



Item 14. Continued.

CHANGES TO SPECIFICATIONS

1. Replacement Sections – Replace the following sections with the accompanying new sections of the same number and title, bearing the notation "ACCOMPANYING AMENDMENT NO. 0003 TO SOLICITATION NO. W9126G-04-R-0029:"

00120 EVALUATION FACTORS FOR AWARD  
01000 CONSTRUCTION SCHEDULE  
01010 WORK PLAN REQUIREMENTS

ADDITION OF ATTACHMENTS

2. Following Section 01355 Environmental Protection, add the accompanying new attachments, bearing the notation "ACCOMPANYING AMENDMENT NO. 0003 TO SOLICITATION NO. W9126G-04-R-0029:"

01355A Asbestos Project Requirements (For all Projects at CCAD)  
01355B Lead Abatement Project Requirements for Licensed Lead Contractors

END OF AMENDMENT

**SECTION 00120**  
**EVALUATION FACTORS FOR AWARD**

**1.0 VOLUME I, TECHNICAL PROPOSAL**

1.1 **Basis for Awards.** The solicitation includes the provision, FAR 52.0215-0001, INSTRUCTIONS TO OFFERORS – COMPETITIVE AQUITION. The Government intends to award one (1) contract, based upon initial offers received, without discussion of such offers. Each offer shall contain the offeror’s best terms from a price/cost and technical standpoint. The Government reserves the right to conduct discussions if that is later determined by the Contracting Officer to be necessary. The right is reserved to accept other than the lowest offer and to reject any or all offers. Award may be made to the superior offer which is not the lowest priced offer, but which is sufficiently more advantageous than the lowest offer so as to justify the payment of a higher price. As technical proposals become more equivalent, cost consideration becomes more significant and may become the determining factor for award. Any award price must be determined to be fair and reasonable

1.2 The technical proposals received in response to this request for proposal will be evaluated using “Best Value” source selection process in selecting the proposal that is most advantageous to the Government. To be considered responsive each offeror shall specifically address each of the evaluation factors set forth in this section. Sufficient detail shall be provided citing specific data as may be required, such that the proposal may be evaluated. The proposal shall clearly demonstrate that the offeror has an understanding of the work tasks required.

1.3 Technical proposals shall be submitted so as to fully and clearly be acceptable without additional explanation or information, since the Government reserves the right to make a final determination as to whether a proposal is acceptable or unacceptable solely on the basis of the proposal as submitted. However, the Government, may request additional information from offerors that clarifies or supplements, but does not basically change any proposal as submitted.

1.4 Technical evaluations will be performed on each proposal covering the evaluation factors listed in Section 00120 “EVALUATION FACTORS FOR VOLUME I, TECHNICAL PROPOSAL.” These factors are listed in the order of their importance, both as major factors, subfactors and elements, thereof.

**1.5 TECHNICAL PROPOSAL EVALUATION FACTORS**

The relative weight of all the non-priced factors when combined, are significantly more important than cost. The technical merit factor is significantly more important than the management merit factor. The following technical evaluation factors are listed in descending order of importance: “Technical” and “Management”. The subfactors and elements for “Technical” are listed in descending order of importance. The subfactors for “Management” are listed in descending order of importance.

A. Major Technical - non-cost factors

Factor - Technical Area

Subfactor I - Experience, Past Performance, and Capability of Proposed Subcontractors

- Element I Experience
- Element II Past Performance
- Element III Capability of Proposed Subcontractors

Subfactor II - Technical Approach

- Element I Decision Capability Level of Response

Factor - Management Area

- Subfactor I Organization and Personnel Qualifications
- Subfactor II Corporate Experience & Support
- Subfactor III SDB Utilization Plan

B. Price/Cost Proposal . . . . . Not scored but will be considered

1.5.1 Rating Factors. On each proposal, individual evaluators will rate each category unless otherwise noted.

1.6 **EXPLANATION OF EVALUATION CATEGORIES**

I. **Technical Proposals**

A. **Technical Area.** The technical approach should address the items in Section 00900 being sure to include the nature of the requirement as understood by the offeror; recognition of critical areas of the requirement; and proposed methods of accomplishing the requirement. Subfactors I and II are listed in descending order of importance –

1. **SUBFACTOR I - Experience, Past Performance and Relationship with Proposed Subcontractors:** Offeror shall have experience in various types of construction related work, past performance, and Relationships with proposed subcontractors to do same or similar work. The following Elements I, II, and III, listed in their relative order of importance -

i. **ELEMENT I - Experience:** Offeror shall provide a list of the principle types of contract work performed in the categories as listed in Section 00110).

ii. **ELEMENT II - Past Performance:** Offeror shall provide information that indicates their ability to perform the proposed contract effort. (See Section 00110.)

iii. **ELEMENT III – Relationship with Proposed Subcontractors:** Offeror shall identify and describe the services of their proposed subcontractors (making referencing to the list of principle types of work listed Section 00110, paragraph 6.1.1.1) and shall provide their rationale for selecting those subcontractors and their past working relationship, if any, with any of your proposed subcontractors located in/around the Ft. Polk, LA area.

**2. SUBFACTOR II - Technical Approach:**

i **ELEMENT I– Decision Capability Level of Response:** It is essential that the offeror demonstrate:

ability to retain qualified personnel adept at decision making to provide rapid response for submitting a proposal/technical information for individual task orders and managing subcontractors for numerous, simultaneous ongoing task orders.

B. **MANAGEMENT AREA.** The following Subfactors I, II, and III are listed in descending order of importance -

1. **SUBFACTOR I - Organization and Personnel Qualifications:** Offeror shall furnish an organization chart depicting the management structure proposed for the RFP and any resulting contract.

