a formal 65% design review phase. If that is the case, those items may move to the 100% submittal phase. • **Use this matrix for MILCON Medical projects.**
D-B RFP Matrix Exhibit 10.4c	**CID D-B RFP Section 01010 "Design Criteria" Matrix** • Gives the sequence of assembly of CID narratives • Gives the level of information that is to be provided when writing the D-B RFP Section 01010 "Design Criteria". • It is important that the User be involved in the development of this criteria to ensure their project requirements for "outfitting" the building are included in the D-B RFP solicitation. • Based on the CID Criteria Review comments, the D-B RFP Design Criteria shall also provide requirements for the procurement and installation of the CID package.
D-B RFP Matrix Exhibit 10.3c	**SID & CID D-B RFP "Section 01012 Design After Award" Matrix** • Gives the standard clause to use when writing the D-B RFP Section 01012 "Design After Award". • This is a "bridge" clause and combines SID/CID requirements into one standard clause that gives instructions to the D-B Contractor. This standard clause may have to be modified to meet project specific requirements if a CID is not part of the project.
D-B After Award Matrix Exhibit 10.5a	**SID-CID "D-B Contractor Response to the RFP" Matrix** • Gives the sequence of assembly of the CID presentations and package • Tells what information is to be provided and when it is to be provided during the design phase after award of the D-B Contract. • This Matrix also tells what format the information is to be provided in after award of the D-B contract.
Note: CID INSTALLED BY THE USER GROUP	• If the client/User Group is installing the CID package, including furniture systems (prewired) workstations, all furniture system related drawings should be indicated in the SID contract drawings with the note "FOR INFORMATION ONLY". • Reference 10.7 for furniture system drawing and specification requirements.
Note: CID INSTALLED BY THE CONSTRUCTION CONTRACTOR	• If the D-B contractor is installing the CID project specific clauses require the Construction Contractor to supply the installation of the CID, it is the responsibility of the project interior designer to ensure Government/Contractor obligations are clearly stated in the D-b RFP and Bid Options and Costs are defined in the D-B RFP.

EXHIBT 10-4b	**CID-PPTO Deliverable Matrix** * Hard Copy Presentation ** Digital Data Presentation					
ITEM	CID SUBMITTAL DESCRIPTION	10%-15% S-2	30%-S-3 35%-S-4	50%-65% S-5	100% S-6	RTP
*	**CID BINDER (Hardcopy)**					
	Note: Insert CD into inside front pocket of the binder.					
1.	* BINDER COVER SHEET AND SPINE LABEL		X	X	X	X
2.	* TABLE OF CONTENTS (SID/CID)		X	X	x X	X
3.	* PRELIMINARY FURNITURE "MATERIAL, FINISH AND COLOR" SAMPLE BOARDS		X	X		
3A.	* FINAL FURNITURE SAMPLE BOARDS				X	X
**	**Sub-Folder #1 Record Copy** **CID Procurement Information** **Ms Excel files transposed** **to Adobe.PDF format**					
4.	PROJECT TITLE PAGE		X	X	X	X
5.	TABLE OF CONTENTS CID		X	X	X	X
6.	BEST VALUE STATEMENT				X	X
7.	UNICOR WAIVER		X	X	X	X
8.	SID/CID NARRATIVES		X	X	X	X
9.	POC LIST				X	X
10.	CODES & COST ESTIMATE		X	X	X	X
11.	MANUFACTURERS LIST				X	X
12.	ACCESSORIES SECTION TITLE PAGE		X	X	X	X
13.	PRELIMINARY ACCESSORIES ILLUSTRATED ORDER FORMS (IOF)(one IOF)		X			
13A.	ACCESSORIES IOF (All items specified)				X	X
14.	AV SECTION TITLE PAGE		X	X	X	X
15.	AV IOF			X	X	X
16.	CHAIRS SECTION TITLE PAGE		X	X	X	X
17.	PRELIMINARY CHAIRS IOF (one IOF)		X			
17A.	CHAIRS IOF (all chairs used on the project)			X	X	X
18.	DESK SECTION TITLE PAGE		X	X	X	X
19.	PRELIMINARY DESK IOF (one IOF)		X			
19A.	DESK IOF			X	X	X
20.	FILES & STORAGE SECTION TITLE PAGE		X	X	X	X
21.	PRELIMINARY FILES & STORAGE IOF (one IOF)			X	X	X
21A.	FILES & STORAGE IOF					
22.	TABLES SECTION TITLE PAGE		X	X	X	X
23.	PRELIMINARY TABLE IOF (one IOF)					
23A.	TABLES IOF			X	X	X
24.	FURNITURE SYSTEMS SECTION TITLE PAGE		X	X	X	X
25.	FURNITURE SYSTEMS IOF			X	X	X
26.	EQUIPMENT SECTION TITLE PAGE		X	X	X	X
27.	PRELIMINARY EQUIPMENT IOF(one IOF)		X			
27A.	EQUIPMENT IOF			X	X	X
28.	BEDDING SECTION TITLE PAGE		X	X	X	X
29.	BEDDING IOF			X	X	X
30.	WINDOW TREATMENT SECTION TITLE PAGE		X	X	X	X
31.	WINDOW TREATMENT IOF				X	X

**	**Sub Folder #2 Record Copy** **CID Composite FPP Drawings Adobe.PDF** **To be viewed using Adobe Acrobat Read**	10%-15% S-2	30%-S-3 35%-S-4	50%-65% S-5	100% S-6	RTP
32.	Furniture Placement Plans		X	X	X	X
32.	Furniture Systems Plans		X	X	X	X
34.	Furniture Systems Product/PVD List			X	X	X

**	**Sub-Folder #3 Record Copy** **MASTER CID SAMPLE BOARDS Adobe.PDF** **To be viewed using Adobe Acrobat Read**	10%-15% S-2	30%-S-3 35%-S-4	50%-65% S-5	100% S-6	RTP
35.	Title Section Page-MARKED FOR INFORMATION ONLY-NOT FOR SHOP DRAWING APPROVAL					X
36.	SID Material, Finish and Color Boards Adobe.PDF					X
37.	CID Fabric and Finish Color Boards Adobe.PDF					X

*** Note if Artworks and Interior Signage are part of the CID provide record copy and working drawings in digital separate folders.**

**	**Sub-Folder #4 Working Files** **Ms Excel Folder of all the CID WORKBOOKS** **To be viewed using MS Excel**	10%-15% S-2	30%-S-3 35%-S-4	50%-65% S-5	100% S-6	RTP
38.	00-Project Title Page.xls					X
39.	01-Table of Contents.xls					X
40.	02-Best Value Statement.xls					X
41.	03-UNIOCR Waiver.xls					X
42.	04-SIDCID Narrative.xls					X
43.	05-POC List.xls					X
44.	06-Codes&Cost.xls					X
45.	07-Manufacturer's.xls					X
46.	08-Accessories.xls					X
47.	09-AV.xls					X
48.	10-Chairs.xls					X
49.	11-Desks.xls					X
50.	12-Files&Storage.xls					X
51.	13-Tables.xls					X
52.	14-Furniture Sys.xls					X
53.	15-Equipment.xls					X
54.	16-Bedding.xls					X
55.	17-Window Treatments.xls					X

**	**Sub-Folder #5 Working Files** **Composite FPP Drawings** **To be viewed using AutoCAD or Microstation**	10%-15% S-2	30%-S-3 35%-S-4	50%-65% S-5	100% S-6	RTP
56.	All CID CADD drawings					X

End of Exhibit 10-4b

EXHIBIT 10-4c	**CID-RFP "Section 01010 Design Criteria" Matrix Summary** ** Digital Data Presentation			
ITEM	-----CUT AND PASTE--- Standard clauses to use in the RFP "Section 01010- Design Criteria"	NOMINAL PROJECT CRITERIA 10%-30%	PARTIAL PROJECT CRITERIA 35%-50%	FULL PROJECT CRITERIA 100%
STANDARD CLAUSE **	x.1 The CID has been fully developed and ready for procurement. The Contractor is to coordinate building changes with the USER and the CID package. All changes must be coordinated with the User. The User will be responsible for updating the CID based on building related changes.			X
STANDARD CLAUSE **	X.1 The Contractor shall be responsible for the CID requirement analysis survey to determine the furniture needs of the User. The Contractor will develop the CID package in accordance with the Mobile District's Design Manual 2002 Chapter 10 "Interior Design". The Government will provide the brand(s)names of furniture to use in the CID package after award of the Design Build contract. Furniture selected and specified shall have a current GSA contract or be from UNICOR. Typical CID items to be specified are: • Accessories, Artwork, Planters, Plants • Audio Visual support, carts, project screens • Chairs(all kinds) • Desk (all kinds) • Files & Storage (all kinds) • Furniture Systems • Tables (all kinds) • Equipment, TV. Refrigerators, Washer/Dryers • Bedding, all Dormitory Room furniture, Sheets, Bedspreads • Window Treatments, cubicle curtains, shower curtains	X	X	

10.4.2 Master CID MS Excel Folder

The following paragraphs describe the sequence for developing and assembling the digital CID data. The process begins with CID procurement information developed in MS Excel Workbooks. Exhibit 10.4d illustrates all the MS Excel workbooks within the Master CID MS Excel Folder. FPP Drawings will be developed using the DoD Tri-Services standards.

Master CID MS Excel Files and Project Folder (Sub-Folder #4)

- The CID project folder could be comprised of as many as of eighteen (18) separate Ms Excel files called “workbooks”.
- The number of workbooks used in a CID project will depend on project specific requirements.
- Exhibit 10-4d illustrates the comprehensive list of all possible CID workbook files.
- Workbook file names “00-Project Title.xls” through “07-Manufacturers List.xls” are related to documenting the design analysis, market research analysis, project specific personnel, and the final cost estimate.
- Workbook file names “08-Accessories” through “17 Window Treatments.xls” are related to the ten-(10) furniture/equipment item categories. No new furniture categories or workbooks shall to be created.
- Each of the 10 furniture categories has its own unique, “stand-alone” workbook with its own unique “alpha code”.
- All 18 workbooks are have a prescribed file name and are stacked in a prescribed order. Workbooks shall not be merged or renamed or the CID project will be disapproved.

“Ready-to-Edit” CID Ms Excel Workbooks

- The required "ready to edit" CID MS Excel workbooks which are the working files needed to create the CID can be obtain upon request.
- Request files from the Mobile District’s EN-DR (Interior Design) or copy them from the Mobile District's public web site: ftp://ftp.sam.army.mil/pub in the folder labeled "INTERIOR DESIGN".

10.4.3 Editing the Master CID Ms Excel Folder (Sub-Folder #4)

- The Master CID MS Excel Folder will require editing if certain categories of furniture/equipment are not used for a project.

- For example, not all CID packages will require bedding, dormitory furniture and window treatments like draperies. These workbook files would be deleted from the Master Project Folder to reflect only the furniture categories required for the project. Although workbooks files are removed from the master list, the prescribed order of the list shown in Exhibit 10-4d is to remain. Do not add, merge, rename or reorganize the structure of files in the prescribed Master Ms Excel Folder files.

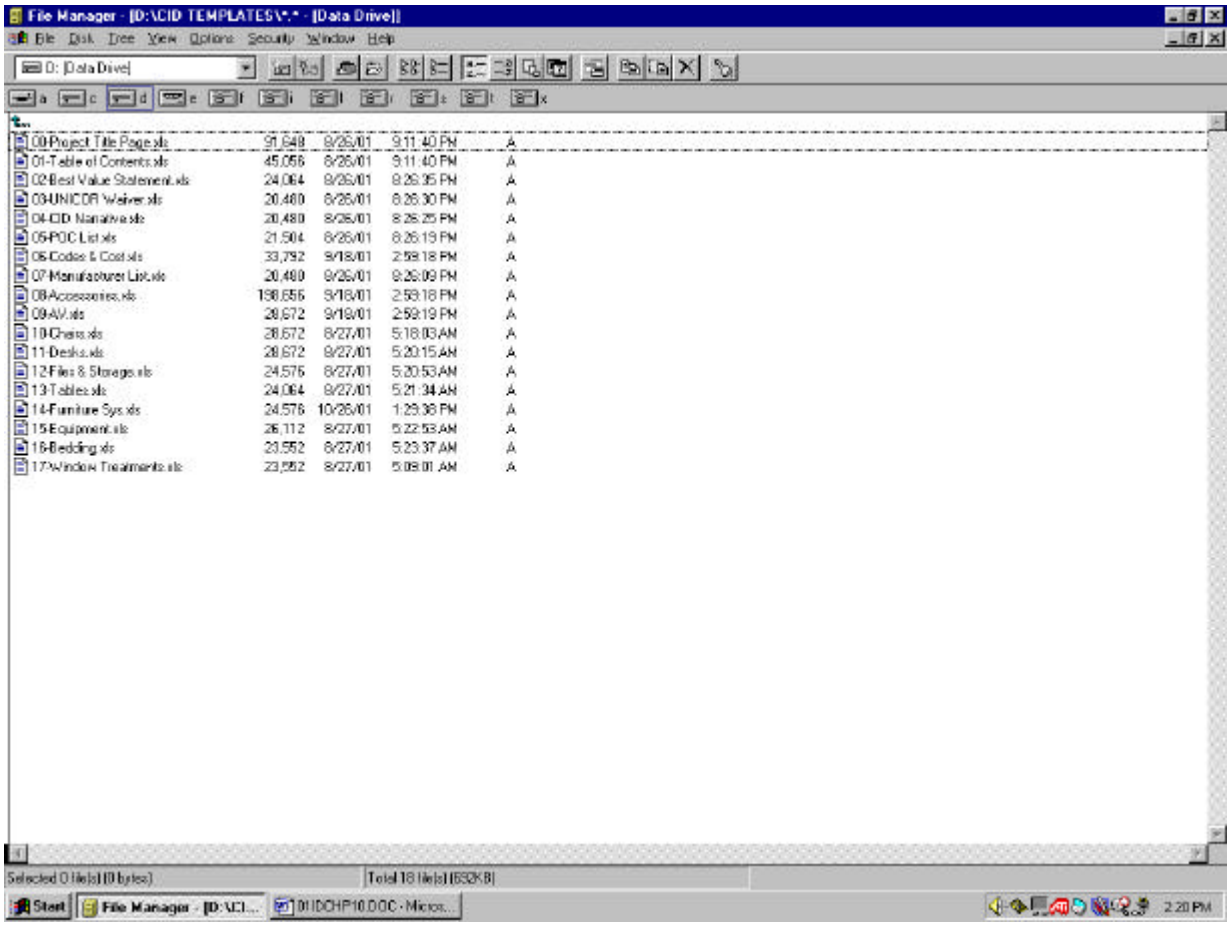


Exhibit 10-4d Master CID MS Excel Folder of Workbook Files

10.4.4 Editing MS Excel Workbooks and Worksheets

Editing the Ms Excel Workbooks and Worksheets will begin with instructions for editing files “08-Accessories.xls” through “17-Window Treatments.xls” and end with instructions for editing files “00-Project Title Page.xls” through “07-Manufacturer List.xls”.
Default Page Set-up and hyperlinks for all Ms Excel Worksheets are follows:

- A "portrait"-“down and over” orientation
- Letter size 8-1/2” x 11”
- No gridlines
- All 18 workbooks are “hyperlinked” in two places.
- The first link is found in the workbook file “01-Table of Contents.xls”.
- A second “hyperlink” is found within each of the 18 workbooks on a worksheet tab marked “Table of Contents Link”.
- Exhibit 10-4e illustrates a workbook opened to the “Table of Contents Link” worksheet. The “hyperlinks” are ordered and

listed in column “B” with corresponding digital file names in column “C”. Column “C” is not hyperlinked.

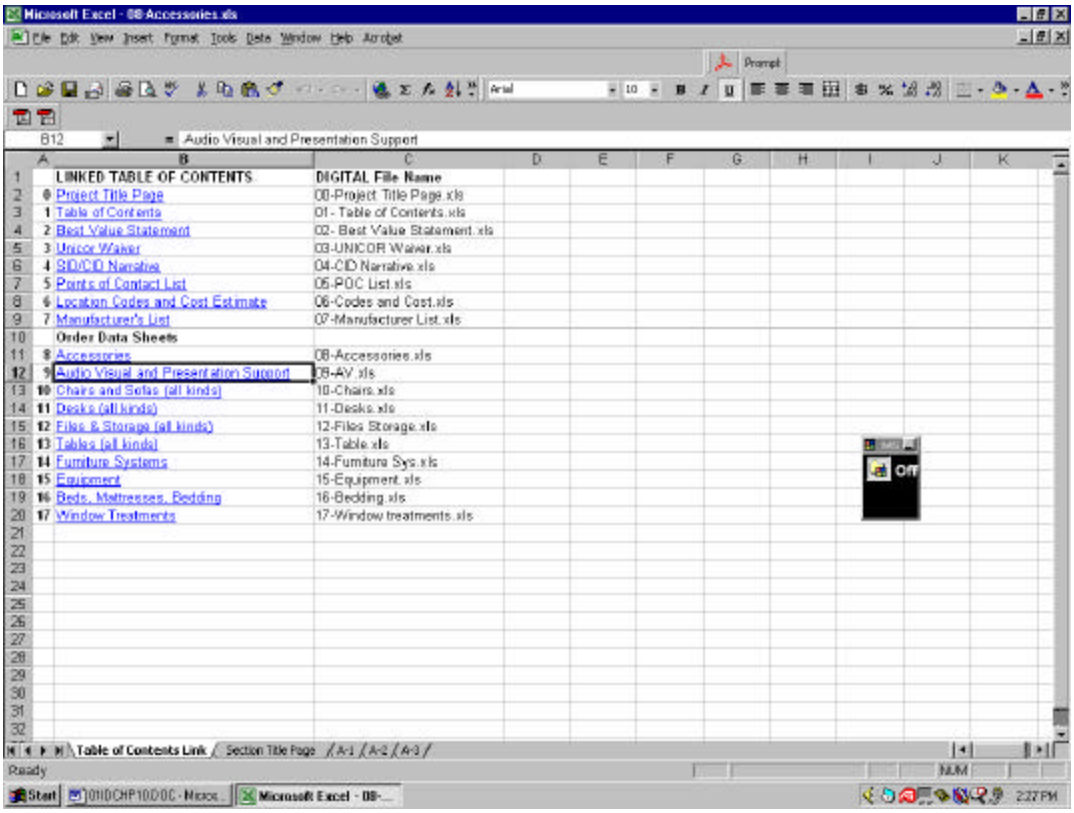


Exhibit 10-4e Opened Workbook

10.4.5 Editing The “Table of Contents Link” Worksheet

- The first worksheet tab within each workbook file shall always be the hyperlinked “Table of Contents Link”. This “hyperlink” feature will facilitate easy access and navigation to all other workbook files within the master project folder during the development of the CID. The integrity of these hyperlinks is to remain at all times.
- When workbook files are deleted from the master project Folder, edit all “Table of Contents Links” worksheets, the corresponding digital file names and the “01-Table of Contents” workbook to reflect project specific requirements.
- The “Link” worksheets shall never be part of the Adobe Acrobat Master CID Submittal. The “Link” worksheets will remain a unique worksheet within the Master CID MS Excel Folder.

10.4.6 Editing the “Section Title Page”

- The second worksheet tab within each workbook file shall always be the “Section Title Page”. Exhibit 10-4f illustrates the "Section Title Page".
- Edit the “footer” on all "Section Tile Page" worksheets to indicate the Project Name and Location. Verify the correct "Section Title" is in the header. Do not put dates or location codes in the "headers and footers".
- Edit the “Section Title Page” to provide a generic list of items specified in each section. For example the list under the general category of "Section 8-Accessories" may read: Artwork, Artificial Plants, Clocks, Coat Racks and Wastebaskets.
- Edit the "Section Title Page" for the range of location codes used within this section. For example if 32 accessory type items are being specified in “Section 8-Accessories” then the range of location codes would read: A-1 thru A-32.

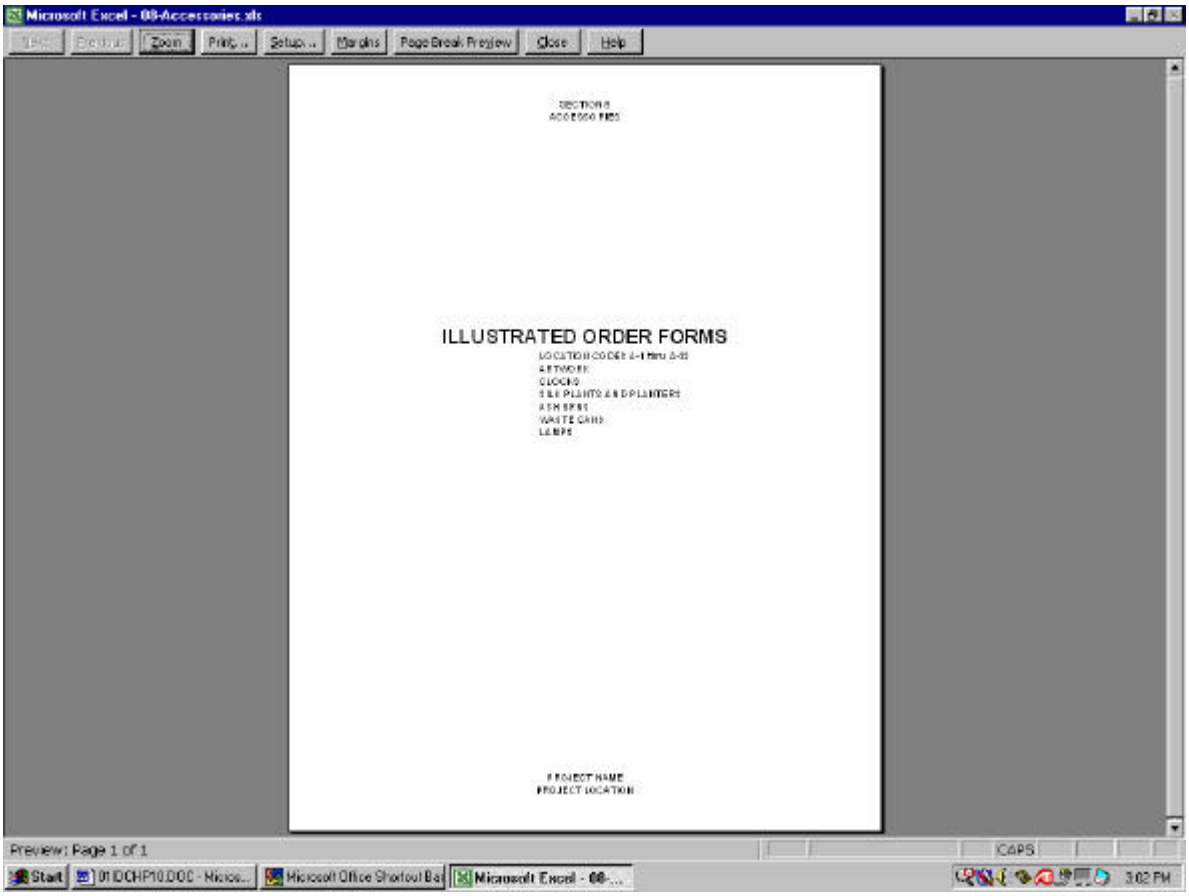


Exhibit 10-4f “Section Title Page"

10.4.7 Alphanumeric Location Codes

- The third worksheet tab within a workbook shall always start the “Illustrated Order Forms” (IOF). Each IFO is identified on a worksheet tab with the new simplified alphanumeric “Location Code”.
- Exhibit 10-4g illustrates the Location Codes tabs and stacked horizontally for easy navigation.
- There are only 10 "alpha codes" that can be used in developing the CID. However there are infinite "number codes" to use. Before assigning an alphanumeric location code to an item, determine the CID category workbook the item is to be in. When the category and workbook is determined, using the workbook's unique alpha code, assign the item an "alphanumeric" location code.
- Location Codes are not in alphabetical order. Codes are selected, ordered and stacked for easy editing of the Master MS Excel Director.

10.4.7.1 Workbook Alpha “Location Codes”

- A= Accessories
- V= Audio Visual and Presentation support furnishings
- C= Seating (All Kinds)
- D= Desks (All Kinds of free standing units)
- F= Files and Storage (All Kinds)
- T= Tables (All Kinds)
- S= Furniture Systems (Panels, components, & worksurfaces)
- E= Equipment
- B= Bedding, dormitory room furniture, Sheets, Mattress
- W= Window Treatments not included in the SID such as draperies.