2. **SUBFACTOR II - Corporate Experience & Support:** Offeror shall demonstrate related corporate experience and support for unusual Government requirements such as increased workload in a compressed time frame.

3. **SUBFACTOR III – SDB Utilization Plan:** Offeror shall furnish a SDB Utilization Plan that affords subcontracting opportunities to Small Disadvantaged Business concerns. The minimum monetary target for this subfactor is 8.91%.

ALL Offerors shall submit a SDB Utilization Plan, to include the following information:

- Identification of each SDB concern proposed and the work each is to perform( See NOTE below regarding SDB certification)
- Targets expressed in dollars and percentages representing each SDB concern’s participation of the total contract value.
- Total target value of all SDB participation, expressed in dollars and percentages, of the total contract value.

The offeror is put on notice that any targets represented in a submitted proposal will be incorporated into and become part of any resulting contract.

NOTE: All proposed SDB concerns must be SBA-certified in PRO-Net. SBA concerns can register in PRO-Net on the Internet at the following address: <http://pronet.sba.gov>.

II. **Price/Cost Proposal:** (Is not scored) Price analysis will be used to evaluate proposals. If adequate competition does not exist at the time proposals are opened, supplementary cost and pricing information will be requested from the Offerors and it will be evaluated for reasonableness and realism in accordance with AFARS 15.608(a)(1).

C. **RATING PROPOSALS.**

1. **Rating Technical Proposals.** Upon completion of the individual technical proposal evaluations by the TE Team, the TE Team will meet to assign a consensus rating to each proposal, to include each category and subcategory.

2. **Evaluating Price Proposals.** Not scored

**2.0 VOLUME II, PRICE/COST PROPOSAL and PREAWARD SURVEY INFORMATION.**

2.1 For the purpose of evaluating price/cost submitted hereunder:

2.1.1 The Government will assume that 95% of the work will be done during the normal duty hours and that 5% will be accomplished during other than normal duty hours.

2.1.2 A price analysis will be completed of the offeror's *price/cost* proposal ***as submitted on the bid schedule, Section 00010 (see Section 00110)*** to determine price reasonableness. If adequate competition is not obtained, a detailed cost analysis will be used to evaluate for cost realism (allowability, allocability, and reasonableness) in accordance with AFARS 15.608(a)(1).

2.2 For the purpose of evaluating the preaward survey information submitted hereunder:

2.2.1 Preaward survey data will be evaluated as it relates to the probability of the offeror successfully accomplishing the proposed effort.

2.2.2 The Government will use preaward survey data provided by the offeror (as specified in Section 00110) and data obtained from other sources to perform this assessment.

**3.0 EVALUATION OF OPTIONS (JUL 1990)(FAR 52.217-5)** 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).

**4.0 EVALUATION FACTORS FOR VOLUME I, TECHNICAL PROPOSALS.** The evaluation factors are divided sequentially into major Factors, Subfactors and Elements. The considerations used for determining their value are also described. DETAILED DESCRIPTIONS OF THE EVALUATION FACTORS, SUBFACTORS AND ELEMENTS ARE INCLUDED IN SECTION 00110.

**(End of Section 00120)**

## SECTION 01000

## CONSTRUCTION SCHEDULE

**AM #0003**

## PART 1 GENERAL

## 1.1 SCHEDULE

Commence, prosecute, and complete the work under this contract in accordance with the following schedule and Section 00700 CONTRACT CLAUSES COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK and LIQUIDATED DAMAGES.

## 1.1.1 Testing of Heating and Air-Conditioning Systems

The times stated for completion of a task order includes all required testing specified in appropriate specification sections of heating, air conditioning and ventilation systems including HVAC Commissioning. Exception: boiler combustion efficiency test, boiler full load tests, cooling tower performance tests, and refrigeration equipment full load tests, when specified in the applicable specifications, shall be preformed in the appropriate heating/cooling season as determined by the Contracting Officer. See Section 01770 TASK ORDER AND CONTRACT CLOSEOUT, paragraph HVAC Testing.

1.2 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (OCT 1989)  
(ER 415-1-15)(52.0001-4038 1/96)

a. This provision specifies the procedure for 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 due to precipitation and temperature is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. Wind is not considered in the Monthly Anticipated Adverse Weather Calendar Day Schedule.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY  
 WORK DAYS BASED ON (5) DAY WORK WEEK  
 CORPUS CHRISTI, TX AREA (RESERVE CTRS. WITHIN 80 MILE RADIUS  
 WEST AND 40 MILES OTHERWISE)

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3   | 2   | 1   | 2   | 4   | 4   | 2   | 3   | 4   | 2   | 2   | 2   |

c. Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the contractor's scheduled work day.

The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph "b", above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause entitled "Default (Fixed Price Construction)."

### 1.3 CONSTRUCTION PHASING

#### 1.3.1 Phasing Requirements

Construction phasing shall be in accordance with each task order.

### 1.4 WORK RESTRICTIONS

Work restrictions, including those concerning joint occupancy, noise, and height, will shall be determined per each task order.

#### 1.4.1 Working Hours

See Section 00800 SPECIAL CONTRACT REQUIREMENTS clause WORK HOURS.

#### 1.4.2 Access

Access to Post and other areas will be arranged by the Contractor based on requirements of each task order.

#### 1.4.3 Security Requirements

For the duration of this Contract, access to Corpus Christi Army Depot will

be delayed between 5 minutes to 30 minutes or more due to increased security precautions, including the checking of vehicle occupants' IDs, vehicle manifests, and the searching of all vehicles. Any general or specific threat to the safety of those working or living at [AM #0003] Corpus Christi Army Depot could result in longer waiting times at the access points to Corpus Christi Army Depot.

The following are requirements for contractor employees entering the Corpus Christi Army Depot:

- a. One form of picture ID.
- b. A memo from the construction company on their letterhead stating the reason for entry, contract number, and the location at the Corpus Christi Army Depot where the jobsite is located.
- c. All delivery trucks must have a bill of lading and delivery truck drivers must have a picture ID.
- d. Employee Identification Badges: Contractor personnel shall wear visible Contractor-furnished employee identification badges while physically on the Installation. Each badge shall include, as a minimum, the company name, employee name, photograph, Contract Title, Contract Number, and the expiration date of the badge. See Section 01500 TEMPORARY CONSTRUCTION FACILITIES for additional requirements.

## 1.5 UTILITIES

### 1.5.1 Payment for Utility Services

Unless otherwise stated in the task order, water, gas, and electricity are available from Government-owned and operated systems and will be furnished without charge to the Contractor in accordance with Contract Clause 52.236.14 AVAILABILITY AND USE OF UTILITY SERVICES.

### 1.5.2 Outages

Unless otherwise stated in the task order and in accordance with Section 00800 SPECIAL CONTRACT REQUIREMENTS, the Contractor shall coordinate all requests for utility outages with the Contracting Officer in writing 14 days prior to date of requested outage:

- a. Water, gas, steam, and sewer outages shall be held to a maximum duration of 4 hours unless otherwise approved in writing.
- b. Electrical outages shall have a maximum duration of 4 hours.
- c. For specific task orders, utility outages may be limited to Saturdays, Sundays, or holidays ONLY unless specific approval is otherwise received.

## 1.6 STREET CLOSINGS

Unless otherwise stated in the task order, the Contractor shall coordinate all requests for street closings with the Contracting Officer in writing 14 days prior to date of requested outage:

a. One lane traffic shall be maintained at all times (except that a total closing may be allowed for specific 8-hour periods).

b. The final street repair shall be completed within 14 days after the start of any street crossing. Any part of the street returned to service prior to final repair shall be maintained smooth with hot-mix cold-lay surface course.

c. Open cuts across paved roads and streets for utility crossings will not be allowed. Utility crossings will be accomplished by boring or jacking procedures only.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

SECTION 01010

WORK PLAN REQUIREMENTS

**AM #0003**

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.

INTERNATIONAL CODE COUNCIL (ICC)

ICC Bldg Code

ICC International Building Code

UNIFIED FACILITIES CRITERIA (UFC)

U.S. ARMY CORPS OF ENGINEERS, SOUTHWESTERN DIVISION PUBLICATIONS  
(CESWD)

CESWD-01

Corps of Engineers Southwestern Division  
Architectural and Engineering Instruction  
Manual (CESWD-AEIM)

1.2 SUBMISSION OF TASK ORDER DRAWINGS, SPECIFICATIONS, AND OTHER DATA

1.2.1 Number of Copies

The Contractor shall submit, in accordance with Sections 00900 DESCRIPTION/SPECS/WORK STATEMENT, and 00800 SPECIAL CONTRACT REQUIREMENTS, the required number of copies of the construction drawings, specifications, calculations, equipment schedules, and all other submittal data for each review submittal. These submittals shall be in accordance with the requirements of this solicitation, all current revisions, the applicable task order, and all other terms and conditions of the contract. Upon final approval, the Contractor shall within 7 calendar days furnish the required number of copies (including one reproducible) of the approved drawings, specifications, calculations, and other data.

1.2.2 Task Order Drawings

Task order drawings shall be prepared on CADD, plotted on mylar only. Size of drawings shall be SI A1, 594 mm by 841 mm (23.39 by 33.11 inches), trim to trim, with Government standard metric borders. Full size drawings shall be submitted for all submittals. Mylar can be provided by the Base to the Contractor in exchange for consideration of fees.

#### 1.2.2.1 Computer Aided Design and Drafting (CADD) Systems

Task order construction drawings, and record (as-built) drawings after the completion of each task order, shall be submitted on CD-ROM disk(s) along with the hard copies of the drawings, technical specifications, calculations, and other data. For each task order, furnish two sets of the CADD drawings on CD-ROM disk (i.e. two CD-ROM disks, one set per disk), compatible with the user's format (Bentley Systems Microstation or AutoCADD). Microstation will be the default CADD system unless AutoCADD is required by the task order. Drawings shall be printed to .cal format for viewing using SourceView, MaxView, or On-Screen Takeoff Viewer Readers. Provide Reader and Contract Viewer software on the CD's. Contract Viewer software, along with instructions, can be copied from the Contract Award CD-ROM disc.

#### 1.2.2.2 CADD Drawings

The Contractor shall ensure that all delivered CADD digital files and data (e.g., sheet files, model files, cell/block libraries) are compatible with the Government's target CADD system and operating system and adhere to the standards and requirements specified. The term "compatible" means that data is in native digital format i.e. .dgn, (Microstation) or .dwg (AutoCADD). It is the responsibility of the Contractor to ensure this level of compatibility.

#### 1.2.2.3 CADD Standards

CADD drawings shall be prepared in accordance with the applicable general and discipline-specific provisions for drawing formats, level/layer assignments, line colors, line weights, and line types of the "Tri-Service A/E/C Standards" and the "SWD Architectural and Engineering Instruction Manual (AEIM), Chapter VIII, "Drafting Standards."

The CADD standards for design of this project, including seed/prototype files containing the Government's preset standard settings and electronic reference files containing the Government's standard border/title block sheets, are located at the following Web site:

<http://tsc.wes.army.mil/products/standards/aec/aecstdweb.asp>.

The Contractor shall submit a written request for approval of any deviations from the Government's established CADD standards. No deviations will be permitted unless prior written approval of such deviation has been received from the Government.