10.4.8 Editing Illustrated Order Form (IOF) Worksheets

Editing the IOF worksheet is a two-step process. The first step is the page set-up. The second step is the actual development of the item specific ordering information. The following instructions will provide general guidance developing IOF worksheets and page set-ups:

- Only one location code per worksheet tab.
- Specify only one CID item per worksheet tab.
- Worksheets also known, as IOFs shall not be merged. For example, if 32 different types of accessories are specified for a project, there shall be 32 worksheets tabs labeled A1, A-2, A-3 etc.
- The new simplified Location Codes are provided in the editable MS excel files obtained from the Mobile District.
- Use only the alphanumeric codes provided in the 10 Furniture/Equipment workbooks. Do not create any new locations codes or workbooks. Alpha Codes used other than those provided will be disapproved. Exceptions are for Medical Projects.
- The “Location Code” used on the worksheet tab is also to be placed in the worksheet on line “1”, column “B”. Do not place the Location Code in the "header or footer".
- Edit the “header/footer” of each IOF with the Section Number and Name and the Project Name and Project Location. Dates are not required.
- If hyperlinks are used during the design development process, delete the hyperlinks in the in the Ready-To-Purchase (RTP) working files to. Hyperlinks are to be only in the "Table of Contents Link" Worksheets and the file “01-Table of Contents” workbook at the RTP submittal.
- Formulas for adding and multiplying cost and quantities can be used for quick calculations within a IFO worksheet only and can remain in individual IOFs at RTP.
- Do not hyperlink formulas to any other IOF worksheets or workbooks. Do not link the Cost Estimate workbook to any of the IOF worksheets. All 100% workbooks and worksheet are "stand alone" documents.

10.4.8.1 Information Provided on IOF Worksheets

The designer is to edit the IOF by completing all sections. The goal is the use of only one page, 8-1/2″ x 11″ with "portrait" orientation and shown in Exhibit 10-4g. An exception is allowed if additional sheets are needed for detail specifications. The additional pages are to be ordered "down then over" in the "page set".

Each IOF worksheet is a "stand-alone" document and provides comprehensive ordering information including the following:

- Item's Location Code
- GSA FSC Group and Schedule Name
- Contractor's GSA Contract Number/Expiration Date
- Contractor's Name and Address information
- Ordering Address
- Catalog Item Name
- Catalog Number
- Catalog Description
- Dimensions
- Finishes
- An image of the item to be purchased. It is suggested that furniture images be inserted into the Ms Excel page using a .bmp format.
- Do not provide an image of the finishes. Finishes shall only be placed on the Hard Copy CID Color Boards.
- Provide all the ordering information and specification data need for the item illustrated.
- Listing of the room numbers where the item is used.
- Quantity count per room.
- Total quantity count for the project.
- Unit cost of the item.
- Extend cost of all units specified
- Freight cost if applicable.

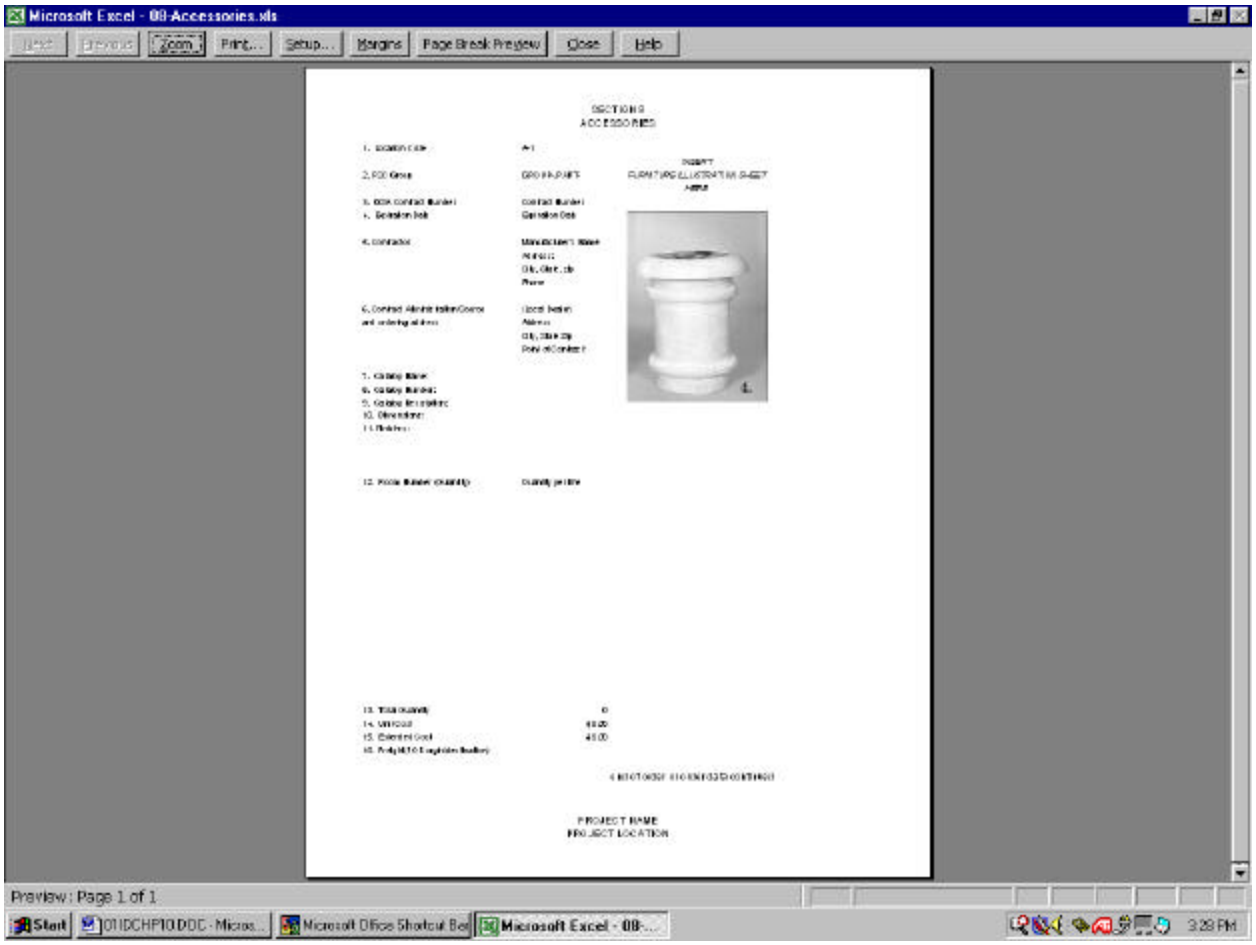


Exhibit 10-4g Illustrated Order Form (8-1/2” x 11”)

10.4.9 Editing the Furniture Systems Worksheets

File “14-Furniture Systems.xls” workbook will not follow the format of the other furniture item and equipment workbooks. Paragraphs 10.4.5 Furniture Systems and 10.4 SID/CID Drawing and Specification Requirements will discuss in detail developing projects that include Furniture Systems.

10.4.10 Editing the Project Title Page Workbook

The Project “Title Page” is found in the file “00-Project Title.xls” Edit the project specific information as indicated in Exhibit 10-2a and 10-2b. This worksheet will also be printed and used as the CID binder cover insert as well as the digital title page for the Master CID Adobe.PDF Folder, which will be discussed later. Editing the “header and footer” in this workbook is not required. Design Firms may insert their companies logo in the title page as well as project specific User and command logos.

10.4.11 Editing the Table of Contents Workbook

The “Table of Contents” is found in the file “01-Table of Contents.xls”. Provide a comprehensive table of contents based on project specific requirements. Ensure this information is coordinated with the "Table of Contents Links" in each workbook.

10.4.12 Editing The Best Value Statement Workbook

The “Best Value Statement” is found in file “02-Best Value Statement.xls”. The Best Value Statement form is a GSA approved form used to document the market research analysis and provide justification as to why certain suppliers and furniture contractors are used in the CID. The statement will provide the FAR required market research information used by Contracting Specialist and the Client with assurance that the CID has met cost and competitive requirements. The Best Value Statement is also an extension of the CID narrative and is to be referenced in the CID narrative.

The Best Value Statement workbook may also be expanded to include any Scope of Work documents required for a Packaged Office or Packaged Room order. The Best Value form is a GSA requirement and may be used by other contracting activities. The Interior Designer of record “signs” the form electronically as follows: /signed by/ Mary Doe, Registered Interior, Such and Such Firm.

10.4.13 Editing the UNICOR Waiver Workbook

The UNICOR Waiver statement is found in the file “03-UNICOR Waiver.xls. If a paper copy of the wavier is available, scan the document and insert the image into this workbook. Edit the UNICOR Waiver Worksheet to document:

- If a UNICOR waiver is required.
- How UNICOR was given the opportunity to compete with other Sources/vendors during the market research/design development process. Provide “Select Program” Requirements if any.

10.4.14 Editing the SID/CID Narrative Workbook

The SID/CID Narrative worksheets are found in the file “04-CID Narrative”. The narratives are to include discussion of the design analysis of the SID and CID to ensure the comprehensive design analysis is retained with the CID. Edit the SID/CID narratives in the SID CID worksheets using:

- A "portrait"-“down and over” orientation
- Letter size 8-1/2” x 11”
- No gridlines
- Do not import any other word document programs into this Workbook.

Narratives are to provide design analysis information to support the development of the SID/CID.

The CID Narrative is to:

- Discuss the SID and how it coordinates with the CID
- Discuss the Best Value Statement, Market Research, Function,
- Discuss Safety, and Aesthetics
- Discuss the UNICOR Waiver Requirements.
- Discuss project specific design requirements and how the CID met those requirements.

The SID Narrative is to:

- Discuss the CID and how it coordinates with the SID
- Discuss durability, life safety, maintenance, design decisions, color scheme etc.
- Discuss project specific design requirements and how the SID met those requirements.

10.4.15 Editing the Point of Contact List (POC) Workbook

The POC List is found in file “05-POC List.xls” is a comprehensive list of POCs needed to implement this CID project. The POC workbook is to list:

- Name
- Address
- Phone/Fax
- E-mail

Job Function of those associated with the CID project.

10.4.16 Editing the Location Codes and Cost Estimate Workbook

The comprehensive cost estimate if found in file “06-Codes & Cost.xls”. The comprehensive cost estimate shall be organized and grouped by the General Service Administration (GSA) Contracting Source’s Contract Number. Because GSA has consolidated many of their schedules, it is possible to have several different types of furniture items listed under one Contractor's Contract Number. Reference Exhibit 10-3h for an example of the Cost Estimate.

Do not organize the cost estimate by location codes. The Cost Estimate is organized according to GSA Schedule Titles and individual contractors under that GSA scheduled titled.

After furniture and equipment costs have been sub-totaled add the following line item costs to determine the final total cost of the CID package. Add:

- Freight charges 7-10% CONUS ONLY or 34% for CONUS/OCONUS
- 7% Installation fees
- 5-6% GSA Project Management Fees
- 6.5% Area Office fees (If the project acceptance is accomplished by the District’s Resident Office)
- Other Management fees other than the ordering an installation fees.

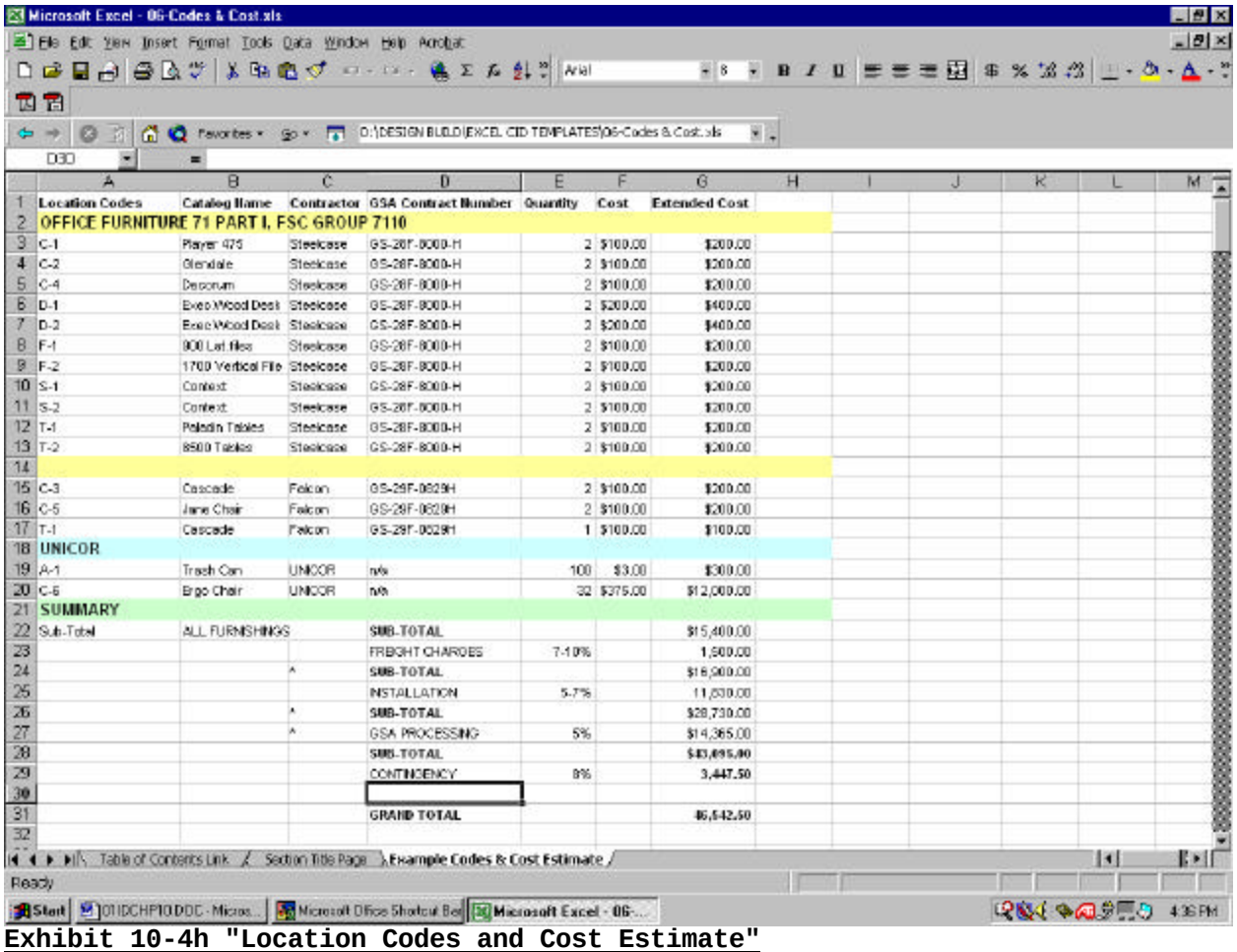
(% may vary and are to be based on the CID Procurement Plan discussed in 10.1.3)

10.4.17 Editing the Manufacturers List Workbook

The Manufacturer Lists are found in file “07-Manufacturer List.xls”. The Manufacturer's list is a comprehensive, summary list with addresses of all the contractors and sources used on the CID project. IOF will provide other specific information required for ordering purposes in addition to the addresses shown on the Manufacturer’s List.

The Manufacturer's List is to show:

- Name of the Source
- Address
- Phone/Fax
- E-Mail address



Location Codes	Catalog Name	Contractor	GSA Contract Number	Quantity	Cost	Extended Cost
OFFICE FURNITURE 71 PART I, FSC GROUP 7110						
C-1	Player 475	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
C-2	Glendale	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
C-4	Decorum	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
D-1	Exec Wood Desk	Steelcase	GS-28F-8000-H	2	$200.00	$400.00
D-2	Exec Wood Desk	Steelcase	GS-28F-8000-H	2	$200.00	$400.00
F-1	900 Lat files	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
F-2	1700 Vertical File	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
S-1	Context	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
S-2	Context	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
T-1	Paladin Tables	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
T-2	8500 Tables	Steelcase	GS-28F-8000-H	2	$100.00	$200.00
C-3	Cascade	Falcon	GS-29F-0029H	2	$100.00	$200.00
C-5	Jane Chair	Falcon	GS-29F-0029H	2	$100.00	$200.00
T-1	Cascade	Falcon	GS-29F-0029H	1	$100.00	$100.00
UNICOR						
A-1	Trash Can	UNICOR	n/a	100	$3.00	$300.00
C-6	Ergo Chair	UNICOR	n/a	32	$375.00	$12,000.00
SUMMARY						
Sub-Total	ALL FURNISHINGS		SUB-TOTAL			$15,400.00
			FREIGHT CHARGES	7-10%		1,500.00
		^	SUB-TOTAL			$16,900.00
			INSTALLATION	5-7%		11,830.00
		^	SUB-TOTAL			$28,730.00
		^	GSA PROCESSING	5%		$14,365.00
			SUB-TOTAL			$43,095.00
			CONTINGENCY	8%		3,447.50
			GRAND TOTAL			46,542.50

Exhibit 10-4h "Location Codes and Cost Estimate"

10.5 ASSEMBLING THE RECORD COPY CID (Sub-Folder #1)

After the MS Excel CID workbooks are edited to meet project and submittal level requirements, each workbook is to be "printed" in an Adobe Acrobat portable document format (Adobe.PDF) and compiled into “Sub-Folder #1 which is the Record Copy CID. The creation of the Record Copy CID is a two-step process. The first step is to print or transposed all the Ms Excel working files into Adobe.PDF files. Exhibit 10-5a illustrates the files names and stacking order.

Creating the CID Adobe.PDF files is quick and easy. To print the Ms Excel CID working files into the Adobe.PDF file, print one entire workbook at a time by simply “highlighting” the required worksheet tabs then print in a .PDF output. The file name will be the same with one exception. The file extension will be “.PDF”. Not all the worksheets in a workbook will be printed. **Do not print to the .PDF file the “Table of Contents Link” worksheet tab.** The “Link” worksheet tab is used only in the CID working files within the MS Excel Master Sub-Folder #4 for navigation purposes. Typical tabs titles printed in files “08 through 17” are:

- **“Section Title Page” tab**
- **“Illustrated Order Forms” tabs.**

Workbooks with the digital file names 00-Project Title Page.xls through 07-Manufacturer List.xls will require the workbook specific tabs to be printed. **Do not print the “Table of Contents Link”** in these workbooks.

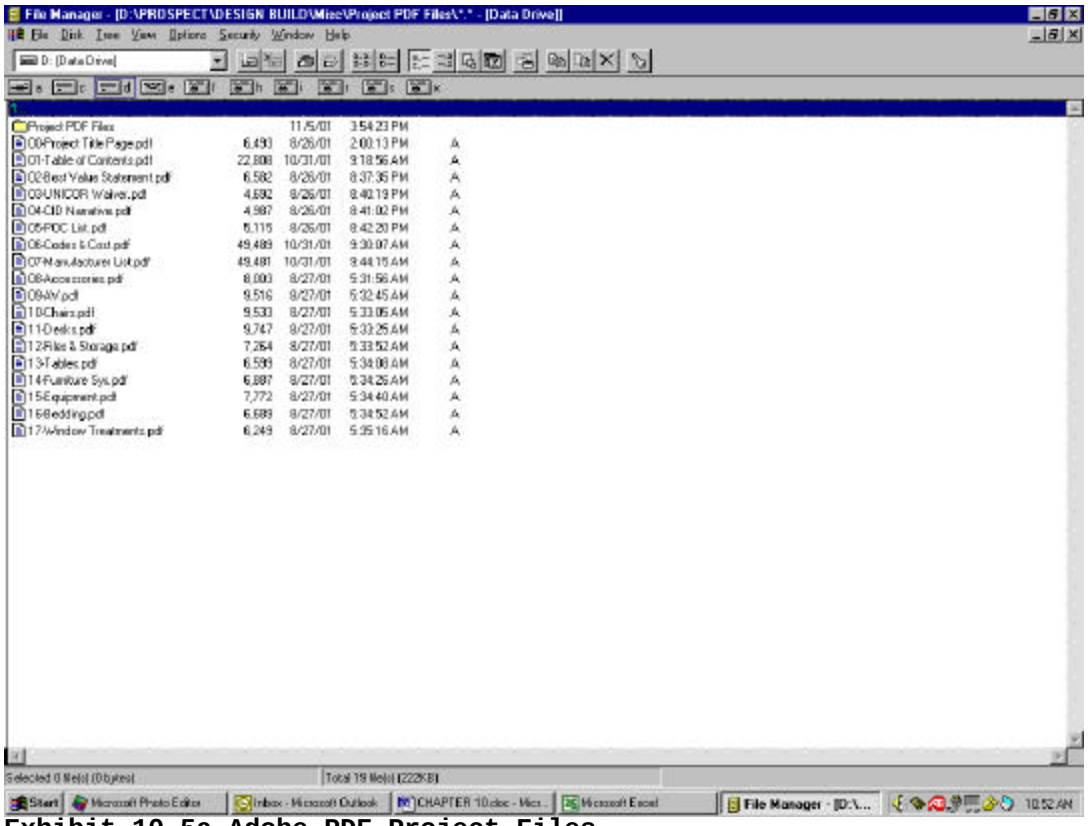


Exhibit 10-5a Adobe.PDF Project Files

The second step is to insert the Adobe.PDF files into the Sub-Folder #1- which will become the CID Record Copy is created. Adobe.PDF files inserted into the CID Record Copy using Adobe Acrobat Writer program. The CID Record Copy is the comprehensive CID procurement data other than drawings and actual sample boards.

10.5.1 Adding Bookmarks to Section Title Pages

After the digital workbook pages have been inserted into the Sub-Folder #1 using Adobe Acrobat Writer program, begin adding bookmarks to identify each "Section Title Page" and provide the number of pages within each Section. Exhibit 10-5b illustrates this requirement. For example, in Exhibit 10-5b the Section Title page "SID CID Narratives" has (2) pages within that section. The page numbers within the each section are noted in parentathes (#).

10.5.2 Adding Bookmarks to Illustrated Order Forms

Add IOF bookmarks as a sub-tile under the “Section Title” bookmarks. Edit the bookmarks using the simple alphanumeric location code used to identify the furniture item. If two or more sheets are required for an IOF add the number of sheets in (#) like the Section Title pages.

10.5.3 Electronic Signatures for the Record Copy

When all the information required for a submittal is inserted into the CID Record Copy, add a digital signature with a protective password for authenticity of the “Record Copy”. This signature action notes if any changes have been made to the document after the digital signature has been added.

10.5.4 Default settings Adobe.PDF Record Copy

Set the default settings in the Record Copy CID as:

- Open with page and bookmarks
- Magnification shall be set to "fit width".

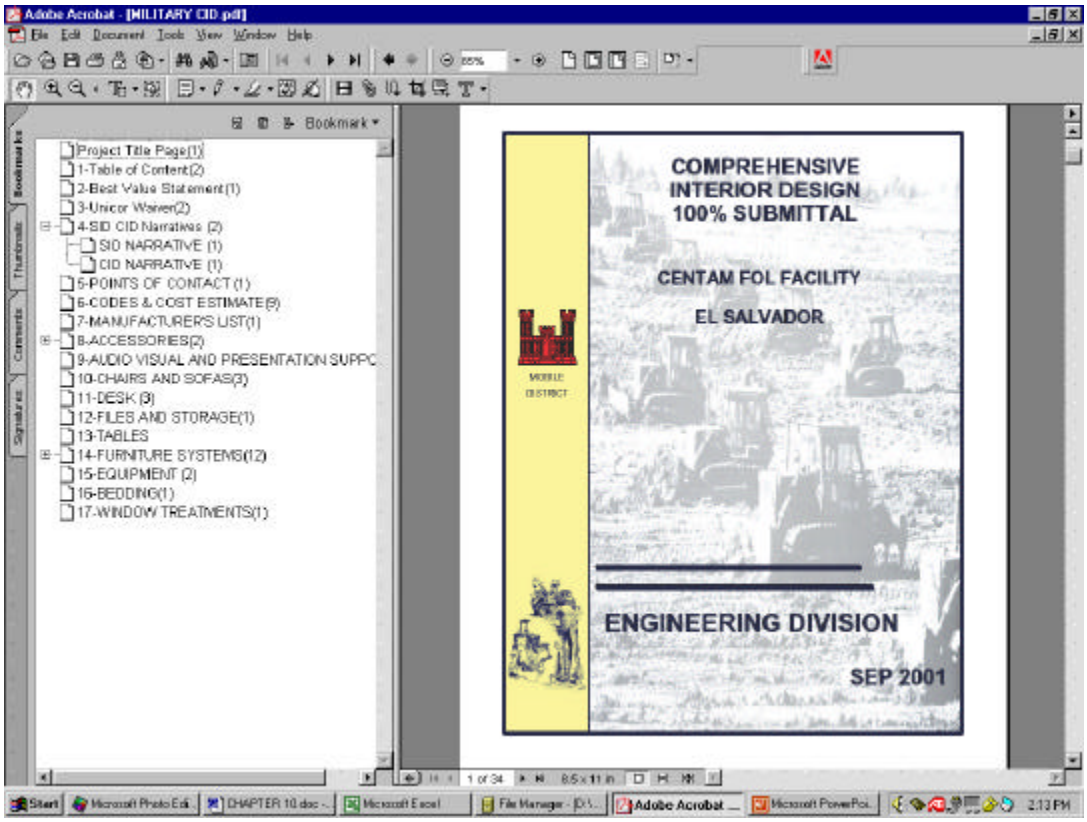


Exhibit 10-5b Adobe Acrobat Digital CID RECORD COPY FORMAT

10.6 ADOBE ACROBAT READ DRAWINGS AND DRAWING BOOKMARKS (Sub-Folder #2)

Working drawings of the "Composite Furniture Placement Plans" (FPP) shall be printed to Adobe.PDF files and placed in Sub-Folder #2. The FPP drawings are not to be included in the same folder as the IOFs. Drawings are to be stacked in a drawings folder as illustrated in Exhibit 10-2e.

10.6.1 Adding and Bookmarking Acrobat Read Drawings

Working files of AutoCAD or Microstation drawings are to be printed in the Adobe.PDF format using black and white output. Color output is not acceptable. When inserted into the Adobe Drawings Folder, "Bookmark" a full view of the each composite furniture placement. Use the sheet name in the drawing's title block for the "Bookmark" title.

10.6.2 Adding and Bookmarking Individual Room Placement Plans

After all the FPP drawings have been set for full view, bookmarked and titled, create individual room placement views under each Sheet title. This is done by "zooming-in" on the individual furnished rooms and inserting a "bookmark" for that one room. Edit Room Placement Plan bookmarks with the room number only. If the customer requires a hard copy of the room plan, instruct them to use the "crop and print" feature in the Acrobat program to obtain the hard copy. Exhibit 10-6a illustrates the Composite FPP with individual room "bookmarks".

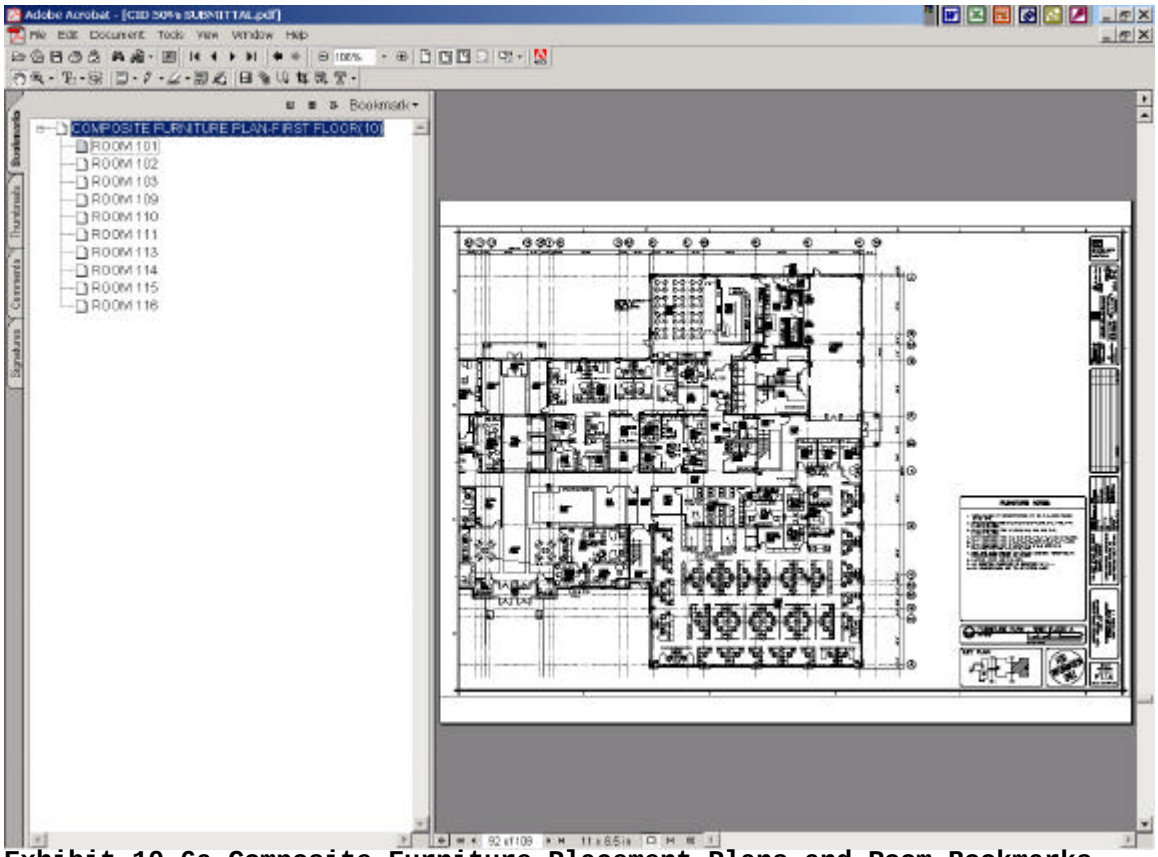


Exhibit 10-6a Composite Furniture Placement Plans and Room Bookmarks

10.7 FURNITURE SYSTEMS

Furniture systems workstations, either desk based, panel based or a frame and tile system are actually “a building within a building” because of their intended use and the requirement to fully coordinate them with the building’s finishes, architectural layout, structural, electrical and mechanical systems.

Furniture system workstations are intended to function as hard walled offices providing some degree of acoustical and visual privacy in addition to having power, voice and data (PVD) network distribution outlets like one would find in a hard walled office. Workstation designs and layouts are required to fully coordinate with the life safety plan, audio and visual alarms and the fire suppression system to ensure the “building within the building” supports life safety.

Workstation solutions for projects are not only to be designed for project specific requirements but are required to address the inevitable office reconfiguration. Workstations need to be selected for their best value features, durability, flexibility, and ease of reconfiguration. Workstations are to offer limited interruption of the PVD when reconfiguration occurs and are to be easily adaptable to incorporate new technology.

Workstations are to provide ergonomic features such as adjustable height work surfaces, fully articulating keyboards with parallel and changeable mouse pads, and paper management and storage tools to support tasking. All computer hard drives are to be mounted under the worksurfaces. A suitable, ergonomically designed task chair is to be selected and specified for each workstation. To the fullest extent possible, avoid placing an occupied workstation next to common use area such as semi-private conference spaces, copy areas or “food preparation” areas.

When considering the scope of work involved developing a furniture systems design and cost estimate and when considering the project delivery process of “fast track- Design Build”, new design requirements have been developed to ensure furniture systems designs and installation efforts are reasonably distributed throughout the design and construction process. These new requirements shall be applied to PPTO and D-B RFP projects alike to ensure the SID/CID submittal process for all projects are consistent.

10.7.1 Furniture System Requirements During the Design Phase

During the Design Phase of an PPTO or D-B RFP project provide the following design and procurement information:

- Workstation finishes,
- Coded workstation layouts plans
- Workstation product lists
- PVD requirements per typical workstation
- Cost estimates
- Edited UFGS Section 12705 FURNITURE SYSTEMS

10.7.2 Furniture Systems Requirements During the Construction Phase

During the construction phase of the project furniture systems vendors and the construction contractor is to provide as a single shop drawing the following submittal information:

- Detailed drawings, panel plans, PVD plans,
- Bill of materials
- Elevations or isometrics of typical workstations

Note: These requirements are based on submittal requirements listed in the UFGS 12705 Furniture Systems.

10.7.3 Editing CID Ms Excel Furniture Systems Workbook

The following instructions will provide guidance for the development of the CID MS Excel file “14-Furniture Systems.xls to meet **“Design Phase”** requirements. The MS Excel File “14-Furniture Systems.xls is different from all other IOF files. Isometrics are not required during the design phase of the project unless a unique workstation design needs to be shown. When an isometric is needed, the isometric is to be shown on the furniture systems “I” drawings. Editing the “Table of Contents Link” and the “Section Title” page is the same as the other 17 files.

10.7.4 Workstation Finish Sample Boards

- Provide a hard copy sample color board(s) illustrating all workstation finishes.
- On the sample board identify the furniture systems manufacturer’s name, and “product line”
- Identify each finish with the manufacturer’s color name and number.

10.7.5 Workstation Location Codes

- A simplified workstation alphanumeric location code is to be used. The letter “S” followed by a number is all that is required.
- The intent of the location code is to identify the workstation type. The location code is not to be used as a “room number”. If a combination of a desk based and frame and tile or panel based systems are used the “S” location code may be modified as follows:

    - SD-# for the desk based systems
    - SP-# for the panel based systems
    - ST-# for the frame and tile systems

10.7.6 Editing the Ms Excel Manufacturer Worksheet

- Block 1 Locations Codes: List all the location codes used. If only one manufacturer is supplying two or three types of systems, the location codes should be keyed to the ordering information make the distinction.
- Block 2 thru 6: Edit to include all the required ordering information and GSA contracting information.
- Block 7: Special Instructions.
- Block 8: List the types by Location Code and in [brackets] list the room numbers where they are used.
- Block 9: Indicate the total quantity of a each typical.
- Block 10: Indicate the cost of a single workstation type.
- Block 11: Indicate the extended cost.
- Block 12: Indicate the total cost for all types.
- Block 13: Add additional costs for design, installation etc.
- Blocks 14-16: Cost may vary depending on the CID procurement strategy agreed to during the Criteria Review meeting.
- Block 17: Indicate the Grand Total for Workstation design and installation.

NOTE: If UNICOR is designing and supplying the furniture systems a design fee of $225.00 per workstation for design and or design verification must be added to the project costs.

If the CID WILL NOT be installed by the General Construction Contractor, fees associated with the installation of the PVD networks and distribution systems must be added to the cost estimate.

10.7.7 Editing Fabric and Finish Worksheet

- Edit the fabric and finish worksheet by listing the manufacturer's fabric and finishes according to typicals.
- For example: Fabrics and finishes in open office areas may be different from fabrics and finishes used for private offices.
- Avoid Custom or Customer's Own Material. COMs will be disapproved.

10.7.8 Editing "Typical Workstation" Worksheets

- Worksheet Tabs: Edit the sheet tabs using the typical's location code.
- Block 1: Indicate the Location Code.
- Block 2: Workstation dimensions/square footage requirements.
- Block 3: List of product and PVD requirements.

NOTE: A "go-by" product list has been provided in worksheet "S-1".

If the designer chooses, the product and PVD requirements lists may be scheduled on an "I" drawing and included in the composite furniture placement plan drawings. The schedule may also be added to UFGS Section 12705 Furniture Systems in Part 3 Execution.

10.7.9 Editing UFGS Section 12705 Furniture Systems

- The UFGS 12705 Furniture Systems specification provides paragraphs describing the three types of systems discussed in paragraphs 10.3.
- Ensure only the systems types specified for the projects are included in the final specification. Ensure furniture system types that are not used in the project are edited out.
- A schedule of workstation products per type may be added under “Part 3 Execution” in lieu of using the drawings for scheduling workstation type product list.

Note: When the UFGS 12705 is used but not included in the set of building related contract drawings and specifications published by the District’s EN-DW, submit the specification as part of the Master CID Adobe Acrobat file. Print the SpectsInTact file to a Adobe.PDF file and insert into the Master CID Binder directly behind the last typical location code for furniture systems. Provide a Bookmark indicating it is the “Furniture Systems Specification”.

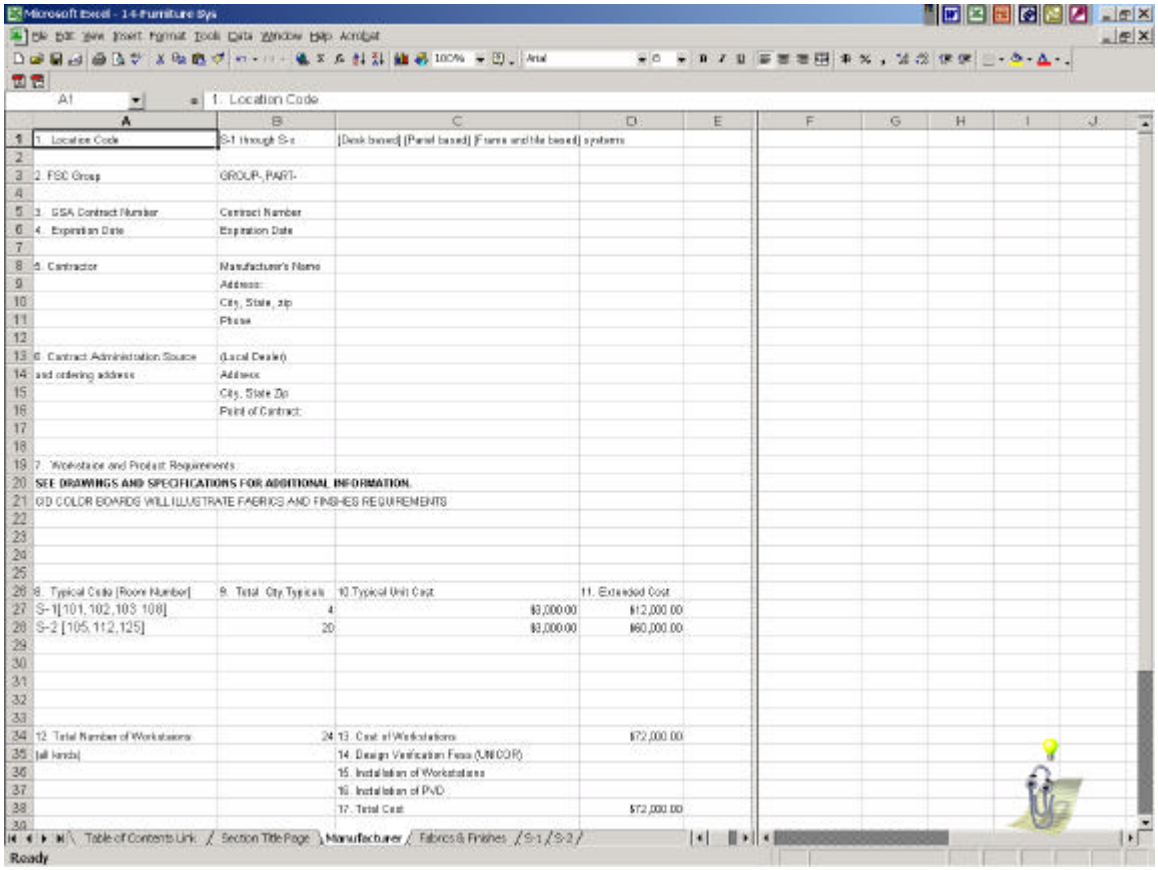


Exhibit 10-7a Furniture Systems Workbook

10.8 CONSTRUCTION CONTRACTOR INSTRUCTIONS FOR D-B SUBMITTALS

The D-B Construction Contractor is to respond to the D-B RFP by completing a 100% SID and CID if required by the D-B RFP.

10.8.1 Full D-B Project Criteria

When full project criteria is provided in the D-B RFP the D-B Contract, the Prime Contractor will provide a 100% SID based the 100% plans and specifications provided in the RFP. If 100% of the CID packages has been developed during the RFP phase of the project, The Prime Contractor is to coordinate any changes made during construction with the User and the 100% SID/CID. Revisions to the SID are the responsibility of the Construction Contractor. Revisions to the CID are the responsibility of the User Group.

10.8.2 Nominal and Partial D-B Project Criteria

When Nominal or Partial Project criteria is provided in the D-B RFP, the D-B contractor will be required to make submissions for Government acceptance of the SID and CID during the Predefinition Conference, 50% design phase, 100% un-reviewed design phase and final design phase after award of the D-B contract.

The 100% CID is to be completed by the D-B Contractor's Design Team and ready for government procurement at the time building construction begins. The CID needs to be fully coordinated with the other engineering disciplines to ensure PVD connection requirements are met as well as the architectural layout and building related finishes.

- The level of Contractor response is directly related to the level of criteria and submittal requirements provided in the D-B RFP. Contractor responses are provided during the following phases:

    - D-B Pre-Definition Conference
    - D-B 50% Design Phase
    - D-B 95% Design Phase
    - D-B Final Design Phase.

10.8.3 Pre-Definition Conference

The Contractor shall lead a predefinition conference at the User's office or at a site agreed upon by the Mobile District Project Manager, 30 days before the 50% design submittal is due. Government personnel responsible for the interior design of this project shall attend this meeting.

The purpose of the predefinition conference is to present and discuss the SID color scheme for the project and to present any Contractor initiated deviations from the D-B RFP. Any SID deviations accepted are to fully integrate and coordinate with the SID materials, finishes, colors,

textures, and patterns indicated in Section “01010 Design Criteria” or related UFGS.

Actual exterior and interior materials, finishes and colors are to be provided for review and comment. The format for this presentation shall be on 24 inch by 36-inch (600 by 900 mm) presentation board(s).

The Contractor shall provide colored elevations or perspectives of both the SID exterior and interior color schemes to assist in the discussion and presentation. At the end of the predefinition conference the Government will decide the final SID finishes that will be accepted for incorporation into the construction and ensure that installation guide standards are met. SID finishes accepted throughout the predefinition and design phase process shall be installed during the construction phase process.

Discontinued items will be the only justification for changing a accepted SID finish during the construction process. Therefore if is critical that accepted SID finishes will be available at the time of installation. The Government shall provide specific guidance as to the types and manufacturers to be used to develop the CID package during the Pre-definition conference.

10.8.4 50%, 100% AND Final Design Submittals

After the Pre-Definition Conference, the D-B Contractor will submit the formal 50%, 100% Un-reviewed and Final Design Package. The Contractor shall submit 5 complete sets of the 100% SID/CID package in accordance with this Chapter 10 of the Mobile District's Design Manual.

EXHIBIT 10-8a SID/CID D-B Contractor Deliverables
After Award of the D-B Contract
*** Hard Copy Presentation**
**** Digital Data Presentation**

ITEM	Description of the D-B contractor SID deliverables after the award of the D-B Contract.	Pre-definition Conference	50% Design Phase	100% Un-Reviewed Final Design Phase	Final Design	FULL PROJECT CRITERIA
	Start of SID Submittals					
1. * **	The D-B Contractor shall provide 2 sets of 100% SID color boards, 120 days after the Contractor is given Notice to proceed, complying with the requirements of Full Project Criteria. The Color Boards are to be submitted in an 8-1/2″ x 11 format as indicated in the Mobile District Design Manual Chapter 10. Side mark each set with "USER" and "COE Resident Engineer".					X
2. *	Provide large SID presentation color boards organized logically according to color placement and use. Deviations or alternatives samples can be provided for further development of the Design.	X				
3. *	Provide preliminary review of exterior materials etc. Colored rendering may be used as visual aid.	X X				
4.	SID binders (see 10.3) SID binders will be returned to the D-B contractor for updating.		X	X	X	
5.	Drawings (10.3)		X	X	X	
6.	Specifications (10.3)			X	X	
7.	Interior Signage Design, and placement plans (10.3)			X	X	
	Start of CID Submittals					
8. **	Preliminary layout of the furniture and equipment plans to validate the space supports the furniture requirements. (10.4)		X			
9. **	100% layout and scheduling of the furniture and equipment plans. (10.4)			X	X	
10. **	Preliminary CID selections and Illustrated Order Forms for one area of the facility. Preliminary discussions manufactures to use in the development of the CID. (10.4)		X			
11. **	Preliminary digital CID. PDF files only. (10.4)		X			
12. **	100% digital CID. PDF files only. (10.1 & 10.4)			X		
13. **	Final CID Adobe.PDF and MS Excel working files. (10.1 & 10.4)				X	
14. **	CD-ROM with entire Contract drawings and specification				X	

10.9 GLOSSARY OF TERM AND DEFINITIONS

The following commonly used terms and definitions are associated with SID/CID design development process. The terms may not be used in this Chapter but are helpful when planning or implementing an interior design package. There are many terms used in the Federal Government and many may be defined differently by other Department of Defense activities, other Federal Agencies and private sector professional societies and organizations. This Glossary provides Departments of the Air Force and Army specific acronyms related to the SID/CID packages and related contracting actions. The Glossary is divided into three sections: (1) Army and Air Force Terms, (2) Procurement Terms and (3) Space Planning Terms

Army and Air Force

A-E - ARCHITECT-ENGINEER A term generally used informally to identify a non-government designer, design team or design service contractor.

Air Force Interior Design Presentation Format- A resource indicating the format of SID/CID presentation and additional Air Force Procurement Order Forms. Visit the web site http://www.afcee.af.mil/dc for this publications and used in the programming, design and construction of Air Force facilities.

AR-405-70- Army Regulation for Utilization of Real Property- Army space allocation guidance. Exhibit 10-8a provides a summary of space allocation guidelines for administrative space.

BCE - BASE CIVIL ENGINEER The Air Force term for the centralized engineering management staff. The BCE is responsible for the coordination of all MILCON and O&M design and construction projects; is the principle coordinator between the designer, users and Major Commands. See also **DPW.**

CID - COMPREHENSIVE INTERIOR DESIGN The selection and illustration of all furniture necessary to complete the interior environment; The submittal is O&M funded and includes furniture illustrations, fabric and finish samples, plans, and ordering information. The CID may include the furniture systems plans and purchase orders if they are not included in the SID. See also **SID.**

DD 1391 - DEPARTMENT OF DEFENSE FORM 1391 A programming document initiated by the installation and submitted to Congress through the Major Command for funding. It includes an outline of basic needs for a proposed facility and an estimated cost to fulfill the needs.

DPW - DIRECTORATE OF PUBLIC WORKS The Army term for the centralized engineering management staff. The DPW is responsible for the coordination of all MILCON and O&M design and construction projects; is the principle coordinator between the designer, users and Major Commands. See also **BCE.**

DoD Tri-Service Standards CADD and Specification standard used by the three services branches that make up the Department of Defense (DoD-Department of Army, Air Force and Navy.

EN-DR Mobile District Engineering Design and Review Section responsible for SID/CID criteria development and project review during design and construction.

EN-DW Mobile District Engineering Project Support Section responsible for compiling and publishing the Contract Solicitations.

FSN 595B - **FEDERAL STANDARD NUMBER 595B** A collection of standard colors used by the various departments or agencies. The first number in the five digit series indicates a specific finish: (1)full gloss, (2) semigloss and (3)flat. The remaining 4 digits indicate a specific hue and tint/shade range.

FSN 595B – COLOR FAN DECK Federal Standard colors are available in a "fan deck" booklet for under $10.50. Use Order number # NSN 7690-01-162-2210 and mail your request and check to:

GSA
Specification Unit (3F-BP-W)
Seventh and D Sts SW
Washington, DC 20407

FY - **FISCAL YEAR** (a) October 1 of a calendar year through September 30 of the following calendar year; (b)"FY-...." at the beginning of a project title identifies the year Congress will fund the construction c contract.

JOC - (JOB ORDER CONTRACT) OR SABER (SIMPLIFIED ACQUISITION OF BASE ENGINEERING REQUIREMENTS) The JOC (Army) and SABER (Air Force) are methods the installation uses to contract for repair work. The Contracting Officer and the contractor agreed upon unit prices for work, then individual job orders are negotiated for specific scopes of repair work.

Mobile District Design Manual- The Mobile District Design Manual prescribes standard procedures and instructions for the preparation of design documents for Military and Civil Construction projects the direction of the US Army Corps of Engineers, Mobile District. Chapter 10 of the engineering design manual covers specific project directions and instructions for SID/CID designs. The web site for the complete design manual is: http://www.sam.usace.army.mil/en

MILCON - MILITARY CONSTRUCTION Funds that are appropriated by Congress for new military construction. Also known as MCA or MCP.