#### 1.2.2.4 Drawing Format

Title block shall include, as a minimum, project title and location, sheet title, and sequence number. At the preliminary and final design submittals, each Contractor-prepared drawing shall bear the printed name and signature of the registered architect or appropriate registered engineer responsible for the work portrayed on that drawing and proposed to meet the task order requirements. For the final submittal, each Contractor-prepared drawing shall bear the stamp or seal and signature

of the registered architect or appropriate registered engineer responsible for the work portrayed on that drawing and proposed to meet the task order requirements.

#### 1.2.2.5 Drawings Sequence

Arrange drawings by design discipline in accordance with the CESWD-01, SWD Architectural and Engineering Instruction Manual, Chapter VIII, Appendix A, Plate D1, Standard Arrangement Of Drawings.

#### 1.2.2.6 Drawings Required

As a minimum, the construction drawings shall consist of the following as required by the task order:

- a. Title Sheet, Index of Drawings (each technical discipline shall have a separate drawing legend sheet located in front of each respective section), Legend, and Abbreviations and Soil Borings
- b. Civil Drawings
- c. Utility Drawings (Water Supply, Wastewater, Gas, Electrical, Fiber and Communication)
- d. Architectural Drawings
- e. Interior Design Drawings
- f. Structural Drawings
- g. Mechanical Drawings
- h. Electrical Drawings (including security and fire alarm)
- i. Lightning Protection
- j. Fire Protection Drawings
- k. Environmental Drawings (including identification and removal of hazardous materials from the buildings, storm water control details, etc.)
- l. Kitchen Equipment Drawings
- m. Landscape Architectural Drawings
- n. Irrigation Layout Drawings

#### 1.2.3 Task Order Specifications

Construction specifications shall be in sufficient detail to fully describe and demonstrate the quality of materials, the installation and performance of equipment, and the quality of workmanship. Specifications shall conform to the Construction Specifications Institute (CSI) 16-Division, 3-Part format. Use Corps of Engineers Unified Facilities Guide Specifications (UFGS), the Fort Worth District's UFSWF local guide specifications, and the Fort Worth District Supplements to the UFGS, to the extent available, to develop construction specifications unless the task order permits the use of commercially available guide specifications such as "SpecText" published by The Construction Specifications Institute (<http://csi.worldweb.net/technic/master/spectextms.htm>), "MasterSpec" published by The American Institute of Architects (<http://www.arcomnet.com/>), BSD SpecLink (Building Systems Design, Inc., Atlanta, GA, <http://csi.worldweb.net/technic/master/bsdms.htm> and [http://www.bsdssoftlink.com/speclink/sl\\_frame.htm](http://www.bsdssoftlink.com/speclink/sl_frame.htm)) or manufacturers' product specifications utilizing CSI's Manu-Spec format. **The specifications shall clearly identify, where appropriate, the specific products chosen to meet**

**the requirements of the Contract (manufacturers' brand names and model numbers or similar product information). The Contractor shall be responsible for coordinating references, along with the Contract performance requirements, to specific specification sections (number and title) within the construction specifications.**

#### 1.2.3.1 Commercially Available Guide Specifications

When commercially available construction guide specifications are used, change references to the "Architect/Engineer" and the "Owner" to refer to the "Government" or "Contracting Officer" respectfully. Change references to "Section 01300" or "Section 01300 SUBMITTALS" to "Section 01330 SUBMITTAL PROCEDURES."

#### 1.2.3.2 Guide Specification Editing

When the UFGS are used, specification paragraphs and subparagraphs shall not be rewritten to lessen the quality of the original guide specifications. Additions shall not lessen the quality of materials required by the guide specifications. Delete all inapplicable text material to tailor the specifications to fit the project. Complete the editing of all options in the guide specifications. Edit choices and options in accordance with the recommendations and guidance of designer notes and Fort Worth District Guide Supplements. The specifications shall clearly identify, where appropriate, the specific products chosen to meet the requirements of the task order (manufacturers' brand names and model numbers or similar product information).

#### 1.2.3.3 Format

Submit construction specifications, including cover page and Table of Contents, using software applicable to the guide specification version; Corps of Engineers Specsintact, Version 4.0 or later for the UFGS and MS Word 2000. When the UFGS are used and the users want Word document files, Specsintact can convert the Specsintact sections to Word. See paragraph GUIDE SPECIFICATIONS AND SOFTWARE.

Print hard copies using laser or inkjet printer and good quality white bond paper (75 g/m<sup>2</sup> (20 pound Copier/Laser/Fax/Inkjet/Offset type), 215 mm by 279 mm (8 1/2 by 11 inch) in size. Review copies shall be the marked-up version with the editing shown by using redlining for text insertions and strikeouts for text deletions. The corrected 100 percent specifications with review comments incorporated shall be cleaned up (markings for insertion and deletion removed) and submitted in both hard copy and on magnetic media (DOS compatible 1.44 MB floppy disk or CD-ROM disk). Carbon copies are not acceptable.

Electronic version: Print the specifications to Adobe Acrobat .pdf format and include on the CD-ROM disc with the drawings. Include Adobe Acrobat Reader and the Contract Viewer software on the CD Disc. Contract Viewer software, along with instructions, can be copied from the Contract Award CD-ROM disc.

#### 1.2.3.4 Submittal Register

Submit a submittal register with each task order. See Section 01330 SUBMITTAL PROCEDURES. It can be produced using the Specsintact submittal register program or the Microsoft EXCEL SR4288 file that is on the Solicitation CD-ROM disk. Submit with the review and final submittals.