OMA-O&M - OPERATION AND MAINTENANCE Funds provided to each installation by the Major Command and used for the day to day operations of the installation. These funds may be used for the renovation of existing buildings or for the purchase of furniture. Funds not spent to award a contract disappear at the end of the FY and cannot be recovered.

PD- Project Definition-Air Force term-The requirement validation and schematic design phase of the design process. It satisfies the requirements for early preliminary design (35%).

Select Program- A UNICOR program allowing purchasing activities to select the projects that will be purchased from UNICOR.

SID - STRUCTURAL INTERIOR DESIGN (a) The selection and sampling of building related finishes; (b) A submittal with samples of proposed building materials a for a particular project; (c) Materials and finishes purchased and installed by the General Contractor; (d) Projects that are funded with the MILCON funds. The SID may also include the O&M funded furniture systems workstations.

Sustainable Design- Designs that consider the use of re-cycled products and designs conditions that score rating points such with the as LEEDs program.

Procurement Terms

BEST VALUE- The best value provision gives an ordering agency the authority to consider non-price-related factors in making a purchasing decision. Under the FAR 8.404, the customer is not required to use only price as the sole factor in an award. So non-price-related factors such as:

- special features of a product not offered by other vendors that will enhance the agency's performance
- product trade-in considerations
- advantageous warranty
- product maintenance availability

can be used in the purchase decision-making process without a formal quotation procedures.

COM- CUSTOMERS OWN MATERIAL- Manufacturer's have standard fabric offerings that meet testing standards, aesthetics qualities and color trends. A custom or special order fabric which is not part of a the standard offering is called "Customer's Own Material" (COM). Typical COM adds extra cost and coordination issues to the order. COM is discouraged.

DESIGN BUILD-The term Design-Build has many meaning. For the purposes of this chapter of the Design Manual the term Design Build will be A method of contracting in which a single entity takes responsibility for both design and construction of a facility. Performance requirements are outlined using the RFP format. See also **RFP.**

ENVIRONMENTAL PRODUCTS GUIDE- A GSA catalog for supply items. This guide can be obtained by contacting:

GSA CENTRALIZED MAILING LIST SERVICE (7CAFL)
P.O. BOX 6477
FT. WORTH, TX 76115
(817) 334-5215

FAR - FEDERAL ACQUISITION REGULATIONS The Federal laws governing how the Federal Government buys products and services. FAR 8.4 indicates the process for ordering from Federal Supply Schedules.

FSS - FEDERAL SUPPLY SCHEDULES Contracts that provide indefinite quantity contracts for commercial items at established prices for direct ordering use by Government agencies. For copies, mail requests to:

Furniture Commodity Center (3FN-CO)
Crystal Mall 4, RM 403
Washington DC 20406

(703) 305-5056.

GSA FSC - GENERAL SERVICES ADMINISTRATION FEDERAL SUPPLY CLASSES FEDERAL SUPPLY GROUPS Government contracts with private manufacturers that have a fixed price, MOL, and expiration date. This publication can be ordered from the following address:

GSA CENTRALIZED MAILING LIST SERVICE (7CAFL)
P.O. BOX 6477
FT. WORTH, TX 76115
(817) 334-5215

The Web site is: www.gsa.gov

MO - MAXIMUM ORDER- Maximum Order replaces the old Maximum Order Limit (MOL). Under the new Maximum Order provision (MO), any size order may be placed against a Federal Supply Schedule. The MO does not require the customer or the vendor to engage in a requote process. Under FAR 8.404, the new MO suggests the customer many want to seek a reduced price from the contractor. Under the MO principle, the customer may contract a preferred vendor(s), or dealer, and negotiate a better price directly with them. The ordering agency is **not required to use the formal requote process.** Depending on the specific circumstances, the vendor and dealer may order a better price than the contract. They are not required to pass reductions on to all Federal agencies.

OPEN MARKET - Designation for products that are not on a GSA or UNICOR contract.

PPTO – PRICE PERFORMANCE TRADE-OFF One of the ways the Government solicits for construction. The PPTO is a standard 100% design contract with clearly defined requirements, specifications, and terms that are not negotiated. Any proposal prepared in response to an PPTO must strictly adhered to the terms. The award is based on a “best value” bases and the past performance of the construction contractor on similar type projects.

RFP - REQUEST FOR PROPOSAL One of the ways the Government solicits for construction. An RFP usually defines a design problem and allows those who respond to the RFP to suggest a solution. The RFP is much more flexible than the **PPTO.** A solicitation document used in lieu of a sealed bid procurement. When and RFP so states, the Government reserves the right to award a contract based on initial offers received without any written or oral discussion with the Offerors.

RFQ - REQUEST FOR QUOTES An informal request for a price for a standard item.

UNICOR- The trade name for the Federal Prison Industries (FPI)Inc., a wholly owned government corporation established in 1934. UNICOR provides a variety of products and services to the Federal Government. All furniture systems workstations and conventional furniture requires a waiver. All waivers are to be requested at 35% design. Web site for FPI is www.unicor.gov. The waiver requests are sent to FPI on this web site.

Space Planning Terms

Assignment Drawings- Single-line architectural drawings, which incorporate graphic and statistical information broken down by tenant or organization.

Base Building Drawings- Scaled architectural drawings indicating the building shell and accurately representing all architectural and structural elements. They shall include but not be limited to exterior building elements, and permanent interior partitions, core areas, columns and convectors. Numerical identification of all columns, stairwells and elevators, toilets, doors, etc., shall be included.

Bay- The space in a building bounded by four columns. 20,25 and 30 foot bays are common.

Blocking, Stacking and Zoning- The first step in space planning. Arranging all organizational units by floor and within a floor to fit in the building. Determined by adjacency requirements, square footage's and special space needs. Zoning diagrams show public, semi-private and secure spaces by floor or within the facility.

Building Core- Includes elevators, stairs, restrooms, mechanical rooms, shafts, and electrical closets. These elements are generally grouped together.

Circulation & Layout factors: In accordance with the AR-405-70, the circulation factor is a percentage of the net square footage allocation per person. Circulation and layout factors account for aisles, corridors and within the office space.

Color Boards- Boards displaying samples of the materials to be used in the project. There are color boards for SID building related materials and color boards for CID furniture related materials.

Design Charrette Phase-The second part of the on-site effort is to produce a responsive schematic project solution based on the documentation of the Requirement Analysis Charrette. See Requirement Analysis Charrette.

Ergonomic- The science or study of human proportions and actions as related to the immediate human environment such as a employee's workstation.

Footprints & Typical- The footprint is an outline of the space required for a workstation and a typical is an example type of workstation that is used repeatedly throughout the project with no variation.

FPP- Furniture Placement Plans Drawings usually provided in the CID package that show all the furniture and equipment needed to "outfit" the facility.

FURNITURE SYSTEMS Furniture systems refer to workstations cubicles that are either desk based, panel based or frame and tile based. All types are under the same GSA Contract "Furniture Systems" Workstations are O&M funded only and never MILCON. If included in the construction contract and funded with O&M dollars, the workstations may be purchased and installed in the construction contract.

The interior designer will coordinate the workstation plans with the building and building systems and provide the plans and specifications in the contact documents for bids if the General Contractor will purchase and install the workstations and connect the workstations to the building's electrical, data, voice, and LAN systems. Reference UFGS Section 12705 Furniture systems workstations. Layout plans for workstations purchased and installed by the User are to fully coordinated with the building's systems and workstation layouts are included in the contract plans for "information only."

PVD- Power, Voice and Data- Electrical and Electronic systems that must be coordinated with the FPP. Each workstation must be assessed for the type of equipment that will be used and ensure the correct number of electrical and data outlet devices and circuits are specified.
These requirements are to be coordinated with the Electrical Drawings.

Requirement Analysis Charrette Phase- The first part of the on-site effort to systematically collect and analyze the customer and project requirements. Information is typically gathered through the use of project specific questionnaires typically alphanumeric and proceeds to the schematic design such as a bubble diagram and the blocking and stacking plans.

Turnkey- Specific to Mobile District- When the a single contractor is hired to provide all services related to implement the SID and CID packages. Typically the CID is procured by the Government and installed by the General Construction Contractor. The coordination and installation of furniture deliveries and placement efforts are typically and option to the building related contract.

Workstation Standard-Development of a personal workspace, which includes all necessary storage, and furnishings for a specific job function.

10.10 FURNITURE COST GUIDELINES

In projects where the furniture budgets have not been established, furniture cost guidelines are provided to establish preliminary targets for CID packages. Furniture costs have been developed based on the number of personnel who will occupy the facility and the facility type being occupied.

Exhibit 10-10a Furniture Cost Guidelines	
Facility Type	**Average Cost per person**
Administrative Space	$4,500
Air Force Quarters and Army Barracks Dormitory or UEPH rooms and Dayroom spaces	$3,200/$3,500

10.11 U.S. ARMY SPACE UTILIZATION GUIDANCE

The Department of Army programming requirements for space utilization OF administrative areas is found in AR-405-70. Net square footage allowances include internal circulation within workstations. For example, a 200 net square foot office for a Division Head is the total square footage allowed for furniture and circulation within the office.

Exhibit 10-11a Space Utilization Guidelines SPACE ALLOCATION	**GRADE**	NET SQUARE FOOTAGE ALLOWANCE
P-1 Commanders and Deputy Commanders Heads and Deputies of Directorates, Offices, Bureau, and Agencies	010 & 09 010, 109 and GS/GM 18 Comparable positions	400
P-2 Command and Deputy/Assist Heads and Deputies of Directories	08 & 07, SES, GS-15	300
P-3 Commands and Deputy Commanders Commanders Division Heads Branch Heads Professional/Admin. Personnel Command Sergeants Major of Positions in P-1 and P-2 Categories	06 05 GS 15-14 Colonel GS 15-14 Colonel GS 16	200
P-4 Commanders Division Heads, LT. Col Branch Heads Command Sergeants Major of Positions in P-3 Category	04 GS13 GS 15-13	150
P-5 Commanders Branch Heads Professional/Admin. Personnel Staff Sergeants Major Unit First Sergeant	03 GS 12, Major GS 13, LT. Col. & below who require office E-8	110
CIVILIAN PERSONNEL /CIVILIAN SPECIFIC CATEGORIES 0-1 Unit Supervisors	GS-9, E-8 WO, 01 or above W/6 Employees	110
0-2 Professional Administrative Personnel Unit Supervisors	GS-7, E-8 WO, 01 and above GS-8, E-7 and above	100
0-3 Clerical *	GS-07-GS-14	110
Employees (Non-Supervisory)	GS-07-GM-14	110
Administrative Officers (Non-Supervisory)	GS-12	110
Employee (Special assignment)	GS-12	160 plus dimension of all equipment + 50%
Supervisor	GS-13	150
Supervisor	GS-14	200
* NOTE: Add five (5) square feet for computer terminals, fax machines printers, typewriters etc.		

AR REG 405-70 15 Sep 93

NOTE: FOR AIR FORCE PROJECTS USE:
AIR FORCE HANDBOOK 32-1084 "STANDARD FACILITY REQUIREMENTS HANDBOOK"
CHAPTER 12- CATEGORY GROUP 61- ADMINISTRATIVE FACILITIES

End of Chapter 10

APPENDIX I
BORROW PIT PROCEDURES

(NOT APPLICABLE)

*5

APPENDIX J

FIRE FLOW TEST

~~(TO BE PROVIDED BY GOVERNMENT AT A LATER DATE)~~

(Revised by Amendment No. 0005)

Fort Bragg Fire & Emergency Sv

Hydrant Flow Test By Hydrant

Hydrant Number Between "D-0001 " And "D-0002 "

Date	Static	Residual	Pitot	Pitot 2	GPM	20 PSI	10 PSI	0 PSI
D-0001	D-3004 Ardennes ST				MUELLER			
4/22/2003	72	52	48	0	1163	1948	2142	2323
4981	Whittington, Vancleef							
Subtotal Flow Tests:		1		Min:	1163	1948	2142	2323
				Max:	1163	1948	2142	2323
				Avg:	1163	1948	2142	2323
D-0002	D-3206 ARDENNES ST				MUELLER			
2/8/2002	92	64	60	0	1300	2165	2322	2471
	<No Staff Member Listed>							
4/22/2003	76	54	58	0	1278	2117	2313	2496
4981	Whittington, Vancleef							
Subtotal Flow Tests:		2		Min:	1278	2117	2313	2471
				Max:	1300	2165	2322	2496
				Avg:	1289	2141	2317	2483

Total Flow Tests: 3

To:
CPT DAN DUNCAN

* Scheduled Flow Test

APPENDIX K

THREAT ANALYSIS

SUMMARY SHEET

SUBJECT: Threat Severity Level for Bryant Hall Renovation PN 53457

APPROVAL/ROUTING				CHIEF OF STAFF TASK #
	NAME	INIT	DATE	
1. DIVISION	Mr. Gutierrez		17 OCT 01	**ACTION OFF/OFFICE/ TEL** Mr. Truxal/ DCSENGR/2-4106
2. DEPUTY	Mr. Parker			
3. DIRECTORATE	LTC Paulson		17 OCT 01	
4. DCSOPS	5.	6.	7.	**DATE:** 18 Oct 01

1. For DECISION. TIME SENSITIVE, BUT NO SUSPENSE.

2. PURPOSE. To obtain approval of tactic and threat severity level (TAB A) for subject project based on asset value and aggressor likelihood (TAB B).

3. RECOMMENDATION. That DCSOPS approve threat severity level (TAB A) for subject project.

4. BACKGROUND AND DISCUSSION.

a. Security forms (TAB A & B) used to determine appropriate levels of anti-terrorism / force protection were completed during a security planning session conducted on 17 Oct 01. Participants were from DCSOPS, DCSINT, DCSENGR, USASOC SAFETY, and PSBC/SID.

b. The primary asset for Bryant Hall renovation MILCON PN 53457 is general military/civilian population. It has an overall asset value rating of medium (M). The tactic and threat level is low for standoff weapons, covert entry and insider compromise; medium for moving vehicle bomb, stationary vehicle bomb, exterior, and ballistics; and high for forced entry; and requires protection from mail bomb delivery and supplies bomb delivery, airborne contamination and waterborne contamination.

c. The tactic and threat levels listed in 4B will be used to program, facility standoff distance, security lighting, access control, intrusion detection systems and closed circuit television for subject project.

5. RESOURCES IMPACT. Estimated cost of project is $11.7.

6. MILESTONES. Estimated construction start date: Mar 03.

7. CONSIDERATION OF NONCONCURRENCE. None.

COORDINATION

OFFICE	NAME	CONCUR?	DATE	OFFICE	NAME	CONCUR?	DATE
AOOP-OPP-PR	MAJ Anderson		18OCT01				
AOOP-OPP-PR	Mr. Strickland		18OCT01				

USASOC Form 1001-R E

ASSET VALUE/AGGRESSOR LIKELIHOOD WORKSHEET

1. PROJECT/BUILDING IDENTIFICATION: BRYANT HALL

2. DATE: 17 OCT 01

3. ASSET CATEGORY (TABLE 3-2)	4. PRIMARY (P) OR SECONDARY (S) (PAGE 3-1)	5. VALUE RATING FACTORS: a MILITARY MISSION CRITICALITY	b USER MISSION CRITICALITY	c REPLACEABILITY	d RELATIVE VALUE	6. SUM OF VALUE RATING FACTORS	7. VALUE RATING (TABLE 3-15)
N	P	1	4	3	5	13	M
TABLE REFERENCE (TABLE 3-3)		3-4	3-5	3-6	3-13		

9. ASSET IDENTIFICATION

8. POTENTIAL (X) (TABLE 3-18)	10. AGGRESSORS	11. LIKELIHOOD RATING FACTORS: a ASSET PROFILE	b USEFULNESS	c ASSET AVAILABILITY	d LOCAL INCIDENTS (PAST)	e NEARBY INCIDENTS (PAST)	f POTENTIAL INCIDENTS	g ACCESSIBILITY	h LAW ENFORCEMENT EFFECTIVENESS	i DETERRENCE	j SUM OF LIKELIHOOD RATING FACTORS	k LIKEHOOD RATING (TABLE 3-37)
	TABLE REFERENCE	3-20	3-23	3-24	3-25	3-26	3-27	3-33	3-34	3-36	j	k
	a. UNSOPHISTICATED CRIMINALS											
	b. SOPHISTICATED CRIMINALS											
	c. ORGANIZED CRIMINAL GROUPS											
	d. VANDALS											
X	e. EXTREMIST PROTESTERS	4	2	5	1	1	2	6	4	2	27	L
X	f. CONUS TERRORISTS	5	2	5	1	1	2	6	4	6	32	M
X	g. OCONUS TERRORISTS	4	4	5	1	1	2	6	4	8	35	M
X	h. PARAMILITARY OCONUS TERRORISTS	4	5	5	1	1	1	6	4	8	35	M
	i. SABOTEURS											
	j. SPIES											

DD Form 2684, FEB 94

TACTIC AND THREAT SEVERITY LEVEL WORKSHEET

1. PROJECT/BUILDING IDENTIFICATION: BRYANT HALL.

2. ASSET IDENTIFICATION: PERSONNEL

3. DATE: 17 OCT 01

(CONCUR) (~~NONCONCUR~~)

TACTICS

AL AYCOCK
Colonel
DCSOPS

5. AGGRESSORS

	FROM DD 2684 APPLICABLE AGGRESSORS (X)	MOVING VEHICLE BOMB a	STATIONARY VEHICLE BOMB b	EXTERIOR c	STANDOFF WEAPONS d	BALLISTICS e	FORCED ENTRY f	COVERT ENTRY g	INSIDER COMPROMISE h	VISUAL SURVEILLANCE i	ACOUSTIC EAVESDROPPING j	ELEC. EMANATIONS EAVESDROPPING k	MAIL BOMB DELIVERY l	SUPPLIES BOMB DELIVERY m	AIRBORNE CONTAMINATION n	WATERBORNE CONTAMINATION o
APPLICABLE TACTICS (X) TABLE 3-38		X	X	X	X	X	X	X	X				X	X	X	X
a. Unsophisticated Criminals																
b. Sophisticated Criminals																
c. Organized Criminal Groups																
d. Vandals/Activists																
e. Extremist Protesters	X			L		L	VL	L	L							
f. CONUS Terrorists	X		L	M	L	M	L	L	L				YES	YES		
g. OCONUS Terrorists	X		M	M	L	M	M	L	L				YES	YES	YES	YES
h. Paramilitary OCONUS Terrorists	X	M	M	M	L	M	H	L	L				YES	YES	YES	YES
i. Saboteurs																
j. Spies																
k. Design Basis Threat		M	M	M	L	M	H	L	L				YES	YES	YES	YES

DD Form 2685, FEB 94

SECTION 01030

DESIGN AFTER AWARD

1. DESIGN RESPONSIBILITY. The Contractor shall furnish and be responsible for a complete set of design documents as called for in Section 01020 DESIGN REQUIREMENTS and as called for hereinafter.

2. DESIGN SUBMITTAL. The Contractor shall submit the design at different stages of design to the Government for review. All submittals required at each stage of design shall be submitted as a complete package at one time. No partial submittals will be reviewed. The number and requirements of each design submittal are listed hereinafter. The number and contents of the design submittals shall be reflected in the Contractor's progress charts. No construction work shall be performed by the Contractor until final design has been reviewed and approved for construction by the government. All comments for each submittal shall have been incorporated into the design. General submittal requirements are identified in the Savannah District Design Manual. This is available on the internet (under “Engineering Criteria”) at: http://en.sas.usace.army.mil. Specific submittal requirements are identified in the sections below.

3. GOVERNMENT APPROVED DESIGN SUBMITTALS. The approval of submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the design is in conformance with the contract requirements. Approval will not relieve the Contractor of the responsibility for any error, which may exist, as the Contractor is responsible for the design and construction of all work.

4. DESIGN SCHEDULE. Within 21 days after Notice to Proceed, the Contractor shall submit, for approval, a complete design schedule with all submittals and review times indicated by calendar dates in accordance with requirements in Paragraph 5 “Project Schedule” of the Phase One Request For Proposal. This schedule shall be updated monthly. No progress payments will be made without an approved schedule. Any additional changes which the Contractor may wish to make to number or composition of design submittals shall be made 30 days prior to the expected submittal date. The Contractor shall allow 21 days for the Government review period if submittal dates are met. If a scheduled design submittal date is not met without notifying the Contracting officer in writing one (1) week in advance, 28 days shall be allowed for the Government review period. If a submittal date is not going to be met, the Contractor shall notify the contracting officer, in writing, one (1) week prior to the scheduled submittal date. failure to do so will increase the Government review time by seven (7) days. See Paragraph: "REVIEW COMMENTS".

5. PROGRESS CHARTS. The Contractor shall prepare and submit a progress chart to the Contracting Officer. The progress chart 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 progression of the work in accordance with the progress schedule. The Contractor shall correct the progress schedule at the end of each month and shall deliver three copies to the Contracting Officer. Inasmuch as monthly partial payments to the Contractor are based to a large extent on the progress schedule, the monthly corrections should be realistically made to the best ability of the Contractor.

6. STAGES AND CONTENTS OF DESIGN SUBMITTALS.

6.1. Corrected Proposal Submittal. The Contractor shall submit 10 copies of corrected drawings and technical proposal notebooks which incorporate any corrections on clarification items or deficiencies noted during negotiations for distribution to the Users and command agencies. Submit the drawings in half size to the project manager within 30 days after contract award. This item only applies to the successful proposer after contract award.

6.2. 60% Preliminary Design Submittal. The 60% preliminary design submittal is a set of drawings in half-size representing 60% of the design. It will also include a tabulation recapitulating the total utility system loads – electrical, sanitary sewer, water, etc., - giving the point of connection into the existing utility systems. Any unusual utility system aspects of the project, especially those requiring resolution prior to final design, will be addressed. The average annual energy use per square meter of net floor area shall be calculated and stated in BTU per square meter. Prior to submittal of the concept design, the Design Build Contractor shall ensure that the design has been thoroughly checked and coordinated between the various design specialties. All material submitted shall be dated. Whenever items are corrected or later resubmitted, they will show a revised date in order to differentiate later material from the original submittal. Each discipline has unique Preliminary Design submittal requirements. Respective chapters of the Savannah District Design Manual should be reviewed to determine the exact nature of these requirements.

6.2.1. 60% Additional Fire Protection Design Submittal Requirements:

6.2.1.1. Design Analysis shall be in accordance with the DMMC, Chapters A-4, 5, and 6 for preliminary (60%) design submittals. Project fire protection design shall be complete and detailed as required for critical projects per the DMMC, Chapters A-4 and A-6.

6.2.1.2. Drawings shall be in accordance with the DMMC, Chapters A-4, 5, and 6 for preliminary (60%) design submittals. Project fire protection design shall be complete and detailed as required for critical projects per the DMMC, Chapters A-4 and A-6.

6.2.1.3. Specifications shall be in accordance with the DMMC, Chapters A-4, 5, and 6 for preliminary (60%) design submittals. Specifications submitted shall be marked-up versions such that reviewer can visually see the

revisions. The proposer's optional items shall be limited to bracketed items only.

6.2.2. 100% Final Design Submittal. The 100% final design submittal should represent final drawings and technical specifications. All design work should be complete. Each discipline has unique Final Design submittal requirements. Respective chapters of the Savannah District Design Manual should be reviewed to determine the exact nature of these requirements.

6.2.2.1. 100% Additional Fire Protection Design Submittal Requirements:

6.2.2.1.1. Design Analysis shall be in accordance with the DMMC, Chapters A-4, 5, and 6 for final (100%) design submittals. Project fire protection design shall be complete and detailed as required for critical projects per the DMMC, Chapters A-4 and A-6.

6.2.2.1.2. Drawings shall be in accordance with the DMMC, Chapters A-4, 5, and 6 for final (100%) design submittals. Project fire protection design shall be complete and detailed as required for critical projects per the DMMC, Chapters A-4 and A-6.

6.2.2.1.3. Specifications shall be in accordance with the DMMC, Chapters A-4, 5, and 6 for final (100%) design submittals.

6.2.2.1.4. For HVAC Controls: HVAC Controls System Drawings (MC-Plates) shall be submitted at the final design stage and shall include the following.

6.2.2.1.4.1. HVAC Controls System Legend
6.2.2.1.4.2. Control System Schematic
6.2.2.1.4.3. Equipment Schedule
6.2.2.1.4.4. Valve Schedule
6.2.2.1.4.5. Damper Schedule
6.2.2.1.4.6. Sequence of Operations
6.2.2.1.4.7. I/O Summery table and Data Terminal Strip Diagram
6.2.2.1.4.8. Wiring Diagram
6.2.2.1.4.9. Communications Network and Block Diagram
6.2.2.1.4.10. Metering of Utilities (gas, electrical and water)
6.2.2.1.4.11. DDC Panel locations

6.2.2.2. The control drawings shall use the Corps of Engineers standard control drawings. These drawings are available at the following website: http://www.sas.usace.army.mil/eng/hvac/ or on the SAS_STD CD available from the project manager.

6.2.2.3. Corrected Final Design Submittal. Each discipline has unique Corrected Final Design submittal requirements. Respective chapters of the Savannah District Design Manual should be reviewed to determine the exact nature of these requirements.

7. QUANTITY OF SUBMITTAL ITEMS. The documents which the Contractor shall submit to the Government for each submittal are listed and generally described. If the Contractor chooses "fast track" process of design/ construction he shall package the submittals for a total limit of 14 submittals review packages in order not to burden the Government review process. The submittal arrangement is any logical

order desired by the Contractor as long as it is limited to 14 or less.

8. MAILING OF SUBMITTALS. All submittals to the Government during design shall be mailed using overnight mailing service. The addresses to where each copy shall be mailed are listed below. Each submittal shall have a transmittal letter accompanying it that indicates the date, design percentage, type of submittal, list of items submitted, transmittal number and point of contact with telephone number.

8.1. Addresses and submittal distribution:

8.1.1. U.S. Army Engineer District, Savannah
ATTN: CESAS-PM-MD/ (Mr. Kurt Amundson)
P.O. Box 889
100 West Oglethorpe Avenue
Savannah, GA 31402-0889

8.1.2. Directorate of Public Works & Environment
XVIII Airborne Corps & Ft. Bragg
ATTN: AFZA-PW-PM (Master Planning Branch, Ms. Katherine Haught)
Bldg No. 3-2033
Ruther Road
Fort Bragg, NC 28310-5000

8.1.3. U.S. Army Engineer District-Savannah
XVIII Airborne Corps & Ft. Bragg
ATTN: Corps of Engineers, Resident Engineer (Mr. Vernon B. Crudup)
Bldg No. 3-2033
Ruther Road
Fort Bragg, NC 28310-5000

8.1.4. U.S. Army Special Operations Command
ATTN: AOEN (Mr. David Truxal)
Building D-2507
Ardennes Street
Fort Bragg, NC 28310-5000

8.1.5. Commander
UFACCOM-TAO
Attn: AMSEL-DSA-TAM (Calvin Flanigan)
1671 Nelson St.
Fort Detrick, Maryland 21702-5044

The following table lists the number of copies of design submittal requirements for this project:

	Distribution List				
Submittal/Item	**.1**	**.2**	**.3**	**.4**	**.5**
1. CORRECTED PROPOSAL					
1/2 Size Drawings	10	0	0	0	0
Revised Proposal Notebooks	10	0	0	0	0
2. PRELIMINARY (60%)					
Drawings, Half Size	3	0	0	0	0
Drawings, Full Size	14	10	3	4	0
Design Analysis	14	10	3	4	0
Specifications	14	10	3	4	0
Revised Color Boards	2	1	1	1	0
3. FINAL (100%)					
Drawings, Half Size	3	0	0	0	0
Drawings, Full Size	14	10	3	4	1
Design Analysis	14	10	3	4	1
Drawings on CD	1	1	1	1	0
Specifications	14	10	3	4	1
Revised Color Boards	2	1	1	2	0
4. CORRECTED FINAL					
Drawings, Half Size	3	3	2	5	0
Drawings, Full Size	10	4	3	4	1
Design Analysis	10	4	3	4	1
Drawings on CD	1	1	1	1	0
Specifications	10	4	3	4	1
5. APPROVED CORRECTED FINAL					
Drawings, Half Size	3	3	2	5	0
Drawings, Full Size	1	1	0	2	1
Specifications	4	4	2	5	1
Electronic Specifications	3	0	0	0	0
Drawing Files in Microstation Format	2	2	1	2	0

9. DESIGN SUBMITTAL REVIEWS.

9.1. For each design review submittal, the Contractor will be furnished comments from the various design sections of the Savannah District and from other concerned agencies involved in the review process. The Contractor/Designer shall annotate the comments with actions taken, and shall provide the annotated comments with the next submittal.

9.2. ProjNet/DrChecks is the required method for preparing and annotating comments. This is an Internet based database available on the Internet at: http://65.204.17.188/projnet/home/version1/

9.3. The review will be for conformance with the technical requirements of the solicitation. The Government will take twenty-one (21) days to review and comment on each design submittal. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the

comment, he shall clearly outline, with ample justification, the reasons for noncompliance within five (5) days after receipt of these comments in order that the comment can be resolved. The disposition of all comments shall be furnished in writing with the next scheduled submittal. The Contractor is cautioned in that if he believes the action required by any comment exceeds the requirements of this contract, that he should take no action and notify the District in writing immediately.

9.4. Review conferences will be held for each design submittal at Fort Bragg, GA. The Contractor shall bring the personnel that developed the design submittal to the review conference. These conferences will take place the week after the review period.

10. PAYMENT DURING DESIGN

10.1. Payments, as authorized by the Authorized Representative Contracting Officer (COR), will be made monthly for the amount and value of the work and services performed by the Contractor. This estimate will be verified by the Contracting Officer utilizing the progress charts or the CONTRACTOR-PREPARED NETWORK ANALYSIS SYSTEM submitted by the Contractor and independent analyses of progress. See Contract Clause entitled PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS for additional information.

11. DESIGN ANALYSIS

11.1. Media and Format: The design analysis shall be presented on 8-1/2 inch by 11-inch paper except that larger sheets may be used when required for graphs or other special calculation forms. All sheets shall be reproducible form. The material may be typewritten, hand lettered, handwritten, or a combination thereof, provided it is legible. Side margins shall be 1 inch minimum to permit side binding and head to head printing. Bottom margins shall be 1-1/4 inches, with page numbers centered 1 inch from the bottom.

11.2. Organization: The several parts and sheets of the design analysis shall be given a sequential binding number and bound under a cover indicating the name of the facility and project number, if applicable. The title page shall carry the designation of the submittal being made. The complete design analysis presented for final review with the final drawings and specifications shall carry the designation "FINAL DESIGN ANALYSIS" on the title page.

11.3. Design Calculations: Design calculations are a part of the design analysis. When they are voluminous, they shall be bound separately from the narrative part of the design analysis. The design calculations shall be presented in a clean and legible form incorporating a title page and index for each volume. A table of contents, which shall be an index of the indices, shall be furnished when there is more than one volume. The source of loading conditions, supplementary sketches, graphs, formulae, and references shall be identified. Assumptions ad conclusions shall be explained. Calculation sheets shall carry the names or initials of the computer and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person.

11.4. Automatic Data Processing Systems (ADPS): When ADPS are used to perform design calculations, the design analysis shall include descriptions of the computer programs used and copies of the ADPS input data and output summaries. When the computer output is large, it may be divided into volumes at logical division points. 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. Preparation of the descriptions which must accompany each set of ADPS printouts shall include the following:

11.4.1. Explain the design method, including assumptions, theories, and 0 formulae.

11.4.2. Include applicable diagrams, adequately identified.

11.4.3. State exactly the computation performed by the computer.

11.4.4. Provide all necessary explanations of the computer printout format, symbols, and abbreviations.

11.4.5. Use adequate and consistent notation.

11.4.6. Provide sufficient information to permit manual checks of the results.

12. DRAWINGS

12.1. All drawings shall be Computer-Aided Design and Drafting (CADD) in Bentley (Intergraph) Microstation format. The Contractor shall prepare the drawings in such a manner that the Corps of Engineers could construct the facility without any additional assistance from the Contractor. Drawings shall be complete. Unnecessary work such as duplicate views, notes and lettering, and repetition of details shall not be permitted. Standard details not applicable to the project shall not be shown. Details of standard products or items which are adequately covered by specifications shall not be included on the drawings. Drawings shall be detailed such that conformance with the RFP can be checked and to the extent that shop drawings can be checked. Shop drawings shall not be used as design drawings. The Contractor shall use standard Corps of Engineers title blocks and borders on all drawings at all submittal stages. Standard drawing sheet formats and title blocks, and file and drawing CADD file names will be furnished to the Contractor by the Government. The Contractor shall incorporate the drawing, file, and contract numbers on individual drawing sheets at the earliest submittal.

12.2. 60% and Final Submittals. Drawing submittals shall be both half size and full size plots as indicated by the chart above.

12.3. Corrected Final Submittal. Drawing submittals shall be both half and full size plots as indicated by the chart above.

13. SPECIFICATIONS

13.1. The Contractor shall submit marked-up guide specifications at the 60% submittal and edited final specifications at the final and corrected final submittals. The specifications shall be UFGS Guide Specifications and Savannah District Specifications. These specifications are available on the Internet at: http://www.hnd.usace.army.mil and http://en.sas.usace.army.mil/ .

13.2. Many of these specifications are in SPECSINTACT format (*.sec). SPECSINTACT software is available free of charge at http://si.ksc.nasa.gov/specsintact. These specifications shall be edited and tailored by the Contractor in the basic specification format (Parts 1, 2 and 3) to meet the requirements of the project under design. The Contractor Submittal Register must be edited and included. The UFGS are guide specifications only. The Contractor is to delete what is not needed and add what is needed.

13.3. For marked-up specifications at the 60% submittal, the Contractor shall mark out and/or add to the original text, as required, showing intended additions and deletions. Intended additions and deletions may be made by marking with a red pencil, manually typing inserts, or by word processing. If a red pencil is used, the Contractor shall mark out all unneeded specification data and/or add as required to fully describe the work. Additions may be penciled in the margin or typed on individual pieces of paper, marked as inserts, and attached to the specification in the proper location.

13.4. Final format, clean specifications will be submitted at the Final and Corrected Final submittals. All marked-out or redlined text shall be deleted and all inserted text shall be typed and accepted.

13.5. The specification shall be detailed enough such that alternate products meeting the specification could be substituted and they would not adversely impact the project.

14. SUBMITTAL REGISTER. The Contractor shall develop submittal requirements required during construction as part of the design phase of the contract. This shall be done by the Contractor’s Designer of Record by producing a Contractor Submittal Register at each submittal during design. A submittal register shall be prepared for each section of the specifications for the submittal requirements of that section. The Contractor’s Designer of Record shall be responsible for listing all required submittals necessary to insure the project requirements are complied with. The Register shall identify submittal items such as shop drawings, manufacturer's literature, certificates of compliance, material samples, guarantees, test results, etc. that the Contractor shall submit for review and/or approval action during the life of the construction contract. See Section 01330 Submittal Procedures (Design Build) for submittal and submittal register definitions and procedures.

15. DESIGNER OF RECORD. The Contractor shall identify and have on his staff a State of North Carolina licensed or board certified Designer of Record to develop submittal requirements during design and construction, and be responsible for each submittal identified in the Contractor Submittal Register. A Designer of Record may be responsible for more than one submittal. All areas of work shall be accounted for by a listed Designer of Record. Designers of Record shall approve all submittals they are responsible for prior to submittal to the Government.

-- End of section --

SECTION 01312A

QUALITY CONTROL SYSTEM (QCS)
08/01

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. 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 Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01320A, PROJECT SCHEDULE, Section 01330, SUBMITTAL PROCEDURES, and Section 01451A, CONTRACTOR QUALITY CONTROL, 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. The Government will make available the QCS software to the Contractor after award of the construction contract. 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. Upon specific justification and request by the Contractor, the Government can provide QCS on (3-1/2 inch) high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website 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:

Hardware

IBM-compatible PC with 200 MHz Pentium or higher processor

32+ MB RAM

4 GB hard drive disk space for sole use by the QCS system

3 1/2 inch high-density floppy drive

Compact disk (CD) Reader

Color monitor

Laser printer compatible with HP LaserJet III or better, with minimum 4 MB installed memory.

Connection to the Internet, minimum 28 BPS

Software

MS Windows 95 or newer version operating system (MS Windows NT 4.0 or newer is recommended)

Word Processing software compatible with MS Word 97 or newer

Internet browser

The Contractor's computer system shall be protected by virus protection software that is regularly upgraded with all issued manufacturer's updates throughout the life of the contract.

Electronic mail (E-mail) compatible with MS Outlook

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.

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. 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. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). 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".

1.6.1.5 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.

1.6.1.7 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. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. 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. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451A, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, 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 Section 01451A, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

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, e.g., ENG Form 3394 and OSHA Form 200.

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 Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, 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 Contract Clause "Schedules for Construction Contracts", or CONTRACTOR PREPARED NETWORK ANALYSIS SYSTEM (NAS) – PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF). (See CONTRACTOR PREPARED NETWORK ANALYSIS SYSTEM (NAS) – PROJECT SCHEDULE.) The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 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. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

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 01322

CONTRACTOR PREPARED NETWORK ANALYSIS SYSTEM (NAS) FOR DESIGN–BUILD CONTRACTS — PROJECT SCHEDULE (Sept 01)

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publication is referenced in the text by basic designation only.

ER 1-1-11 Progress, Schedules, and Network Analysis Systems (June 1995)

1.2 CONTRACTOR SCHEDULING REPRESENTATIVE

The Contractor shall designate, a scheduling representative, the individual tasked with the responsibility for preparation-updating-revision of the NAS schedule who shall be responsible for the preparation and submittal of the entire NAS project schedule including all items specified below and revisions to the schedule or supplemental completion schedules, as applicable or directed by the Contracting Officer. The scheduling representative shall be approved by the Contracting Officer based on a resume, indicating as a minimum, formal training from software vendor or 5 years' experience in working with NAS schedules.

1.3 GENERAL REQUIREMENTS

Pursuant to Contract Clause FAR 52.236-15, SCHEDULES FOR CONSTRUCTION CONTRACTS, the Contractor shall prepare the NAS Project Schedule as described below. The NAS Project Schedule shall be a composite schedule including the design and construction activities. The scheduling of construction shall be the responsibility of the Contractor. Contractor management and superintendent personnel shall actively participate in its development. Subcontractors and suppliers working on the project should actively participate in developing and maintaining an accurate NAS Project Schedule, and the prime Contractor shall verify their support for the submitted schedule in writing. The Contractor shall include this written verification with the initial submittal and all revisions (to logic and durations) of the NAS schedule. The approved NAS Project Schedule shall be used by the Contractor to plan and control the progress of the work, perform evaluations of actual progress, perform time analysis for requests of time extensions on changes, and to provide the basis for the request of all progress payments.

The Government will use the NAS Project Schedule to evaluate the Contractor's progress for timely completion, plan for Quality Assurance verification of the work and evaluate the effects of a proposed modification on the contract duration (critical path activities).

1.4 BASIS FOR PAYMENT

The approved schedule shall be the basis for progress payments. Lack of an approved schedule or scheduling personnel will result in an inability of the

Contracting Officer to evaluate Contractor's progress, may delay progress payments and may result in an interim unsatisfactory performance rating for the area of effectiveness of management.

The Contractor shall provide all information/data, as specified below, for the Contracting Officer to evaluate Contractor progress for payment purposes. The Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, for failure to provide information and data required in this specification.

1.5 PROJECT SCHEDULE

1.5.1 Project Schedule Software

The Contractor shall prepare the NAS schedule using a computer software system. The system utilized by the Contractor shall be capable of satisfying all requirements of this specification and ER 1-1-11. Manual methods used to produce any required information shall require prior approval by the Contracting Officer. The Contracting Officer intends to use PRIMAVERA P3. The Contractor shall provide to the Government a complete input listing for the initial schedule.

The selected software must be able to function so as to provide all information and functions required by this specification in an accessible manner acceptable to the Contracting Officer. The Government’s acceptance of the software does not waive any requirements under this specification and shall not require the Government to go to any significant effort to retrieve the required information.

Should the Contractor utilize software that is different than that utilized by the Contracting Officer, based on the software utilized by the Contractor for the preparation of the NAS schedule, the Contractor shall provide a copy of the software and a license to the Administrative Contracting Officer at the Government field office until final payment. The software and license shall be returned to the Contractor. The Contractor shall submit a copy of the user's manual outlining the selected CPM computer program's mathematical analysis capabilities, details, functions and operation.

The NAS schedule shall be prepared in the Standard Data Exchange Format as required in ER 1-1-11 and approved by the Contracting Officer.

1.5.2 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in the Precedence Diagram Method (PDM).

1.5.2.1 Level of Detail Required

The Contractor shall develop or update the Project Schedule and provide data to the Contracting Officer at the appropriate level of detail necessary to properly evaluate progress as approved by the Contracting Officer.

1.5.2.2 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that

allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' original durations should be greater than 20 work days).

1.5.2.3 Key Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the Project Schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of key procurement activities include, but are not limited to: shop drawing submittals/approvals or review and fabrication/delivery.

1.5.2.4 Government Activities

Government and other agency activities that could impact progress shall be included in the schedule. These activities include, but are not limited to: Government approvals, Government review and verification that design submittals are in accordance with the RFP, inspections, utility tie-in, Government-furnished equipment (GFE) and Notice to Proceed (NTP) for phasing requirements. Government approval of shop drawings activities should be shown with the duration of at least the minimum allowed by the contract. The Contractor's failure to provide reasonable durations in its schedule for Government activities does not establish or change the Government's review or approval periods, and the durations established for Government's activities are subject to approval by the Contracting Officer.

1.5.2.5 Contracts with Multiple Buildings/Facilities

The Contractor shall prepare a separate detailed NAS schedule for each building/facility indicating its critical path for specified interim completion dates or critical milestone date. The master NAS schedule shall indicate the interface/lag/link between buildings/facilities to maximize/level the labor and other resources. The master schedule critical path must be indicated through the various buildings/facilities and total duration equal to the contract duration.

1.5.3 Project NAS Schedule Submissions

The Contractor shall provide the submissions as described below. The data for each submission is as follows:

1.5.3.1 Preliminary NAS Project Schedule Submission

The Preliminary NAS Project Schedule, defining the Contractor's planned operations for the first 60 calendar days shall be submitted for approval at the Preconstruction Conference. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after NTP. The preliminary schedule shall be detailed for the first 60 days and depict the remainder of the project in summary format. The preliminary schedule shall be submitted on data disk or CD (2 copies).

1.5.3.2 Initial NAS Project Schedule Submission

The initial NAS Project Schedule shall be submitted for approval within 50 calendar days after NTP is acknowledged. The schedule shall include detailed

activities for the entire project with a reasonable sequence of activities and shall be at a reasonable level of detail as approved by the Contracting Officer. The initial schedule shall be submitted on data disk or CD (2 copies).

1.5.3.3 Monthly Updates (Entire NAS Project Schedule)

The Contractor shall submit monthly schedule updates to the Contracting Officer for approval. Monthly updates shall continue until the Contracting Officer accepts the contract. See paragraph 1.6.2 for further requirements for monthly updates. These submissions shall enable the Contracting Officer to assess Contractor's monthly progress. The monthly updates shall be submitted on data disk or CD (2 copies).

The Contractor’s invoice may be deemed as an improper invoice if it fails to provide monthly updates acceptable to Contracting Officer. This may delay progress payment and may result in an interim unsatisfactory performance rating. The Contractor shall include its requests to revise/adjust the NAS schedule for approval, prior to implementing the revisions into the official schedule.

1.5.3.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory even if some fields are not used.

1.5.3.5 Submission Requirements

1.5.3.5.1 Data Disks

Two data disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

1.5.3.5.2 File Medium

Required data shall be submitted on CD including the baseline and all updates (cumulative). Monthly data disks must be 3.5 disks, formatted to hold 1.44 MB of data, under the MS-DOS Version S or 6.x, unless otherwise approved by the Contracting Officer.

1.5.3.5.3 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number of person responsible for the schedule, and the MS-DOS version used to format the disk.

1.5.3.5.4 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted

are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval. Provide the naming convention (limited to 4 characters: i.e. Filename (contract 99-47) = 47BL for Baseline and 4701 for 1st monthly.

1.5.4 Network Logic Diagram

1.5.4.1 Four hard copies of the network diagram shall be required on the preliminary schedule, initial schedule submission, and updated on each monthly schedule submissions. Monthly updates must indicate actual progress as of the data date. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished.

1.5.4.2 Network diagrams shall show the order and interdependence of project activities and the sequence in which the work is to be accomplished, as planned by the Contractor. The network diagramming procedure which will be used will show how the start of a given activity is dependent on the completion of preceding activities, and how its completion restricts the start of following activities.

1.5.4.3 Activity Duration

The activity duration shall be indicated in “workdays” and revise the assigned calendar. The Contractor may request to change the work days from 5 days/week to 6 or 7 days/week should this action become necessary to regain the schedule due to problems unrelated to the Government actions.

1.5.4.3.1 Contractor submissions shall include reasonable activity durations as determined by the Contractor and subcontractors. The durations are to be determined by the Contractor using the planned crew size/composition. All activities shall be resource loaded with the crew size and composition

1.5.4.4 The logic diagrams may be manually or machine drafted. The quality and readability of the diagrams shall be acceptable to the Contracting Officer.

1.5.4.5 Responsibility

The party responsible to perform the work shall identify all activities in the project schedule. Responsibility includes, but is not limited to, the subcontracting firm, Contractor work force, or Government agency performing a given task. Activities shall not belong to more than one responsible party. The Responsibility Code shall identify the responsible party for each activity. The Government must accept responsibility for activities in writing by the Contracting Officer.

1.5.4.6 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall he identified by the Work Area Code.

1.5.4.8 Modification

Any activity that is added by a contract modification subnet shall be identified by the modification number. Activities shall not belong to more than one modification.

1.5.4.9 Bid Item

The Bid Item to which the activity belongs shall identify all activities in the project schedule. An activity shall not contain work in more than one bid item. The Bid Item Code shall identify the bid item for each appropriate activity.

1.5.4.10 Phase of Work

All activities shall be identified in the project schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

1.5.4.11 Category of Work

All activities shall be identified in the project schedule according to the category of work which best describes the activity. Category of work refers to, but is not limited to, the procurement chain of activities including such items as submittals, approvals, procurement, fabrication, delivery, installation, startup, and testing. The Category of Work Code shall identify the category of work for each activity.

1.5.4.12 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers to, but is not limited to, a work breakdown structure for the project. The Feature of Work Code shall identify the feature of work for each activity.

1.5.4.13 Scheduled Project Completion

The scheduled duration shall extend from NTP to the official contract completion date as awarded (unless approved by Contracting Officer for early completion).

1.5.4.14 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project." The "Start Project" activity shall have an “ES” constraint date equal to the date that the NTP was acknowledged and a zero day duration.

1.5.4.15 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the

project schedule an activity called "End Project." The "End Project" activity shall have an “LF” constraint date equal to the completion date for the project and a zero day duration.

1.5.4.16 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

1.5.4.17 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

1.5.4.18 Design phase

The Contractor shall include the following design phase activities in the composite design and costruction NAS Project Schedule.

Design Charrette (Preliminary Design) within 7 days after NTP

Submittal of preliminary design (60%)

Design review conference of Preliminary design

Submittal of Final design (95%)

Design review conference of Final design

Submittal of Corrected Final design (100%)

Design review conference of Corrected Final design

Design Complete

The duration of each of these activities must be the duration as included in the contract award.

1.5.4.19 Start Phase for construction activities

The Contractor shall include as the first activity for a project phase an activity called "Start Phase _____" where _____ refers to the phase of work. The "Start Phase _____” activity shall have a “ES” constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.
The start phase for construction activities must be as applicable for design-build contracts

1.5.4.20 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase _____” where _____ refers to the phase of work. The "End Phase _____" activity shall have an “LF” constraint date equal to the completion date for the project and a zero day duration.

1.5.4.21 Inspection/Acceptance phase

The Contractor shall include the following work activities with duration and cost:

CQC (all) mechanical systems test (indicate the specific system)

CQC (all) electrical system tests (indicate the specific system)

Government QA (all) mechanical system acceptance/operational test (indicate specific system)

Government QA (all) electrical system acceptance /operational test (indicate specific system)

CQC completion inspection of the entire project

Contractor works off CQC punchlist

Prefinal inspection performed when the facility is completed such that it can be used for its intended function (as determined by the Contracting Officer)

Contractor works off prefinal punchlist

Final/acceptance inspection of the entire project

Contractor works off final punchlist.