The Specsintact electronic version of the ENG Form 4288 is located on the Solicitation and Contract Award CD-ROM disks in folder "Subreg." This version is the Specsintact DOS Submittal Register program and includes a Readme.txt file. Copy the files to the computer's C:\ drive, remove the read-only attributes, and then double-click on either file "subreg.exe" or on "submit.bat." This is **not** a Windows-based program so the mouse **does not** work. Editing instructions are on-screen, such as press the "F5 (add)" and then the "E" keys to create new empty submittals, the "PgDn" key to complete editing, and the "A" key to accept. For each submittal, fill in the Section Number, Activity Number if applicable, Paragraph Number, Description, Type of Submittal (e.g. SD-01 through SD-11(See Section 01330 CONSTRUCTION SUBMITTAL PROCEDURES)), Classification (e.g. G or FIO), and the Contractor's proposed submittal date. Fill in columns "a" through "o" on the ENG Form 4288 and submit a copy of the "Subreg" folder with the updated files and a hard copy of the register as required for the various construction submittals. A blank MS Excel version of the Form 4288 Submittal Register is also included in the "Subreg" folder and may be used if allowed by the Contracting Officer. This Excel version is not compatible with Corps of Engineers' RMS software.

#### 1.2.3.5 Cover Page

Include the following information:

- a. Project title, location, and task order title
- b. Construction contract number
- c. Task Order number
- d. Construction Contractor's name and address

#### 1.2.4 Task Order Documents

Task order documents shall include construction drawings, specifications, Storm Water Pollution Prevention Plan if applicable, cost estimates, construction schedule, and calculations for categories such as, but not limited to, architectural, structural, mechanical, electrical, grading, drainage, paving, and outside utility services. Task orders shall conform to the User's Installation Design Guide. Detailing and installation of all equipment and materials shall comply with the manufacturers' recommendations.

#### 1.2.5 Task Order Reviews

Task order development reviews shall be held at the Fort Worth District's office (location is according to each Task Order) in accordance with the task order schedule. The Government shall have a minimum of 14 days review period for each review submittal and 7 days review period for resubmittal of the final (100 percent) documents incorporating final review comments.

Review periods may be longer, especially for task orders involving historical and environmental requirements. Additional review conferences may be held if the Government determines them necessary.

#### 1.2.5.1 Material required for preliminary submittal

##### a. Drawings

All drawings required for completion of the task order, developed to approximately 35 percent completion.

##### b. Specifications

Draft of specifications for task work, including index and manufacturers' catalog and engineering data.

##### c. Interior and Exterior Finish Samples

For each applicable task order, furnish one (1) complete set of coordinated color/finish sample board(s) for approval. Color/finish board(s) shall have attached samples of all exterior and interior appearance related construction items the Contractor proposes to furnish, including, but not limited to, such items as interior paints and finishes; wall covering; trim items; carpet; floor, wall and ceiling tiles; doors; plastic laminates for cabinet work, signage, etc. Each sample shall indicate color, texture, and finish; and, if patterned, shall be large enough to define full pattern. Samples shall be identified as to type of material, area of installation, manufacturer, and transmittal number under which certification of the material represented has been submitted in accordance with the requirements of Section 01330 SUBMITTAL PROCEDURES. Samples shall be mounted on 215 mm by 280 mm by 1.5 mm (8-1/2 inch by 11 inch by 1/16 inch thick) mat board, and shall be contained in three (3) ring binders. Epoxy glue, hot-melt glue, or contact cement shall be used to attach samples; Scotch tape, double-backed tape, or rubber cement will not be acceptable. Cover of binders shall contain title of contract, contract number, task order number, and name of Contractor.

##### d. Calculations

Calculations developed to the extent required to support the task order development of that portion of utility distribution, structural, electrical, and mechanical systems included in this submittal.

##### e. Storm Water Pollution Prevention Plan (SWPPP)

For project sites that are 1 acre in size or larger, a detailed Storm Water Pollution Prevention Plan (SWPPP) shall be developed in compliance with the requirements for a NPDES General Permit for Storm Water Discharges from Construction Sites, as published in the Federal Register, Volume 57, Number 175, September 9, 1992. Minimum requirements for preparing a SWPPP are located in Section 01421 BASIC STORM WATER POLLUTION PREVENTION PLAN. The Contractor shall identify whether or not a temporary sediment basin will be required during construction to comply with the regulation. If determined to be required a design of the basin will be included as part of the SWPPP

and contract drawings. The SWPPP and a completed but unsigned Notice of Intent (NOI) shall be submitted for approval to the Corps of Engineers, Fort Worth District, as part of this review package, accompanied by a signed Contractor's Certification. Upon approval, the District will file the Noitce of Intent with the Environmental Protection Agency and notify the Contractor that it has been sent. Construction shall not be started earlier than 48 hours after the date the NOI was sent to the EPA. In addition, the Contractor shall post a copy of the NOI and a brief project description on the project bulletin board. For the project description, the Contractor may use Section 1.1 of the SWPPP or write a brief description.

f. Construction Schedule

Construction schedule shall conform to the requirements Section 01321 PROGRESS SCHEDULES (BAR CHART).

1.2.5.2 Material required for final (100 percent) submittal

Includes all documents submitted for the preliminary review, upgraded to 100 percent completion.

a. Drawings

(1) Site Drawings

Site drawings shall include plans and details required by the task order.

(2) Architectural Drawings

Architectural drawings shall include plans, elevations, building sections; fire exits; wall, ceiling, and floor fire ratings; and details required by the task order.

(3) Structural Drawings

Structural drawings shall include plans, details, and connections applicable to the task order.

(4) Mechanical and Electrical Drawings

Mechanical/electrical drawings, with complete schematics, shall show all heating, air conditioning, plumbing and electrical work.