Contractor shall allow 60 calendar days total duration prior to current contract completion date for the above stated activities. (See specification section 01451 Contractor Quality Control.)

1.5.4.22 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. The Contractor must document the Actual Start and Finish dates on the Daily Contractor Quality Control report by activity. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features, which calculate one of these parameters from the other, shall be disabled.

1.5.4.23 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

1.5.4.24 Negative Lags

Lag duration contained in the project schedule shall not have a negative value.

1.5.4.25 Project Monthly and Specific Milestone Dates

Milestone dates shall be shown on the diagram for start of project, each monthly milestone for the critical path activity in progress as of the data date, specific milestones such as: foundation complete, structure complete, roof complete, facility dried in, interim completion dates, and other specific contract milestones as required by the Contracting Officer.

1.5.4.26 Critical Path

The critical path shall be clearly shown on all diagrams (as approved).

1.5.4.27 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

1.5.4.28 S-Curves---cash flow curves

Earnings (cash flow) curves (as required for submissions) shall show scheduled ES/EF and LS/LF curves and actual progress plotted as of the data date. The cash flow curves are affected by the assigned cost and duration of the activities.

The LS/LF cash flow curve is expected approximate 30% earning (without stored material) @ 50% of the contract duration and 70% earning @ 70% of contract duration.

1.5.5 Schedule Reports/Sorts (As Required By Contracting Officer For Submissions)

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall he printed for those activities in progress or completed.

1.5.5.1 Activity Report/sort

A list of all activities sorted according to activity number.

1.5.5.2 Logic Report/sort

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

1.5.5.3 Total Float Report/sort

A list of all incomplete activities sorted in ascending order of total float. Activities, which have the same amount of total float, shall be listed in

ascending order of Early Start Dates. Completed activities shall not be shown on this report.

1.5.5.4 Earnings Report/Sort

A calculation of the Contractor's Total Earnings on the project from the NTP until the most recent Monthly Progress Meeting. This report shall reflect the earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

1.5.5.5 Milestone Report/Sort

The established monthly and special milestones shall be included in this report. The milestones must be established for each significant project features such as: each design submittal, design complete, clearing-grading-demolition, foundation, slab-on-grade, structure-frame, exterior walls-windows, roof-building dry-in, interior walls-mech/elect R/I, above ceiling mech/elect R/I, ceiling, interior wall finish--doors, painting-coverings, floor finish, installation of mech/elect and other equipment-fixtures-casework, plumbing, HVAC system, finish interior mech/elect, testing-commissioning mech/elect systems, onsite utilities, paving-landscaping, prefinal-final inspections—final cleanup and/or other features (as applicable for the project).

1.5.5.6 Late Start Sort

1.5.5.7 Bid Item Sort

1.5.6 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each monthly update of the project schedule. This report shall include: a description of activities along the most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis. If the Contractor believes that any Government action or inaction has, or potentially, will impact its progress, it will include the specific notice of the fact in this report. This information should include the activity number of the impacted work, nature and duration of the impact.

The narrative report shall address all modifications and weather activities that were input for the progress and their impact on the contract completion and total float.

1.5.6.1 Approved Changes Verification

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes. The Contractor shall not change the NAS schedule without specific written approval from the Contracting Officer. Unauthorized changes are not acceptable.

1.6 MONTHLY PROGRESS MEETINGS

There will be two progress meetings.

1.6.1 First - A progress update meeting will be held at the onsite between USACE and the authorized Contractor representatives, on the agreed cutoff date established at the preconstruction conference. During this meeting the Contractor shall indicate its requested percentage completed on each activity on which there was a revised cut of completion. The Contracting Officer must approve actual progress percentages for each activity. The updated progress data will be evaluated at the second progress meeting.

1.6.2 Second - A progress evaluation meeting shall be held with the Contractor, after the updating of the current progress period work activities percentage is complete including modifications and adverse weather activities, to evaluate progress and the NAS schedule.

The monthly updated NAS schedule is submitted to the Contracting Officer, for approval, with the Contractor’s request for progress payment. The evaluation will include a review of actual durations compared to scheduled durations for critical and non-critical activities, progress on critical activities and near critical activities, trends, and current/potential problem areas, cash flow progress, and projected workflow of activities.

The Contractor’s narrative report shall be available for review at least 3 days prior to the second progress meeting.

The Contracting Officer shall approve all proposed revisions and adjustments to the NAS schedule. Update information must include the Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date. The Contractor must address all the activities on an activity-by-activity basis during the second progress meeting.

The monthly NAS schedule update must include an adverse weather activity for work activities impacted greated than 50% of the work shift or were impacted by previous adverse weather (carry-over). The adverse weather activities must be added and applied to the NAS schedule, (all work activities within 10 days float or less when compared to the current critical path and current critical activities) AFTER all of the modifications finalized within the month have been applied to the NAS schedule in the sequential order of finalization during the progress month.

The time extension for usually severe weather (in calendar days) must result from the agreement reached or (as directed) by the Contracting Officer) following the joint Contractor and Contracting Officer monthly weather evaluation held to review the CQC and QA daily reports, not later than 7 calendar days after the end of the progress month. The Contracting Officer

will confirm monthly the results of this evaluation to the Contractor in writing.

The official contract completion date must be revised on the NAS schedule monthly (if applicable) based on the Contracting Officer’s letter confirming the results of the monthly evaluation, to include the time extension in calendars of unusally sereve weather (actual adverse weather impact less the specified anticipated adverse weather impact for the specific month).

A contract modification (SF 30) for a time extension to the official contract completion date, due to unusually severe weather (if any), will be completed quarterly by the Contracting Officer based on the monthly evaluations.

1.6.2.1 Remaining Durations

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

1.6.2.2 Logic Changes

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag duration, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

1.6.2.3 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather, 2) delays encountered due to submittals (material delivery), Government activities, deliveries or work stoppages which make replanning the work necessary, 3) changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

1.6.3 Progress Meeting Attendance

The Contractor's Project Manager/Superintendent, Chief Quality Control, and Contractor’s Scheduler, (as approved in paragraph 1.2), shall attend the second monthly progress meeting. The onsite Government representatives shall be advised of the meeting location, time and date.

1.6.4 Update Submission Following Progress Meeting

A complete update of the entire NAS project progress schedule containing all approved revisions and adjustments, based on the second monthly progress meeting, shall be submitted not later than 6 working days after the second monthly progress meeting if applicable.

1.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests a time extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as the

Contracting Officer may deem necessary. Submission of proof of delay based on a subnet/fragnet of work activities, revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is required for any time extension approvals. The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, shall not be a cause for a time extension to the contract completion date.

1.7.1 Submission Requirements for Justification of Request for Time Extension

The Contractor shall submit a comprehensive time analysis and justification for each “Request for Proposal” for a change in the contract, based upon the most recent approved schedule update at the time of the RFP issued. Such a time analysis and justification shall be in accordance with the requirements of other appropriate contract clauses and shall include, as a minimum:

a. A subnet/fragnet of activities indicating all new change activities and the affect on existing schedule activities.

b. A brief explanation of the causes of the change.

c. An analysis of the overall impact the subnet/fragnet has when applied to the current-updated approved NAS schedule.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

1.8 MODIFICATIONS TO THE CONTRACT

1.8.1 Unpriced, unilateral and bilateral (without agreement on time) modifications

Upon receipt of the signed SF 30 for unpriced and unilateral modifications (or bilateral modifications with agreement on costs without an agreement on time) the Contractor shall submit proposed schedule revisions (in the form of a proposed subnet/fragnet) to the Contracting Officer for approval, within 14 days of the SF 30 being issued. The proposed (subnet/fragnet) revisions to the schedule will be approved by the Contracting Officer prior to application of those changes within the project schedule. Should the Contractor fail or refuse to submit the provisions, the Contracting Officer may furnish the Contractor suggested (subnet/fragnet) revisions to the project schedule. Upon receipt, the Contractor shall include these subnet/fragnet revisions in the project schedule. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 14 days of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement on the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will be the basis for an “equitable adjustment" for performance of the work.

1.8.2 Bilateral modifications shall be entered into the NAS Schedule, utilizing the subnet/fragnet as agreed during negotiations, immediately after receipt of signed SF 30. Entries to the schedule must be approved by Contracting Officer.

1.8.3 All modifications subnets/fragnets shall be applied to the NAS Schedule immediately in the sequence in which they were finalized (received signed SF 30). Weather time extensions must be included upon receipt of the results of the monthly weather evaluation.

1.9 CONTRACTOR FALLS BEHIND THE APPROVED NAS PROJECT SCHEDULE

If the Contractor falls behind the approved schedule (behind the LS/LF cash flow curve or more than 15 work days of negative float) or performs the work in such a manner that the network diagram and mathematical analysis no longer indicate reasonable logic and duration for completion of the work by the current contract completion date, as determined by the Contracting Officer, the Contractor shall promptly provide a supplemental NAS recovery or completion schedule for completion by the current completion date, by reducing the remaining durations, revising logic, or adjusting resources onsite (in addition to the original approved NAS schedule) as approved by the Contracting Officer. The supplemental schedule shall be (resource loaded with crew size and productivity for each remaining activity, and indicating overtime, weekend work, double shifts needed to regain the schedule) in accordance with FAR 52.236-15, without additional cost to the Government. The supplement schedule shall not replace the original approved schedule as the official contract schedule. The original approved schedule shall be updated monthly (in addition to the supplemental schedule) and monitored by the Contractor and the Contracting Officer to determine the effect of the supplemental schedule progress has on the contract progress to regain its rate of progress for timely completion as specified.

The Contractor shall not artificially improve its progress by revising the schedule logic restraints or shortening future work activity durations. The Contractor may improve its progress by performing sequential work activities concurrently or by performing activities more quickly than planned, but such improvements shall be indicated on a supplement schedule and shall not be recorded on the official until the contractor has actually achieved them. The additional resources required to improve the progress must be evident on the work site.

Failure of the Contractor to perform work and maintain progress in accordance with the supplemental recovery or completion schedule may result in an interim and final unsatisfactory performance rating and/or may result in corrective action by the Contracting Officer in accordance with FAR 52.236-15.

1.10 OWNERSHIP OF FLOAT

All float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

PART 2 PRODUCTS (Not applicable)

PART 3 EXECUTION (Not applicable)

-- End of section --

SECTION 01330/S
SUBMITTAL PROCEDURES
(DESIGN/BUILD)
10/2000

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION

Submittals required are identified by SD numbers and titles as follows:

SD-01 Preconstruction Submittals

SD-02 Shop Drawings

SD-03 Product Data

SD-04 Samples

SD-05 Design Data

SD-06 Test Reports

SD-07 Certificates

SD-08 Manufacturer's Instructions

SD-09 Manufacturer's Field Reports

SD-10 Operation and Maintenance Data

SD-11 Closeout Submittals

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 Designer of Record Approved.

Designer of Record approval is required for extensions of design, critical materials, any deviations from the solicitation, the accepted proposal, or the completed design, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer's Representative. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction", they are considered to be "shop drawings". The Contractor shall provide the Government the number of copies designated hereinafter of all Designer of Record approved submittals. The Government may review any or all Designer of Record approved submittals for conformance to the Solicitation and Accepted Proposal. The Government will review all submittals designated as deviating from the Solicitation or Accepted Proposal, as described below.

1.2.2 Government Approved Construction Submittals.

Administrative Contracting Officer approval is required for any deviations from the Solicitation or Accepted Proposal and other items as designated by the Contracting Officer' Representative. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction", they are considered to be "shop drawings".

1.2.3 Government Reviewed Extension of Design.

Government review is required for extension of design construction submittals, used to define contract conformity, and for deviation from the completed design. Review will be only for conformance with the contract requirements. Included are only those construction submittals for which the Designer of Record design documents do not include enough detail to ascertain contract compliance. Government review is not required for extensions of design such as structural steel or reinforcement shop drawings.

1.2.4 Information Only.

All submittals not requiring Designer of Record or Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.2.5 GOVERNMENT REVIEWED OR "APPROVED" SUBMITTALS

The Contracting Officer's Representative conformance review or approval of submittals shall not be construed as a complete check, but will indicate only that the design, general method of construction, materials, detailing and other information appear to meet the Solicitation and Accepted Proposal. Government Review or approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor, under the Design and CQC requirements of this contract, is responsible for design, dimensions, all design extensions, such as the design of adequate connections and details, etc., and the satisfactory construction of all work. After submittals have been reviewed for conformance or approved, as applicable, by the Contracting Officer' Representative, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.3 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer's Representative, obtain the Designer of Record's approval, when applicable, and promptly furnish a corrected submittal in the form an number of copies specified for the initial submittal. Any "information only" submittal found to contain errors or unapproved deviations from the Solicitation or Accepted Proposal shall be resubmitted as one requiring "approval" action, requiring both Design of Record and Government approval. If the Contractor considers any correction indicated by the Government on the submittals to constitute a change to the contract, it shall promptly provide a notice in accordance with the Contract Clause "Changes" to the Contracting Officer's Representative.

1.4 WITHHOLDING OF PAYMENT

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

PART 2 PRODUCTS (Not used)

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signed, and dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

3.1.1 Design Submittals

The Contractor shall provide design submittals in accordance with Section 01012 entitled “DESIGN AFTER AWARD”.

3.2 SUBMITTAL REGISTER

The Contractor's Designer(s) of Record shall develop a complete list of submittals during design. The Designer of Record shall identify required submittals in the specifications. Use the list to prepare ENG Form 4288 Submittal Register or a computerized equivalent. The list may not be all inclusive and additional submittals may be required by other parts of the contract. The Contractor is required to complete ENG Form 4288 (including columns "a" through "r") and submit to the Contracting Officer for approval within 30 calendar days after Notice to Proceed. The approved submittal register will serve as a scheduling document for submittals and will be used to control submittal actions throughout the contract period. The submit dates and need dates used in the submittal register shall be coordinated with dates in the Contractor prepared progress schedule. Updates to the submittal register showing the Contractor action codes and actual dates with Government action codes and actual dates shall be submitted monthly or until all submittals have been

satisfactorily completed. When the progress schedule is revised, the submittal register shall also be revised and both submitted for approval. The Contractor shall maintain a submittal register for the project in accordance with Section 01312 RESIDENT MANAGEMENT SYSTEM (RMS).

3.3 SCHEDULING

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 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 10 calendar days shall be allowed and shown on the register for review and approval of submittals for food service equipment and refrigeration and HVAC control systems.

3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms are included in the RMS-QC software that the Contractor is required to use for this contract. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall 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.

3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

3.5.1 Procedures

The Contractor shall be responsible for the scheduling and control of all submittals. The Contractor is responsible for confirming that the submittal register includes all submittals required by the contract documents.

In addition to those items listed on ENG Form 4288, the Contractor will furnish submittals for any deviation from the plans or specifications. The scheduled need dates must be recorded on the document for each item for control purposes and critical items must be tied to the Contractor's approved schedule where applicable.

The Contractor will submit to the Contracting Officer for approval a minimum of five copies of all G/RE (Resident/Area Office Review), G/ED (Engineering Division Review) or G/AE (Architect-Engineer Review) level submittals. Three copies of all FIO level submittals will be provided. The number of copies of submittals specified in this portion of the contract shall be complied with in lieu of four copies as specified by FAR 52.236-21.

For those contracts requiring Network Analysis System (NAS), the Contractor will schedule on the NAS critical items of equipment

submittals and procurement activities which will, or have the potential to, significantly impact project completion. The inclusion or exclusion of critical items shall be subject to the approval of the Contracting Officer. Where ENG Form 4025 must be submitted prior to approval of the Construction Progress Schedule, the Contractor shall submit an initial annotated ENG Form 4288 upon which dates for submittal, approval and delivery of procurement items shall be included for the first 60 days of the work. Upon approval of the Construction Progress Schedule, or no later than 60 days after Notice to Proceed, the Contractor shall submit final annotated copies of ENG Form 4288. Dates shall be coordinated with the approved Construction Progress Schedule to logically interface with the sequence of construction. Critical item numbers will be shown on the listing if NAS is required.

Furnishing the schedule shall not be interpreted as relieving the Contractor of his obligation to comply with all the specification requirements for the items on the schedule. Contractor's Quality Control representative shall review the listing at least every 30 days and take appropriate action to maintain an effective system. The Contractor shall furnish a list each 30 days of all submittals on which either Government's or Contractor's action is past due. He shall also furnish revised due dates in those cases when the original submittal schedule is no longer realistic. This monthly list of delayed items shall also be annotated by the Contractor to show what corrective action he is taking with regard to slippages in submittal schedule which are attributable to actions by him, his subcontractors, or suppliers.

The Contractor shall provide a complete updated submittal register indicating the current status of all submittals when requested by the Contracting Officer in order to assure himself the schedule is being maintained.

The Contractor shall certify that each submittal is correct and in strict conformance with the contract drawings and specifications. All submittals not subject to the approval of the Contracting Officer will be submitted for information purposes only.

No Corps of Engineers action will be required prior to incorporating these items into the work, but the submittal shall be furnished to the Area/Resident Engineer not less than 2 weeks prior to procurement of Contractor certified material, equipment, etc.

These Contractor approved submittals will be used to verify that material received and used in the job is the same as that described and approved and will be used as record copies. All samples of materials submitted as required by these specifications shall be properly identified and labeled for ready identification, and upon being certified by the Contractor and reviewed by the Contracting Officer, shall be stored at the site of the work for job site use until all work has been completed and accepted by the Contracting Officer. Delegation of this approval authority to Contractor Quality Control does not relieve the Contractor from the obligation to conform to any contract requirement and will not prevent the Contracting Officer from requiring removal and replacement of construction not in contract conformance; nor does it relieve the Contractor from the requirement to furnish "samples" for testing by the Government Laboratory or check testing by the Government in those instances where the technical specifications so prescribe.

Contractor certified drawings will be subject to quality assurance review by the Government at any time during the duration of the contract. No adjustment for time or money will be allowed for corrections required as a result of noncompliance with plans and specifications.

Submittals Requiring Government Approval (G/ED Level, G/RE Level or G/AE level). Where the review authority is designated to the Government, the Contractor is required to sign the certification on ENG Form 4025 in the box beside the remarks block in Section I. The Government will code the items in block h and sign the approval action block in Section II as the approving authority.

Operating and Maintenance Instructions. Six complete sets of instructions containing the manufacturer's operating and maintenance instructions for each piece of equipment shall be furnished. Each set shall be permanently bound and shall have a hard cover. One complete set shall be furnished at the time test procedures are submitted. Remaining sets shall be furnished before the contract is completed. The following identification shall be inscribed on the covers: The words "OPERATING AND MAINTENANCE INSTRUCTIONS," name and location of the facility, name of the Contractor, and contract number. Fly sheets shall be placed before instructions covering each subject. Instruction sheets shall be approximately 8-1/2 by 11 inches, with large sheets of drawings folded in. Instructions shall include but are not limited to:

(1) System layout showing piping, valves and controls;

(2) Approved wiring and control diagrams;

(3) A control sequence describing startup, operation and shutdown;

(4) Operating and maintenance instructions for each piece of equipment, including lubrication instructions and troubleshooting guide; and

(5) Manufacturer's bulletins, cuts and descriptive data; parts lists and recommended parts.

The Government will further discuss and detail the required submittal procedures at the Pre-Construction Conference.

3.5.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. As stated above, the Contractor’s Designer of Record approval is required for any proposed deviations. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.6 CONTROL OF SUBMITTALS

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

3.7 GOVERNMENT CONFORMANCE REVIEW AND APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Four copies of the submittal will be retained by the Contracting Officer and one copy of the submittal will be returned to the Contractor. If the Government performs a conformance review of other Designer of Record approved submittals, the submittals will be so identified and returned, as described above.

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.9 STAMPS

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

CONTRACTOR

(Firm Name)

____ Approved

____ Approved with corrections as noted on the submittal data and/or attached sheets.

SIGNATURE:_____

TITLE: (DESIGNER OF RECORD)

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS
02/02

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number. The designations "AOK" and "LOK" are for administrative purposes and should not be used when ordering publications.

ACI INTERNATIONAL (ACI)
P.O. Box 9094
Farmington Hills, MI 48333-9094
Ph: 248-848-3700
Fax: 248-848-3701
Internet: http://www.aci-int.org
AOK 5/01
LOK 2/01

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)
4301 North Fairfax Dr., Suite 425
ATTN: Pubs Dept.
Arlington, VA 22203
Ph: 703-524-8800
Fax: 703-528-3816
E-mail: ari@ari.org
Internet: http://www.ari.org
AOK 5/01
LOK 2/01

AIR CONDITIONING CONTRACTORS OF AMERICA (ACCA)
2800 Shirlington Road, Suite 300
Arlington, VA 22206
Ph: 703-575-4477
FAX: 703-575-4449
Internet: http://www.acca.org
AOK 5/01
LOK 6/00

AIR DIFFUSION COUNCIL (ADC)

104 So. Michigan Ave., No. 1500
Chicago, IL 60603
Ph: 312-201-0101
Fax: 312-201-0214
Internet: http://www.flexibleduct.org
AOK 5/01
LOK 6/00

AIR MOVEMENT AND CONTROL ASSOCIATION (AMCA)
30 W. University Dr.
Arlington Heights, IL 60004-1893
Ph: 847-394-0150
Fax: 847-253-0088
Internet: http://www.amca.org
AOK 5/01
LOK 2/01

ALUMINUM ASSOCIATION (AA)
900 19th Street N.W.
Washington, DC 20006
Ph: 202-862-5100
Fax: 202-862-5164
Internet: http://www.aluminum.org
AOK 5/01
LOK 2/01

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)
1827 Walden Ofc. Sq.
Suite 104
Schaumburg, IL 60173-4268
Ph: 847-303-5664
Fax: 847-303-5774
Internet: http://www.aamanet.org
AOK 5/01
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AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
444 N. Capital St., NW, Suite 249
Washington, DC 20001
Ph: 800-231-3475 202-624-5800
Fax: 800-525-5562 202-624-5806
Internet: http://www.transportation.org
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AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)
P.O. Box 12215
Research Triangle Park, NC 27709-2215
Ph: 919-549-8141
Fax: 919-549-8933
Internet: http://www.aatcc.org
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AMERICAN BEARING MANUFACTURERS ASSOCIATION (ABMA)
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AMERICAN BOILER MANUFACTURERS ASSOCIATION (ABMA)
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Ph: 703-522-7350
Fax: 703-522-2665
Internet: http://www.abma.com
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AMERICAN CONCRETE PIPE ASSOCIATION (ACPA)
222 West Las Colinas Blvd., Suite 641
Irving, TX 75039-5423
Ph: 972-506-7216
Fax: 972-506-7682
Internet: http://www.concrete-pipe.org
e-mail: info@concrete-pipe.org
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AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)
1330 Kemper Meadow Dr.
Suite 600
Cincinnati, OH 45240
Ph: 513-742-2020
Fax: 513-742-3355
Internet: http://www.acgih.org
E-mail: pubs@acgih.org
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AMERICAN FOREST & PAPER ASSOCIATION (AF&PA)
American Wood Council
ATTN: Publications Dept.
1111 Nineteenth St. NW, Suite 800
Washington, DC 20036
Ph: 800-294-2372 or 202-463-2700
Fax: 202-463-2471
Internet: http://www.forestprod.org/awc/
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AMERICAN GAS ASSOCIATION (AGA)
400 N. Capitol St. N.W.Suite 450
Washington, D.C. 20001
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Fax: 202-824-7115
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AMERICAN GAS ASSOCIATION LABORATORIES (AGAL)
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Fax: 202-824-7115
Internet: http://www.aga.org
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AMERICAN GEAR MANUFACTURERS ASSOCIATION (AGMA)
1500 King St., Suite 201
Alexandria, VA 22314-2730
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Fax: 703-684-0242
Internet: http://www.agma.org
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AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
One East Wacker Dr., Suite 3100
Chicago, IL 60601-2001
Ph: 312-670-2400
Publications: 800-644-2400
Fax: 312-670-5403
Internet: http://www.aisc.org
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AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)
7012 So. Revere Parkway, Suite 140
Englewood, CO 80112
Ph: 303-792-9559
Fax: 303-792-0669
Internet: http://www.aitc-glulam.org
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AMERICAN IRON AND STEEL INSTITUTE (AISI)
1101 17th St., NW Suite 1300
Washington, DC 20036
Ph: 202-452-7100
Internet: http://www.steel.org
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AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
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Washington, DC 20036
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Fax: 202-293-9287
Internet: http://www.ansi.org/
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Standards and Publications Fulfillment Center
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Ph: 412-741-1979

Fax: 412-741-0609
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1250 I St., NW, Suite 500
Washington, DC 20005-3922
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FAX: 202-789-1893
Internet: http://www.anla.org
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AMERICAN PETROLEUM INSTITUTE (API)
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Washington, DC 20005-4070
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Fax: 202-682-8223
Internet: http://www.api.org
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AMERICAN PUBLIC HEALTH ASSOCIATION (APHA)
800 I Street, NW
Washington, DC 20001
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FAX: 202-777-2534
Internet: http://www.apha.org
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AMERICAN RAILWAY ENGINEERING & MAINTENANCE-OF-WAY ASSOCIATION (AREMA)
8201 Corporate Dr., Suite 1125
Landover, MD 20785-2230
Ph: 301-459-3200
Fax: 301-459-8077
Internet: http://www.arema.org
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AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)
1711 Arlingate Lane
P.O. Box 28518
Columbus, OH 43228-0518
Ph: 800-222-2768
Fax: 614-274-6899
Internet: http://www.asnt.org
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AMERICAN SOCIETY FOR QUALITY (ASQ)
600 North Plankinton Avenue
Milwaukee, WI 53202-3005
Ph: 800-248-1946

Fax: 414-272-1734
Internet: http://www.asq.org
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AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
Internet: http://www.astm.org
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AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
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Reston, VA 20191-4400
Ph: 703-295-6300 - 800-548-2723
Fax: 703-295-6222
Internet: http://www.asce.org
e-mail: marketing@asce.org
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AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE)
1791 Tullie Circle, NE
Atlanta, GA 30329
Ph: 800-527-4723 or 404-636-8400
Fax: 404-321-5478
Internet: http://www.ashrae.org
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901 Canterbury, Suite A
Westlake, OH 44145
Ph: 440-835-3040
Fax: 440-835-3488
E-mail: asse@ix.netcom.com
Internet: http://www.asse-plumbing.org
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AMERICAN WATER WORKS ASSOCIATION(AWWA)
6666 West Quincy
Denver, CO 80235
Ph: 800-926-7337 - 303-794-7711
Fax: 303-794-7310
Internet: http://www.awwa.org
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AMERICAN WELDING SOCIETY (AWS)
550 N.W. LeJeune Road
Miami, FL 33126
Ph: 800-443-9353 - 305-443-9353

Fax: 305-443-7559
Internet: http://www.amweld.org
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AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)
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Grandbury, TX 76049-0690
Ph: 817-326-6300
Fax: 817-326-6306
Internet: http://www.awpa.com
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APA - THE ENGINEERED WOOD ASSOCIATION (APA)
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Tacoma, WA 98411-0700
Ph: 253-565-6600
Fax: 253-565-7265
Internet: http://www.apawood.org
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ARCHITECTURAL & TRANSPORTATION BARRIERS COMPLIANCE BOARD (ATBCB)
The Access Board
1331 F Street, NW, Suite 1000
Washington, DC 20004-1111
PH: 202-272-5434
FAX: 202-272-5447
Internet: http://www.access-board.gov
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ARCHITECTURAL WOODWORK INSTITUTE (AWI)
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Reston, VA 20190
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Fax: 703-733-0584
Internet: http://www.awinet.org
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Fax: 514-861-1152
Internet: None
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Materials Park, OH 44073-0002
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ASM International
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New York, NY 10016-5990
Ph: 212-591-7722
Fax: 212-591-7674
Internet: http://www.asme.org
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ASPHALT INSTITUTE (AI)
Research Park Dr.
P.O. Box 14052
Lexington, KY 40512-4052
Ph: 859-288-4960
Fax: 859-288-4999
Internet: http://www.asphaltinstitute.org
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ASSOCIATED AIR BALANCE COUNCIL (AABC)
1518 K St., NW, Suite 503
Washington, DC 20005
Ph: 202-737-0202
Fax: 202-638-4833
Internet: http://www.aabchq.com
E-mail: aabchq@aol.com
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ASSOCIATION FOR THE ADVANCEMENT OF MEDICAL INSTRUMENTATION (AAMI)
1110 N. Glebe Rd., Suite 220
Arlington, VA 22201-5762
Ph: 703-525-4890
Fax: 703-276-0793
Internet: http://www.aami.org
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ASSOCIATION OF EDISON ILLUMINATING COMPANIES (AEIC)
600 No. 18th St.
P.O. Box 2641
Birmingham, AL 35291
Ph: 205-257-2530
Fax: 205-257-2540
Internet: http://www.aeic.org
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ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (AHAM)

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Washington, DC 20036
Ph: 202-872-5955
Fax: 202-872-9354
Internet: http://www.aham.org
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BIFMA INTERNATIONAL (BIFMA)
2680 Horizon Drive SE, Suite A-1
Grand Rapids, MI 49546-7500
Ph: 616-285-3963
Fax: 616-285-3765
Internet: http://www.bifma.com
E-mail: email@bifma.com
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BIOCYCLE, JOURNAL OF COMPOSTING AND RECYCLING (BIOCYCLE)
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419 State Avenue
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Ph: 610-967-4135
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E-mail: jgpress@jgpress.com
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BRICK INDUSTRY ASSOCIATION (BIA)
11490 Commerce Park Dr., Suite 308
Reston, VA 22091-1525
Ph: 703-620-0010
Fax: 703-620-3928
Internet: http://www.brickinfo.org
AOK 5/01
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BRITISH STANDARDS INSTITUTE (BSI)
389 Chiswick High Road
London W4 4AL
United Kingdom
Phone: +44 (0)20 8996 9000
Fax: +44 (0)20 8996 7400
Email: Info@bsi-global.com
Website: http://www.bsi-global.com
AOK 8/01
LOK 6/01

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)
355 Lexington Ave.
17th floor
New York, NY 10017-6603
Ph: 212-297-2122
Fax: 212-370-9047
Internet: http://www.buildershardware.com
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LOK 6/00

CARPET AND RUG INSTITUTE (CRI)
310 Holiday Ave.
Dalton, GA 30720
P.O. Box 2048
Dalton, GA 30722-2048
Ph: 706-278-0232
Fax: 706-278-8835
Internet: http://www.carpet-rug.com
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CAST IRON SOIL PIPE INSTITUTE (CISPI)
5959 Shallowford Rd., Suite 419
Chattanooga, TN 37421
Ph: 423-892-0137
Fax: 423-892-0817
Internet: http://www.cispi.org
AOK 5/01
LOK 6/00

CEILINGS & INTERIOR SYSTEMS CONSTRUCTION ASSOCIATION (CISCA)
1500 Lincoln Highway, Suite 202
St. Charles, IL 60174
Ph: 630-584-1919
Fax: 630-584-2003
Internet: http://www.cisca.org
AOK 5/01
LOK 6/00

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
1600 Clifton Road
Atlanta, GA 30333
PH: 404-639-3534
FAX:
Internet: http://www.cdc.gov
AOK 6/01
LOK 0/00

CHEMICAL FABRICS & FILM ASSOCIATION (CFFA)
1300 Sumner Ave.
Cleveland OH 44115-2851
PH: 216-241-7333
FAX: 216-241-0105
Internet: http://www.chemicalfabricsandfilm.com/welcome.htm
AOK 6/01

CHLORINE INSTITUTE (CI)
2001 L St., NW Suite 506
Washington, DC 20036
Ph: 202-775-2790
Fax: 202-223-7225
Internet: http://www.cl2.com
AOK 5/01
LOK 6/00

COMPRESSED AIR AND GAS INSTITUTE (CAGI)

1300 Sumner Ave.
Cleveland OH 44115-2851
PH: 216-241-7333
FAX: 216-241-0105
Internet: http://www.cagi.org/welcome.htm
AOK 6/01

COMPRESSED GAS ASSOCIATION (CGA)
4221 Walney Road, 5th Floor
Chantilly, VA 20151-2923
Ph: 703-788-2700
Fax: 703-961-1831
Internet: http://www.cganet.com
e-mail: Customer_Service@cganet.com
AOK 9/01
LOK 6/00

CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
933 N. Plum Grove Rd.
Schaumburg, IL 60173-4758
Ph: 847-517-1200
Fax: 847-517-1206
Internet: http://www.crsi.org/
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WESTERN WOOD PRESERVERS INSTITUTE (WWPI)
7017 N.E. Highway 99 # 108
Vancover, WA 98665
Ph: 360-693-9958
Fax: 360-693-9967

Internet: http://www.wwpinstitute.org
e-mail: wwpi@teleport.com
AOK 5/01
LOK 6/00

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)
Yeon Bldg.
522 SW 5th Ave.
Suite 500
Portland, OR 97204-2122
Ph: 503-224-3930
Fax: 503-224-3934
Internet: http://www.wwpa.org
e-mail: info@wwpa.org
AOK 5/01
LOK 6/00

WINDOW AND DOOR MANUFACTURERS ASSOCIATION (WDMA)
1400 East Touhy Ave., Suite 470
Des Plaines, IL 60018
Ph: 847-299-5200 or 800-223-2301
Fax: 708-299-1286
Internet: http://www.wdma.com
e-mail: admin@wdma.com
AOK 5/01
LOK 6/00

WOOD MOULDING AND MILLWORK PRODUCERS ASSOCIATION (WMMPA)
507 First Street
Woodland, CA 95695
Ph: 916-661-9591
Fax: 916-661-9586
Internet: http://www.wmmpa.com
AOK 5/01
LOK 6/00

-- End of Section --

UFGS-01451A (May 2002)

SECTION 01451A

CONTRACTOR QUALITY CONTROL
05/02

PART 1 GENERAL

1.1 REFERENCES

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740	(2001) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E 329	(2000b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." 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 design and 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.

3.2 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 5 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Design and construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all design and construction operations, both onsite and offsite, including work by subcontractors, designers of record, consultants, architect/engineers (AE), 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, designers of record, consultants, architect engineers (AE), offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 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. (Laboratory facilities must be approved by the Contracting Officer.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking design and 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.

3.2.2 Additional Requirements for Design Quality Control (DQC) Plan *5

The following additional requirements apply to the Design Quality Control (DQC) plan:

(1) The Contractor's QCP Plan 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-build 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). In addition, the DQC Plan shall incorporate the Lessons Learned Databases provided by the Government. 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.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of design and construction. Acceptance is conditional and will be predicated on satisfactory performance during the design and construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Postaward Conference, before start of design or construction, and prior to acceptance by the Government of the CQC 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 7 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, design activities, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting 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.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager, a Design Quality Manager, and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly 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, show 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.

3.4.2 CQC System Manager
*5

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of 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 of construction management, with a minimum of ~~five~~ 10 years' construction experience on construction similar to this contract. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be ~~[~~assigned no other duties~~] [assigned as System Manager but may have duties as project superintendent in addition to quality control]~~. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: electrical, mechanical, ~~architectural, materials technician~~design quality control manager, submittals clerk. These individuals may be employees of the prime contractor~~ or subcontractor~~; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals may perform no other duties~~ but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan~~.

Experience Matrix

	Area	Qualifications
a.	Mechanical	Graduate Mechanical Engineer with ~~2~~ 5 years' experience or person with ~~5~~ 10 years' related experience
b.	Electrical	Graduate Electrical Engineer with ~~2~~ 5 years' related experience or person with ~~5~~ 10 years' related experience

~~c.~~	~~Architectural~~	~~Graduate Architect with 2 years' experience or person with 5 years' related experience~~
c.	Submittals	Submittal Clerk with ~~1~~2 years' experience
~~e.~~	~~Testing, Adjusting and Balancing (TAB) Personnel~~	~~Specialist must be a member of AABC or an experienced technician of the firm certified by the NEBB.~~
d.	Design Quality Control Manager	Registered Architect or Professional Engineer

3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is offered on a quarterly basis within the Savannah District boundaries. CQC System Managers who have not successfully completed this course must attend the next available training session. Failure to successfully complete this training within the next available training date will be grounds for removal as CQC System Manager. There is currently a nominal fee to cover the cost of the training materials for Contractors who have current contracts with the Savannah District.

3.4.5 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.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements. When Section 15950A HEATING, VENTILATING AND AIR CONDITIONING (HVAC) CONTROL SYSTEMS; 15951A DIRECT DIGITAL CONTROL FOR HVAC; 15990A TESTING, ADJUSTING, AND BALANCING OF HVAC SYSTEMS; or 15995A COMMISSIONING OF HVAC SYSTEMS are included in the contract, the submittals required by those sections shall be coordinated with Section 01330 SUBMITTAL PROCEDURES to ensure adequate time is allowed for each type of submittal required.

3.6 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:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. 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 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. Review of provisions that 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 assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. A review of the appropriate activity hazard analysis to assure safety requirements are met.

h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The Government shall be notified at least 48 hours in advance of beginning the preparatory control 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 CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 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 work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required 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 CQC 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 onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, 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 deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the

Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. 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 CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall 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.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7.4 Furnishing or Transportation of Samples for Testing
Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and

acceptance testing by the Government shall be delivered to the following address:

US Army Engineer District, Savannah
Environmental & Materials Unit
200 North Cobb Parkway
Building 400, Suite 404
Marietta, GA 30062

Coordination for each specific test will be made through the Area Office.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Special 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.

3.8.2 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.

3.8.3 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".

3.9 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 24 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.

3.10 SAMPLE FORMS

Sample forms are included in Attachment 1 to Section 00800.

3.11 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 --

CEGS-01500/S (February 1997)

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES
02/97

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

1.1.1 Site Plan

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

1.1.2 Identification of Employees

The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

All personnel shall have badges and vehicle passes or decals to enter the installation. Badges will be required to be worn at all times while on the installation. Decals will be required to enter the installation or the driver will be required to go to the MP station for a permit which will require driver license, proof of insurance, contract number, and point of contact for company before being allowed to enter.

1.1.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements of the military installation.

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 Section 01330 SUBMITTAL PROCEDURES:

SD-06 Test Reports

Termiticide Application Report; G, RE

Completed Fort Bragg Termiticide Application Report (no form number) for each structure receiving termiticide treatment.

1.3 OMITTED

1.4 AVAILABILITY AND USE OF UTILITY SERVICES (FORT BRAGG)

1.4.1 Payment for Utility Services

The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to and paid for by the Contractor at the prevailing rates. The rates listed below are current as of September 2002 and are subject to change. The Contractor shall carefully conserve all utilities furnished.

1.4.2 Meters and Temporary Connections

The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall provide and maintain necessary temporary connections, distribution lines, and meters required to measure the amount of each utility used for the purpose of determining charges. The Contractor shall notify the Contracting Officer's Representative, in writing, 10 working days before the temporary connection is made so that a utilities contract can be established. The Contracting Officers Representative will then provide the contractor with the name and phone number of who to contact for setting up the utility contract. For temporary electrical connections the Government or applicable utility provider will provide the meter (meter base provided by contractor) and make the final hot connection after inspection and approval of the Contractor's temporary wiring installation. The Contractor shall not make the final electrical connection. For temporary water and sewer connections the contractor will provide the meter and after inspection/approval by the Contracting Officer's Representative make the final connection at the Contractor's expense.

1.4.3 Use of Permanent Building Utility Connections

Utilities consumed by the contractor from permanent building utility connections shall also be metered and paid for by the contractor. When the permanent system is activated the initial meter reading shall be recorded and reported as specified below. On building renovation projects the initial meter reading shall be recorded when the contractor is given possession of the building to perform the work. The Contractor shall pay for utilities consumed through the permanent building connection until the work has been completed or the Government has occupied the facility, which ever occurs first.

1.4.4 Advance Deposit

An advance deposit for utilities consisting of an estimated month's usage or a minimum of $50.00 will be required. The last monthly bills for the fiscal year will normally be offset by the deposit and adjustments will be billed or returned as appropriate. Services to be rendered for the next fiscal year, beginning 1 October, will require a new deposit. Notification

of the due date for this deposit will be mailed to the Contractor prior to the end of the current fiscal year.

1.4.5 Initial Meter Readings

Upon installation of the meter, the initial reading shall be recorded (in the presence of the Contracting Officer's Representative) and forwarded to the point of contact for utility service with a copy to the Contracting Officer's Representative.

1.4.6 Final Meter Reading

Before completion of the work and final acceptance of the work by the Government, the Contractor shall notify the Contracting Officer and the applicable utility provider, in writing, 10 working days before termination is desired. The Government or applicable utility provider will take a final meter reading. Electric service will be disconnected by the provider. Water and sewer connections will be disconnected by the contractor, at his expenses and by a method approved by the Contracting Officer's Representative. The Contractor shall then remove all the temporary distribution lines, meters, meter bases, and associated paraphernalia. The Contractor shall pay all outstanding utility bills before final acceptance of the work by the Government.

1.4.7 Requirement for Backflow Prevention on Temporary/Permanent Potable Water Connections

The contractor shall install a backflow prevention device on all connections to the potable water system. The backflow prevention device shall be a reduced pressure or double check type, meeting all the State code requirements for backflow preventers on potable water. If the contractor requests the use of a fire hydrant and receives approval from the Contracting Officer's Representative a backflow prevention device and meter shall be installed prior to each use.

1.4.8 Utilities Charge Rates

Water ---------- $1.70 per 1,000 gallons
Electricity ------ $0.0657 per KW hour
Sewer ---------- $10.00/month for each connected trailer up to single wide size. The rate for larger trailers will be determined by the utility provider, however; this rate will not exceed $20.00/month per trailer.

1.4 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

1.4.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 915 by 1220 mm(36 by 48 inches) in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be

displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

1.4.2 Project Signs

The Contractor shall furnish and install a project sign at the location selected by the Contracting Officer. The project sign shall be painted on 1/2 inch thick exterior grade plywood. The sign layout shall be in accordance with the graphic format shown in Attachment 1 to Section 00800.

1.5 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 State and local 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 public 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.

1.5.1 Haul Roads

The Contractor will be required to use the haul routes shown on the plans unless otherwise permitted in writing by the Contracting Officer. When haul routes are not designated on the plans, the Contractor must obtain approval of the Contracting Officer of haul routes he intends to use. The Contractor shall maintain the haul routes and shall keep the dust problem under control by wetting the surface as needed. Sweeping and cleaning of pavements will be done as necessary to remove spillage resulting from the hauling operations. After all hauling has been completed, the Contractor shall restore the earth areas used for the haul routes to original condition by final grading, shaping, compacting, and grassing, and shall clean and sweep all paved areas as required. Any pavement damaged as a result of hauling operations under this contract for both the earth and other materials shall be promptly repaired by the Contractor, as approved by the Contracting Officer. The cost of maintenance and repair of the haul routes, as mentioned above, shall be considered as a subsidiary obligation of the Contractor. The axle load of earth hauling equipment operating on paved streets shall not exceed 18,000 pounds.

1.5.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such 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.

1.6 CONTRACTOR'S TEMPORARY FACILITIES

1.6.1 Administrative Field Offices

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

1.6.2 Storage Area

The Contractor shall construct a temporary 1.8 m(6 foot) high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site but within the military boundaries. Trailers, equipment, or materials shall not be open to public view with the exception of those items which are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. Mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment, shall be parked within the fenced area at the end of each work day.

1.6.3 Supplemental Storage Area

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

1.6.4 Appearance of Trailers

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 which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the military property.

1.6.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the

project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

1.6.6 New Building

In the event a new building is constructed for the temporary project field office, it shall be a minimum 3.6 m(12 feet) in width, 5 m(16 feet) in length and have a minimum of 2.1 m(7 feet) headroom. It shall be equipped with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. It shall be provided with a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building shall be waterproof, shall be supplied with heater, shall have a minimum of two doors, electric lights, a telephone, a battery operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. Approved sanitary facilities shall be furnished. The windows and doors shall be screened and the doors provided with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins shall be non-removable. The windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be protected by bars or heavy mesh screens to prevent easy access to the building through these panels. In warm weather, air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature 11 degrees C (20 degrees F)below the outside temperature when the outside temperature is 35 degrees C(95 degrees F), shall be furnished. Any new building erected for a temporary field office shall be maintained by the Contractor during the life of the contract and upon completion and acceptance of the work shall become the property of the Contractor and shall be removed from the site. All charges for telephone service for the temporary field office shall be borne by the Contractor, including long distance charges up to a maximum of $75.00 per month.

1.6.7 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 equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

1.7 GOVERNMENT FIELD OFFICE

1.7.1 Resident Engineer's Office
*5
~~The Contractor shall provide the Government Resident Engineer with an office, approximately 19 square meters(200 square feet) in floor area, located where directed and providing space heat, electric light and power, and toilet facilities consisting of one lavatory and one water closet complete with connections to water and sewer mains. A mail slot in the door or a lockable mail box mounted on the surface of the door shall be provided. At completion of the project, the office shall remain the property of the Contractor and shall be removed from the site. Utilities shall be connected and disconnected in accordance with local codes and to the satisfaction of the Contracting Officer.~~ The Contractor shall provide one 12' x 60' minimum separate office trailer for Corps of Engineers use only. The trailer shall be located at the project site and sited conveniently for Corps of Engineers use. The condition of the trailer shall be in a like new appearance, contain toilet facilities, and operable

windows on each exterior wall. Exterior doors shall be 3' wide and equipped with a locking hasp mounted with thru bolts on the wall and door. Sewer, electrical and telephone connections shall be provided and installed. Trailer must be properly secured to meet all code standards regarding anchoring straps and hurricane protection. The trailer, furnishings and all necessary utility and site alterations and associated requirements shall be provided for the duration of the contract. Upon final acceptance of the facility, the Contractor shall remove the trailer and associated services restoring the site to the prior work condition. The trailer interior partitions shall be arranged to have a minimum of two office areas with a door to each office area. The following additional furnishings shall be provided with the trailer: heating and air conditioning; toilet with lavatory; telephone jacks providing eight separate lines into the trailer. Entrance landings and all access or exits with steps in accordance with the Corps of Engineers Safety and Health Requirements Manual. Daily professional janitorial services.

1.7.2 Trailer-Type Mobile Office

The Contractor may, at its option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and providing as a minimum the facilities specified above. The trailer shall be securely anchored to the ground at all four corners to guard against movement during high winds.

1.8 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. The devices shall be made available for use by Government personnel.

1.9 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 1.1 m(42 inches) high, supported and tightly secured to steel posts located on maximum 3 m(10 foot) centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.10 OMITTED

1.11 TERMITICIDE APPLICATION REPORT

A Termiticide Application Report (no form number) shall be completed for each structure receiving termiticide treatment. The Contractor shall obtain the form from the Fort Bragg PWBC pest management coordinator through the Contracting Officer. All requested information shall be provided in detail. The location of application shall be clearly designated, e.g., building number, name, or address. If necessary, provide a map showing location of structure with the report.

1.12 INSTALLATION REGULATIONS

The employees of the Contractor will be required to abide by all installation regulations as published by the Commanding Officer. A copy of these regulations can be obtained from the Area/Resident Engineer at the installation. All costs in connection therewith shall be included in the contract price for the work.

1.13 TESTING LABORATORIES

Testing is required to be performed by the Contractor as part of his Quality Control Program to verify contract compliance. This Quality Control Testing is to be conducted by a project or commercial laboratory which has been found adequate and qualified by a Corps of Engineers Division Laboratory Inspection Team.

1.13.1 Approved Testing Laboratories

A composite listing of approved testing laboratories within the Savannah District is available upon request. The Contractor should engage the services of a laboratory contained in the composite list. Contractors may obtain the list by calling (678) 354-0310. Fax requests can be made to number (678) 354-0330.

1.13.2 Other Laboratory Services

The Contractor may engage the services of a laboratory other than those approved by Corps of Engineers District Laboratory Inspection Team if they comply with the following:

a. The Contractor identifies and proposes the unapproved laboratory a minimum of 90 days prior to the start of testing. This time is necessary to allow for scheduling an inspection by a Corps of Engineers District Laboratory team. The time for Government inspection will not be the basis for an increase in the contract performance period.

b. All costs of Government inspection shall be the responsibility of the Contractor.

c. The Contractor may request Government inspection and approval prior to award by forwarding a written request to:

US Army Engineer District, Savannah
Environmental and Materials Unit
200 North Cobb Parkway
Building 400, Suite 404
Marietta, GA 30062

1.14 OMITTED

1.15 ENVIRONMENTAL EVALUATION FOR SITE CONTAMINATION - CATEGORY I

1.15.1 Site Evaluation

The job site has been evaluated for potential site contamination. The site is located in a traditionally nonhazardous location. The installation has no reason to suspect contamination.