(5) Fire Protection Drawings

Fire Protection drawings, with complete schematics, shall show all fire sprinkler system layout, pipe sizes, locations of heads, details, etc. as required for construction and to meet the codes.

(6) Equipment Schedules

Based on the results of calculations, provide a complete list(s) of the

materials and equipment proposed for heating, air conditioning and plumbing, with the manufacturer's published cataloged product installation specifications and roughing-in data. The heating and air conditioning equipment data shall include the manufacturer's wiring diagrams, installation specifications, ARI certification, and the standard warranty for the equipment. When new diffusers are required in a task order, provide the manufacturer's published cataloged capacities for supply diffusers as evidence that the arrangement of supply air outlets in each room will provide the throw and spread characteristics required to cover completely all exterior wall surfaces with the blanket of warm air at the proper design velocities.

b. Specifications

Specifications for all task order work upgraded to 100 percent completion. Contractor shall make final proposal of all materials and finishes at this submittal.

c. Calculations

Complete calculations for utility distribution systems, structural elements, and electrical and mechanical systems. Include computations for sizing equipment, air duct arrangement, and R-values for ceilings, roofs and exterior walls and floors. Calculations shall conform to [AM #0003] Corpus Christi Army Depot's yearly energy budget requirements (i.e. BTU's and KW's). Include codes, manuals, and criteria used for calculations. Include, as applicable:

- (1) loads, load factors, and allowances for future loads,
- (2) energy performance calculations,
- (3) working stresses and factors of safety,
- (4) deflection calculations,
- (5) Expansion-, contraction-, and crack-control measures,
- (6) Foundation characteristics,
- (7) Construction or erection limitations, and
- (8) Fire Protection: Comprehensive analysis of all fire-safety factors with indication of treatment provided for each potential hazard.

d. Construction Schedule

e. Submittal Register

1.2.5.3 Review Location

Review documents shall be sent, in the quantity indicated to the address listed below unless otherwise indicated in the task order. The documents will be in their then present "on-board" status. All documents shall

contain an index of contents.

**[AM #0003]**

**Facilities Engineer, Marciano Gonzalez**

**Corpus Christi Army Depot**

**ATTN: AMSAM-CC-DES-FE**

**308 Crecy Street (Stop 30)**

**Corpus Christi, Tx. 78419**

**Tel. # 361-961-3204,X389**

1.2.5.4 Additional Review Time

If for any reason the Government requires more time than that stated for review, then the Contractor will be granted an extension of time equal to the number of calendar days of delay.

1.2.6 Conference and Post-Conference Action

For each task order, Government personnel will present review comments for discussion and resolution. 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. On receipt of final corrected work plan documents, the Fort Worth District will formally approve them and issue a notice to proceed with construction. The Government, however, reserves the right to disapprove work plan document submittals if comments are of too great a significance. In this case, every effort shall be made during follow-up action between the Contractor and the Fort Worth District to resolve conflicts and problems such that documents can be fully approved. However, if final submittal(s) are incomplete or deficient, requiring 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 \$500.00 per submittal.

1.2.7 Common Design Deficiencies

The work involved in making corrections due to common deficiencies becomes lost effort and time for both the designer and the reviewer. Carefully compare the design and contract documents with all requirements at several points in the design process to avoid unnecessary changes at a later date. Some of the requirements which are most often overlooked include:

a. Requirements of the CESWD-01, Southwestern Division's ARCHITECTURAL AND ENGINEERING INSTRUCTIONS MANUAL (SWD-AEIM) have been repeatedly overlooked in the past.

b. Failure to incorporate the base's Installation Design Guide or the Fort Worth District's supplemental local requirements to the UFGS guide specifications when the UFGS are used.

c. Not using correct abbreviations or terminology on the drawings. Abbreviations must match what is used on the standard abbreviation sheet and terminology must match what is used in the standard technical guide specifications.

d. Not using the correct scales, north arrow designation, section cut system, or incomplete dimensioning on the drawings.

e. Not providing sufficient space for door operation hardware at doors which swing into a wall running perpendicular to the opening. 100 mm minimum is required between edge of door frame and perpendicular walls.

f. Not providing correct and complete Design Analysis information written in the present tense. The Design Analysis will be written following the format indicated herein. A separate Fire Protection section in the Design Analysis with input from all disciplines is one area which is often overlooked and shall be included.

g. Not correctly presenting or coordinating (to avoid interference) features of Fire Protection, Noise Control, and Physical Security.

h. Not correctly referencing and cross referencing building sections, wall sections, details, etc.

i. Failure to read and use technical notes in editing the Technical Guide Specifications.

j. Failure to coordinate all disciplines prior to submittal of projects for review.

k. Improper use of fire-retardant wood. Fire-retardant wood is combustible; its use in buildings that are of noncombustible construction is extremely limited (see ICC Bldg Code for the minor allowable uses). Because of the potential for severe degradation, fire retardant plywood shall not be used in a roof or roofing system, or in structural applications.

l. Not listing the ANSI/BHMA numbers in addition to trade names in door hardware specifications and failure to correctly specify hardware finishes.

m. Control joints in CMU walls and brick expansion joints in face brick are not shown on both architectural plans, elevations and structural plans, or are inconsistent. Note also control joint locating and coordination for floor tile per Tile Council of America recommendations.

n. Failure to delete all publications which do not apply to the particular project.

o. North is not oriented the same direction on all sheets (civil, site, arch).

p. Failure to use the latest edition (at time of task order start) of applicable criteria unless a specific edition is specified.

### 1.3 SWD-AEIM Manual

The CESWD-01 "Architectural and Engineering Instruction Manual" (AEIM) is located on the Solicitation CD-ROM disk and can be accessed from the Contract Viewer "NOTES" button. The Manual's drawings are Microstation CADD files and are located in folder SWD-AEIM, sub-folders CIVIL, DRAWING, ELEC, MECH, and STRUCT.