1.15.2 Contractual Responsibilities of All Parties in the Event of Encounter with Contamination

If the Contractor encounters materials or conditions which indicate that there may be contamination on the site, the Contractor shall stop all work on the job site and report the discovery of the contaminants to the Contracting Officer's Representative (COR). The COR, will issue a written order to the Contractor to resume work or to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government as provided in FAR 52.242-14 - SUSPENSION OF WORK. The Government will be responsible for making an assessment of the contaminated site if this course of action is determined to be appropriate. After the assessment has been completed, the Government reserves the right to the following courses of action:

a. Direct the Contractor to resume work.

b. Clean up the contaminated site prior to directing the Contractor to resume work. The COR will determine whether the cleanup is to be accomplished by others or the Contractor.

c. Relocate the project site.

d. Terminate the contract for the convenience of the Government as provided in FAR 52.249-1 - TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SHORT FORM) or FAR 52.249-2 - TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) - ALTERNATE I as applicable.

1.16 OMITTED
1.17 OMITTED
1.18 OMITTED
1.19 OMITTED

1.20 CONSTRUCTION SCHEDULE RESTRAINTS - FORT BRAGG, NC

1.20.1 Occupancy

The work to be performed is to be accomplished in facilities which will be [occupied and in normal usage] [unoccupied and vacant] [unoccupied but furnished] during the course of construction. It is the intent of these provisions to provide for maximum coordination between construction activities pursuant to this contract and concurrent ongoing routine activities of base personnel. Interference with and inconvenience to the occupants or routine of the facility shall be held to an absolute minimum.

1.20.2 Protection

Contractor is responsible to provide such covering, shields and barricades as are required to protect building occupants, equipment, stores, supplies, etc., from dust, debris, weather intrusion, water, moisture or other cause of damage resulting from construction.

1.20.3 Phasing and Sequence

1.20.3.1 General

In addition to the submittals required by clause SCHEDULES FOR CONSTRUCTION CONTRACTS (see SECTION 00700, FAR 52.236-15) the Contractor shall submit for approval a summary work schedule setting forth schedule dates for initiation and completion of construction in each work area. No work shall be performed prior to approval of this schedule and all work shall be performed in strict adherence thereto. If departures from this schedule appear to be required or desired, the Contracting Officer shall be promptly notified and his approval will be required prior to implementation of said departure(s).

1.20.4 Time of Performance

1.20.4.1 Access to Buildings

All work requiring access to building interiors excluding attics, crawl spaces, etc., and all other work shall be performed between 7:30 a.m. and 4 p.m. (normal working hours for base where project is located) excluding official holidays, unless otherwise indicated or approved by the Contracting Officer. Requests to work during other than these normal hours shall be made in writing at least 48 hours in advance. For example, a request to work on a Saturday shall be submitted no later than Thursday at noon.

1.20.4.2 Work Requiring Outages

Work requiring outages of utilities or building systems will be accomplished during normal working hours in accordance with prior approved schedule(s).

1.20.5 Contractor Vehicle/Equipment Access to Fort Bragg

Fort Bragg is not a closed installation, but vehicular access is controlled. Contractors are required to register each vehicle that will be traveling installation roads or streets under its own power. Each such vehicle shall have a registration decal. Registration may be accomplished at the Main Vehicle Registration Center, building 8-1078 on Randolph Street near Bragg Boulevard, 0800-1700 hours Monday through Friday. Unregistered vehicles may be stopped and delayed at any time anywhere on Fort Bragg, but permanent vehicular check-points will be located at Zabitosky and All-American Expressway (with likely closure of Reilly Road exit), Bragg Boulevard and Butner Road, Reilly Road (Canopy), and Yadkin Road. Contractors should expect possible delays in passing through these locations, even if registered.

1.20.6 Outages

Contractor's work requiring outages of utility systems or building systems will require 2 weeks' advance notice and will be subject to the approval of the Contracting Officer. Contractor will be held responsible for unauthorized utility disruptions that cause damage or loss to the Government's real property, equipment, or operations. The Contractor will be held responsible for utility disruptions that extend beyond this period.

Limits of Duration:

Water ---------- 4 hours

Sewer ---------- 4 hours
Electricity ---------- 4 hours
Natural Gas: Seasons to be determined by Fort Bragg PWBC
During heating season -- 3 hours
During cooling season -- 6 hours
LP Gas: Seasons to be determined by Fort Bragg PWBC
During heating season -- 3 hours
During cooling season -- 6 hours
#2 Fuel Oil: Seasons to be determined by Fort Bragg PWBC
During heating season -- 3 hours
During cooling season -- 6 hours
High Temperature Water (HTW): Seasons to be determined by Fort Bragg PWBC
During heating season -- 3 hours
During cooling season -- 6 hours
Steam: Seasons to be determined by Fort Bragg PWBC
During heating season -- 3 hours
During cooling season -- 6 hours
Chilled Water: Seasons to be determined by Fort Bragg PWBC
During heating season -- 3 hours
During cooling season -- 6 hours

*The cooling season at Fort Bragg is 1 May through 1 October. The heating season at Fort Bragg is 1 October through 1 May.

The Contractor shall provide temporary utilities systems for any utility outage longer than the limits of duration shown above.

1.20.7 Continuity

All tools, labor and materials required to complete any item of work within a given work area or requiring an outage of any building utility or system, shall be available at the site prior to commencement thereof. Once work has commenced on an item of work, said work shall be continuously and diligently performed to completion and acceptance. Breaks in work to be negotiated with the Contracting Officers Representative if other then Holidays.

1.20.8 Permits

1.20.8.1 Excavation Permits

An Excavation Permit, FB Form 1605, shall be presented to the Resident Engineer and approved by the Facilities Engineer 7 working days prior to any excavation that penetrates the ground by 6 or more inches. A sample of this form is included in Attachment 1 to Section 00800 or can be obtained from the Resident Office upon request. The Contractor shall contact the Resident Engineer's Office for an appointment for spotting of utility lines. A signed copy of the digging permit shall be kept on site at all times.

1.20.8.2 Disposal Permits

A permit is required to use the installation land clearing and inert debris and demolition landfills. Landfill permits shall be processed with the Environmental Branch of the PWBC Environmental and Natural Resources Division through the Contracting Officer. Permits are issued for the life of the specific contract only. Only materials produced on the project for which the permits are issued may be disposed of in the land clearing and

inert debris and demolition landfills. The Contractor shall keep a copy of the completed permit with the vehicle throughout the contract disposal operation. Copies of the disposal permit forms will be provided at the Preconstruction Conference. The land clearing and inert debris and demolition debris disposal site locations are shown on the drawings.

1.20.8.3 Borrow Permits

A permit is required to use the Fort Bragg borrow material pits. Borrow pit permits shall be processed with the Environmental Branch of the PWBC Environmental and Natural Resources Division through the Contracting Officer. Permits are issued for the life of the specific contract only. Borrow materials may only be used on the project for which the permits are issued. The Contractor shall keep a copy of the completed permit with the vehicle throughout the contract borrow operation. Copies of the borrow permit forms will be provided at the Preconstruction Conference. The borrow pit location is shown on the drawings.

1.20.9 Road and/or Railroad Closures

Road and/or railroad closures will require 2 weeks' advance written notice and be subject to the Contracting Officer's approval. Notice shall state reason for closure, date and time closure will commence and estimated duration of closure. A sketch shall be provided showing location of excavated area and placement of barricades and signs. Closures shall be limited to a maximum of 5 calendar days. Kendenburg Street, Ardennes Road, and 6th Street from Kendenberg Street to Gruber Road are closed all year round Monday through Friday between the hours of 6:30 a.m. and 7:45 a.m.

1.20.10 Landfills

1.20.10.1 Land Clearing and Inert Debris (LCID) Landfill

The land clearing and inert debris (LCID) landfill is permitted for disposal of yard waste (pine needles, limbs, trees, untreated wood, unpainted wood), inert debris (bricks, concrete, rubble, glass, concertina wire), and uncontaminated soil.

1.20.10.2 Demolition Landfill

The demolition landfill is permitted for disposal of construction and renovation debris: buildings, asphalt, painted and treated wood, incidental scrap metals, shingles, and debris incidental to construction such as cement or joint compound bags, plastic pails or metal cans or drums, insulation, and wallboard.

1.20.10.3 Transfer Station

White goods (appliances), tires, aluminum cans, and municipal solid waste (such as paper, plastic, cardboard, or household garbage) must be disposed of at the transfer station. Special arrangements must be made with the Environmental Branch of the PWBC Environmental and Natural Resources Division through the Contracting Officer to dispose of liquids, hazardous waste, and tires.

1.20.10.4 Disposal of Asbestos

Non-friable asbestos can be disposed of in the demolition landfill. Friable asbestos must be double bagged and disposed of in the section of the demolition landfill designated for that purpose.

1.20.10.5 Municipal Solid Waste (MSW)

Municipal solid waste (MSW) shall be disposed of in dumpsters (either Fort Bragg's or the contractor's) designated for MSW or at the Fort Bragg transfer station. Operating hours for the transfer station are 7:30 a.m. to 3:00 p.m. MSW shall be defined as any wastes other than those described above, to include garbage, vegetable waste and containers thereof resulting from the handling, preparation, cooking and consumption of foods, and excess quantities of paper, plastic, and cardboard (construction material packaging is acceptable).

1.20.10.6 Trash Containers

All trash containers on the job site must be covered at all times to ensure that trash does not blow around. In addition, all light/loose material will be secured such that it will not blow around during windy weather.

1.20.10.7 Construction Debris Leaving Site

All construction debris/trash that leaves the project site will be covered from the time that it leaves the construction site. Any mud or soil which leaves the project site will be cleaned up by the Contractor immediately upon discovery or notification of such an occurrence.

1.20.11 Landforms

Contractor will be required to maintain existing landforms, drainage patterns, and healthy, mature vegetation to the maximum extent possible and will replace damaged vegetation, sod, and ground cover.

1.20.12 Topsoil

Any suitable topsoil stripped from the site during the course of work will be stockpiled onsite for reuse. Any excess topsoil remaining upon completion of project will be stockpiled in the DPW compound.

1.20.13 Unforeseen Site Conditions

Any unforeseen site conditions, unmapped utility systems, or historical/archeological items encountered during site surveys, soil borings, or construction excavation will be reported to the Contracting Officer.

1.20.14 Replacement

The Contractor shall be held responsible for the replacement of any utility systems, facilities, or Government equipment damaged during the course of the contract.

1.20.15 Mowing

The Contractor will mow the grass on the construction site weekly or when the following conditions warrant: centipede grass will be maintained to a

maximum height of 2 inches and a minimum height of 1 inch; all other grasses will be mowed to keep the height of the grass to a maximum of 4 inches and a minimum of 2 inches.

1.20.16 Communications Systems

The Director of Information Management will be notified through the Contracting Officer's Representative of the preparatory meeting for the communications system.

1.21 OMITTED
1.22 OMITTED
1.23 OMITTED
1.24 OMITTED
1.25 OMITTED
1.26 OMITTED
1.27 OMITTED
1.28 OMITTED
1.29 OMITTED

1.30 REQUEST FOR INFORMATION (RFI) SYSTEM

The Government has developed an electronic database, the Request for Information (RFI) System, to track and answer Contractor questions, requests for information and clarifications during construction. The use of the RFI System for all requests (the Contractor's as well as the subcontractors'/suppliers') is a contractual requirement for this project. The Contractor will enter the system over the Internet using a WEB browser such as Internet Explorer 5.0 or newer or Netscape 4.7 or newer and any Internet service provider. The Government will provide the Contractor a user identification and password for the system that will only allow the Contractor to enter and view the requests for this project. The Contractor will provide the Government the E-mail address for the individual(s) inputting into the system in order that E-mail messages can be sent from the Government to the Contractor indicating a response to the request. The Government will provide instructions in the use of the RFI system. The Contractor must fill in seven fields in the Contractor Data portion of the RFI form, which include Date Required, Priority, Short Description, Problem Description, Recommended Action, Cost, and Time. The Government will be notified through an E-mail message that the Contractor has entered a request into the system. When the Government has answered the request, an E-mail message will be sent informing the Contractor that the answer to the request is in the system. The Contractor will enter the system to retrieve the answer using the same procedure to enter the question. The RFI System assigns a unique number to each request. The Contractor will not be reimbursed separately for the required use of this system. The Contractor shall include any costs associated with the use of this system into their bid.

1.31 OMITTED

1.32 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the

fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.33 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of 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 grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

PART 2 PRODUCTS (NOT APPLICABLE)
PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

SECTION 01572

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT
10/01

1.1 GOVERNMENT POLICY

Government policy is to apply sound environmental principles in the design, construction and use of facilities. As part of the implementation of that policy the Contractor shall: (1) practice efficient waste management when sizing, cutting, and installing products and materials and (2) use all reasonable means to divert construction and demolition waste from landfills and incinerators and to facilitate their recycling or reuse.

1.2 MANAGEMENT

The Contractor shall take a pro-active, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. Construction and demolition waste includes products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process but not incorporated into the work. In the management of waste consideration shall be given to the availability of viable markets, the condition of the material, the ability to provide the material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates. The Contractor shall be responsible for implementation of any special programs involving rebates or similar incentives related to recycling of waste. Revenues or other savings obtained for salvage, or recycling shall accrue to the Contractor. Firms and facilities used for recycling, reuse, and disposal shall be appropriately permitted for the intended use to the extent required by federal, state, and local regulations.

1.3 PLAN

A waste management plan shall be submitted within 15 days after contract award and prior to initiating any site preparation work. The plan shall include the following:

a. Name of individuals on the Contractor's staff responsible for waste prevention and management.

b. Actions that will be taken to reduce solid waste generation.

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

d. Characterization, including estimated types and quantities, of the waste to be generated.

e. Name of landfill and/or incinerator to be used and the estimated costs for use, assuming that there would be no salvage or recycling on the project.

f. Identification of local and regional reuse programs, including non-profit organizations such as schools, local housing agencies, and organizations that accept used materials such as materials exchange networks and Habitat for Humanity.

g. List of specific waste materials that will be salvaged for resale, salvaged and reused, or recycled. Recycling facilities that will be used shall be identified.

h. Identification of materials that cannot be recycled/reused with an explanation or justification.

i. Anticipated net cost savings determined by subtracting Contractor program management costs and the cost of disposal from the revenue generated by sale of the materials and the incineration and/or landfill cost avoidance.

1.4 RECORDS

Records shall be maintained to document the quantity of waste generated; the quantity of waste diverted through sale, reuse, or recycling; and the quantity of waste disposed by landfill or incineration. The records shall be made available to the Contracting Officer during construction, and a copy of the records shall be delivered to the Contracting Officer upon completion of the construction.

1.5 COLLECTION

The necessary containers, bins and storage areas to facilitate effective waste management shall be provided and shall be clearly and appropriately identified. Recyclable materials shall be handled to prevent contamination of materials from incompatible products and materials and separated by one of the following methods:

1.5.1 Source Separated Method.

Waste products and materials that are recyclable shall be separated from trash and sorted into appropriately marked separate containers and then transported to the respective recycling facility for further processing.

1.5.2 Co-Mingled Method.

Waste products and recyclable materials shall be placed into a single container and then transported to a recycling facility where the recyclable materials are sorted and processed.

1.5.3 Other Methods.

Other methods proposed by the Contractor may be used when approved by the Contracting Officer.

1.6 DISPOSAL

Except as otherwise specified in other sections of the specifications, disposal shall be in accordance with the following:

1.6.1 Reuse.

First consideration shall be given to salvage for reuse since little or no re-processing is necessary for this method, and less pollution is created when items are reused in their original form. Sale or donation of waste suitable for reuse shall be considered. Salvaged materials, other than those specified in other sections to be salvaged and reinstalled, shall not be used in this project.

1.6.2 Recycle.

Waste materials not suitable for reuse, but having value as being recyclable, shall be made available for recycling whenever economically feasible.

1.6.3 Waste.

Materials with no practical use or economic benefit shall be disposed at a landfill or incinerator.

-- End of Section --

SECTION 01670

RECYCLED / RECOVERED MATERIALS

12/01

PART 1 GENERAL

1.1 REFERENCES

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

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

40 CFR 247	Comprehensive Procurement Guideline for Products Containing Recovered Materials

1.2 OBJECTIVES

Government procurement policy is to acquire, in a cost effective manner, items containing the highest percentage of recycled and recovered materials practicable consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials. The Environmental Protection Agency (EPA) has designated certain items which must contain a specified percent range of recovered or recycled materials. EPA designated products specified in this contract comply with the stated policy and with the EPA guidelines. The Contractor shall make all reasonable efforts to use recycled and recovered materials in providing the EPA designated products and in otherwise utilizing recycled and recovered materials in the execution of the work.

1.3 EPA DESIGNATED ITEMS INCORPORATED IN THE WORK

Various sections of the specifications contain requirements for materials that have been designated by EPA as being products which are or can be made with recovered or recycled materials. These items, when incorporated into the work under this contract, shall contain at least the specified percentage of recycled or recovered materials unless adequate justification (non-availability) for non-use is provided. When a designated item is specified as an option to a non-designated item, the designated item requirements apply only if the designated item is used in the work.

1.4 EPA PROPOSED ITEMS INCORPORATED IN THE WORK

Products other than those designated by EPA are still being researched and are being considered for future Comprehensive Procurement Guideline (CPG) designation. It is recommended that these items, when incorporated in the work under this contract, contain the highest practicable percentage of recycled or recovered materials, provided specified requirements are also met.

1.5 EPA LISTED ITEMS USED IN CONDUCT OF THE WORK BUT NOT INCORPORATED IN THE WORK

There are many products listed in 40 CFR 247 which have been designated or proposed by EPA to include recycled or recovered materials that may be used by the Contractor in performing the work but will not be incorporated into the work. These products include office products, temporary traffic control products, and pallets. It is recommended that these non-construction products, when used in the conduct of the work, contain the highest practicable percentage of recycled or recovered materials and that these products be recycled when no longer needed.

-- End of Section --

UFGS-01780A/S (May 2002)

SECTION 01780A

CLOSEOUT SUBMITTALS
05/02

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. 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 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

As-Built Drawings; G

Drawings showing final as-built conditions of the project. The final CADD as-built drawings shall consist of one set of electronic CADD drawing files in the specified format, two sets of black-line prints, and one set of the approved working as-built drawings.

SD-03 Product Data

As-Built Record of Equipment and Materials; G

Two copies of the record listing the as-built materials and equipment incorporated into the construction of the project.

Warranty Management Plan; G

Two sets 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

Two sets of paper drawings revised to reflect all bid amendments will be provided by the Government at the preconstruction conference for markup of as-built conditions. Electronic CADD files in Microstation format will be provided by the Government at the preconstruction conference for updating CADD file as-built drawings.

1.2.1.2 Working As-Built and Final As-Built Drawings

The Contractor shall revise two 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:

a. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, 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.

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

c. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

d. 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.

e. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

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

g. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.

h. 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.

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

j. 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

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 Microstation J format compatible with a Windows NT 2000 operating system or Windows XP. 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. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make required corrections, changes, additions, and deletions.

a. Corrections shall be made in the "Model" files rather than the individual sheet file when model files are referenced. Once the model file is corrected the individual sheet file will automatically be corrected.

b. The contractor shall modify the drawings at construction completion to indicate the as-built character of all site components:

(1) These drawings will conform to the level symbology of the model files and be free of any superfluous construction detail. The intent is to show As-Built conditions and should not include any components that are not as-built, i.e., if the pre-work map showed a water line 3' from a curb and was constructed 4' from the curb, the as-built map will show only the final location of the water line.

(2) The grading model file will clearly indicate the final grade of the site at a contour interval not greater than one foot.

(3) The final inverts of all utilities will be shown on the model files. Where utilities were installed which follow the surface of the ground, the depth of that utility will be indicated. Where there is a variance in the depth of the utility, the break point and character of variance will be shown.

(4) The model files will clearly identify all utilities installed with a trace wire and/or cathodic protection.

(5) The model files will show a minimum of two tie points for all subsurface control devices to include valves, manholes, handholes, switches, etc. The tie-points will be directed such that they form a triangle with no inclusive angle less than 30 or greater than 150. No leg of the triangle will be longer than 100'. Valid tie-points will run to identifiable above ground objects such as poles or building corners as is in keeping of good survey practice for the recovery of monuments.

(6) The model files will clearly indicate the entry point and character of all utilities running to or from structures.

c. 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.

d. Within 10 days for contracts less than $5 million or 20 days for contracts $5 million and above 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 blue-lined prints of these drawings for Government review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within 7 days for contracts less than $5 million or 10 days for contracts $5 million and above the Contractor shall revise the CADD files accordingly at no additional cost and submit one set of final prints for the completed phase of work to the Government. Within 10 days for contracts less than $5 million or 20 days for contracts $5 million and above 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), two sets of blue-line 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 customer's CADD system. 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 Omitted

1.2.1.6 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 in Section 00800. 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 Bond

The Contractor's performance bond shall remain effective throughout the construction period.

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

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

c. Following oral or written notification of required construction warranty repair work, 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 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.

1.3.5 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

Operation manuals and maintenance manuals shall be submitted as specified. Operation manuals and maintenance manuals provided in a common volume shall be clearly differentiated and shall be 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, downspouts and boot wash areas. 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, fences and construction facilities removed. A list of completed clean-up items shall be submitted on the day of final inspection.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

SECTION 01781

OPERATION AND MAINTENANCE DATA
12/01

PART 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 01330, "Submittal Procedures."

1.1.2 Package Quality

Documents must be fully legible. Poor quality copies and material with hole punches obliterating the text or drawings will not be accepted.

1.1.3 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.

1.1.5 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-Sshutdown 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 orportions 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 itemequipment 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 alist 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.

1.2.3.6 Corrective Maintenance Work-Hours

Include manufacturer's projection of corrective maintenance work-hours including requirements by type of craft. Corrective maintenance that requires completion orparticipation of the equipment manufacturer shall be identified and tabulated separately.

1.2.4 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:

1.2.4.1 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

1.2.4.2 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.

1.2.4.3 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.

1.2.4.4 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.

1.2.4.5 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.

1.3 SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES

Furnish the O&M data packages specified in individual technical sections. The required information for each O&M data package is as follows:

1.3.1 Data Package 1

a. Safety precautions

b. Maintenance and repair procedures

c. Warranty information

d. Contractor information

e. Spare parts and supply list

1.3.2 Data Package 2

a. Safety precautions

b. Normal operations

c. Environmental conditions

d. Lubrication data

e. Preventive maintenance plan and schedule

f. Maintenance and repair procedures

g. Removal and replacement instructions

h. Spare parts and supply list

i. Parts identification

j. Warranty information

k. Contractor information

1.3.3 Data Package 3

a. Safety precautions

b. Normal operations

c. Emergency operations

d. Environmental conditions

e. Lubrication data

f. Preventive maintenance plan and schedule

g. Troubleshooting guides and diagnostic techniques

h. Wiring diagrams and control diagrams

i. Maintenance and repair procedures

j. Removal and replacement instructions

k. Spare parts and supply list

l. Parts identification

m. Warranty information

n. Testing equipment and special tool information

o. Contractor information

1.3.4 Data Package 4

a. Safety precautions

b. Operator prestart

c. Startup, shutdown, and post-shutdown procedures

d. Normal operations

e. Emergency operations

f. Operator service requirements

g. Environmental conditions

h. Lubrication data

i. Preventive maintenance plan and schedule

j. Troubleshooting guides and diagnostic techniques

k. Wiring diagrams and control diagrams

l. Maintenance and repair procedures

m. Removal and replacement instructions

n. Spare parts and supply list

o. Corrective maintenance man-hours

p. Parts identification

q. Warranty information

r. Personnel training requirements

s. Testing equipment and special tool information

t. Contractor information

1.3.5 Data Package 5

a. Safety precautions

b. Operator prestart

c. Start-up, shutdown, and post-shutdown procedures

d. Normal operations

e. Environmental conditions

f. Preventive maintenance plan and schedule

g. Troubleshooting guides and diagnostic techniques

h. Wiring and control diagrams

i. Maintenance and repair procedures

j. Spare parts and supply list

k. Testing equipments and special tools

l. Warranty information

m. Contractor information

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

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