### 1.4 REFERENCES: CODES, CRITERIA AND STANDARDS

The work shall be conducted by the Contractor in strict accordance with the Contract and all applicable federal, state, and local laws and code, as well as stated military regulations, codes, and directives (whichever is the most stringent). The publications, current edition at time of task order award, listed below form the basis for the work under this Contract. Additional references may be identified as required in the task orders. Work done under individual task orders shall utilize the latest issue of the publication dated at the time of the task order award. When a required publication is not referenced in this list or the task order, the Contractor shall utilize one that has national applications. Where conflicts arise between publications, the Contractor is required to elevate the conflict to the Government's Project Manager responsible for the task order and to provide a recommendation of how to resolve the conflict.

American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) publications:

- Handbooks Refrigeration
- Fundamentals
- HVAC System and Equipment
- HVAC Applications
- Standards Ventilation for Acceptable Indoor Air Quality
- Installation Design Guide

Code of Federal Regulations (CFR):

- 29 CFR 1910 Occupational Safety and Health Standards - General Construction
- 29 CFR 1926 Occupational Safety and Health Standards - Construction Industry

Military Handbooks (MIL-HDBK):

- UFC 3-600-1 Design: Fire Protection Engineering For Facilities,
- UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings,
- MIL-HDBK-1190 Facility Planning and Design Guide

Department of the Army Technical Manuals (TM):

- TM 5-810-1 Mechanical Design, Heating, Ventilating, and Air Conditioning,
- TM 5-810-4 Compressed Air, TM 5-810-5 Plumbing,
- TM 5-811-1 Electric Power Supply and Distribution,
- TM 5-811-2 Electric Design, Interior Electrical System
- TM 5-811-14 Coordinated Power Systems Protection
- TM 5-815-3 Heating, Ventilation, and Air Conditioning (HVAC)

## National Fire Protection Association, Inc. (NFPA):

- NFPA 13, Standard for the Installation of Sprinkler Systems
- NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- NFPA 70 National Electric Code
- NFPA 72, National Fire Alarm Code
- NFPA 80 Doors and Windows
- NFPA 101 Life Safety Code

## Building Codes (52.9101-4000 TM)

- American Institute of Steel Construction (AISC)
  - American Concrete Institute (ACI)
  - ICC 861 ICC International Building Code
  - ICC 863 ICC International Plumbing Code
  - ICC 865 ICC International Mechanical Code
  - ICC 871 ICC International Fuel Gas Code
  - Uniform Building Code (UBC)
  - Uniform Plumbing Code (UPC)
  - Uniform Mechanical Code (UMC)
- 
- OSHA General Industry Safety and Health Standards (29 CFR 1910), Publication V2206;
  - OSHA Construction Industry Standards (29 CFR 1926)

Federal Standard 795: Uniform Federal Accessibility Standards.

Americans with Disabilities Act (ADA).

Department of the Army, Corps of Engineers Manual (EM): EM 385-1-1  
Safety and Health Requirements Manual

## 1.5 GUIDE SPECIFICATIONS AND SOFTWARE

Download the Corps of Engineers Unified Facilities Guide Specifications (UFGS), the Fort Worth District Guide Specifications (UFSWF), and the Fort Worth District Supplements to the UFGS Guide Specifications from the Corps of Engineers and Fort Worth District's web sites. The guide specifications (UFGS and UFSWF) and the Fort Worth District's Supplements to the UFGS are in the Specsintact SGML format. The Supplements are in an instructional rather than the CSI 3-Part guide specification format and can be copied and pasted into the applicable guide specification.

a. The Corps of Engineers Specsintact software shall be downloaded from the Internet at the following address:

<http://specsintact.ksc.nasa.gov/software/software.htm>

b. The Corps of Engineers UFGS Guide Specifications can be downloaded from the Internet at the following address:

<http://64.239.96.52/docs/ufgshome/UFGSToc.htm>

c. The Lighting Fixture Standard Drawing 40-06-04 Details and Design Criteria (e.g. Unified Facilities Criteria, Army Technical Manuals (TM's), Engineering Manuals, Engineering Technical Letters, Engineer Circulars, Engineer Pamphlets, Design Guides, and Military Handbooks) can be downloaded from the Internet at the following address:

<http://www.hnd.usace.army.mil/techinfo/index.asp>

Specsintact software and the UFGS guide specifications can also be obtained from the current version of the Construction Criteria Base (CCB) CD issued by the National Institute of Building Sciences (NIBS), telephone number 202/289-7800, fax number 202-289-1092. The Internet address is:

<http://www.nibs.org>.

c. Fort Worth District Guide Specifications and the District Supplements to the UFGS guide specifications can be downloaded from the Internet at the following address:

<http://www.swf.usace.army.mil/eandc/ec-a/default.htm>

#### 1.5.1 List of Guide Specifications

Guide specifications that generally represent the type of maintenance and minor construction work that will be required by the task orders are those that pertain to the following work:

Division 2: Demolition, Removal And Salvage Of Historic Building Materials, Clearing And Grubbing, Earthwork, Excavation, Filling And Backfilling For Buildings And Utilities, Termiticide Treatment Measures For Subterranean Termite Control, Drilled Piers, Water Distribution System, Ground-Water Monitoring Wells, Sanitary Sewers, Gas Distribution System, Storm-Drainage System, Concrete And Asphalt Paving And Base Courses, Bituminous Tack And Prime Coats, Field Molded Sealants For Sealing Joints In Rigid Pavements, Pavement Markings, Concrete Sidewalks, Curbs And Gutters, Irrigation (Sprinkler) System, Fencing, Traffic And Handicap Parking Signs, Seeding, Establishment Of Turf, and Planting Of Trees, Shrubs, And Vines;

Divisions 3 and 4: Concrete, Formwork, Expansion Joints, Contraction Joints, And Waterstops, Concrete Reinforcement, Restoration Of Concrete In Historic Structures, Masonry, Nonbearing Masonry Veneer/Steel Stud Walls, Restoration And Cleaning Of Masonry In Historic Structures;

Division 5: Welding, Structural Steel, Steel Joists, Steel Decking, and Cold-Formed Steel Framing, Miscellaneous Metal;

Division 6: Carpentry, Custom Casework;

Division 7: Water Repellant Coating, Roofing Shingles, Metal

Siding, Structural Standing Seam Metal Roof (Sssmr) System, Built-Up Roofing, Elastomeric Roofing (Epdm), Sheet Metalwork, Roof Ventilators, Spray-Applied Fireproofing, Firestopping, And Joint Sealing;

Division 8: Steel Doors And Frames, Windows, Overhead Rolling Doors, And Builders' Hardware;

Division 9: Gypsum Wallboard, Ceramic Tile, Acoustical Ceilings, Resilient Flooring, And Paints And Coatings;

Division 10: Toilet Partitions, Wall And Corner Protection, Raised Floor Systems, Exterior And Interior Signage, And Toilet Accessories;

Division 12: Cabinets And Countertops, Window Treatment, And Furniture Systems;

Division 13: Cathodic Protection Systems, Standard Metal Building Systems, Metal Building Systems, Asbestos Abatement, Lead Hazard Control Activities, Removal and Disposal of Regulated Materials, Fire Detection And Alarm System, Fire Pumps, Fire Protection Sprinkler Systems, And Mass Notification Systems;

Division 14: Elevators, Cranes (Bridge & Gantry, Top Running), Monorails, And Overhead Electric Cranes;

Division 15: Identification Of Piping, Thermal Insulation For Mechanical Systems, Plumbing, Forced Hot Water Heating Systems Heating System, Gas-Fired Heaters, Air-Conditioning Systems, Air Supply, Distribution, Ventilation, And Exhaust Systems, Testing, Adjusting, And Balancing Of Hvac Systems, And Commissioning Of Hvac Systems;

Division 16: Diesel-Generator Sets, Aerial And Underground Electrical Distribution Systems, Electrical Work, And Communications Systems.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

# **Asbestos Project Requirements**

For all Projects at CCAD

Prepared By

Corpus Christi Army Depot

Department of Engineering Services

Facilities Engineering Management Division

July, 2003

# Memorandum for Asbestos Project Requirements

## **INTRODUCTION:**

The work covered by this memorandum includes Corpus Christi Army Depot's (CCAD) minimum requirements for Asbestos Building Material Surveys, Asbestos Air Monitoring, Asbestos Project Design, and Asbestos Removal Projects. In addition to the Contracting Officer Representative (COR) and or Project Manager, the CCAD Asbestos Program Manager (APM) shall be copied on all asbestos-related documentation including but not limited to survey reports, air monitoring reports, project work plans/designs, in-progress daily abatement reports, project meeting minutes and pre and post project submittals.

## **ASBESTOS BUILDING MATERIAL SURVEYS:**

1. Sampling activities undertaken to determine the presence of ACM shall be conducted by personnel who have successfully completed the EPA Model Accreditation (MAP) "Building Inspector" course required by 40 CFR 763, Subpart E, Appendix C. A Certified Industrial Hygienist (CIH) or TDH Asbestos Consultant shall sign the final Asbestos Survey Report.
2. The Asbestos Survey Report shall include:
  - a. Scope of Work detailing specific survey location and type of survey requested. Include agency/person who requested the survey, purpose of the survey (planned renovation/demolition, etc.) and other hazardous materials included in the survey. Include limitations of the survey (roofing excluded, inaccessible areas, etc.) and statement on previous asbestos survey data utilized.
  - b. Executive Summary detailing asbestos containing materials identified, quantity, location, condition of material, friability and OSHA/NESHAPS classification. Include date when fieldwork was conducted, personnel who conducted the survey including license numbers, total number of samples collected and laboratory utilized for analysis.
  - c. Include section on survey methodology and listing of non-ACM materials identified and sampled with material location.
  - d. Observations/Recommendations for handling and/or removal and specific notes for damaged ACM's or conditions that could potentially affect ACM's.
  - e. Appendices shall include laboratory sample analysis sheets (including QC samples), chain of custody, photographs of asbestos containing homogeneous materials, drawings depicting extent of asbestos containing materials and sample locations, inspectors license, asbestos consultant/CIH license and laboratory license/certifications (NVLAP, etc.).

f. A minimum of three samples of each homogeneous area shall be collected, except for Transite where one sample will be sufficient. Surfacing materials shall be sampled per AHERA protocols. Positive stop for homogeneous materials is acceptable.

## **ASBESTOS AIR MONITORING**

1. Air monitoring data reports shall include specific work area location, date collected, sample number, sample type (work area, clean room, etc.), specific sample description/location and drawing as necessary to accurately locate sample, sample pump number, pre and post calibration flow rates, rotometer number, filter lot number, cassettes (0.8 or 0.45, etc.), on/off times, total minutes of sample time, airborne fiber concentration, printed name and signature of person collecting sample, printed name and signature of person performing sample analysis, CIH review signature, date analyzed and microscope number.
2. Every effort shall be made to collect a minimum PCM sample volume of 3000 liters, exceptions would be personal and inside the work area samples.
3. Personal air samples shall include employees name, last four digits of the social security number or employee I.D. number, task being performed, excursion and 8 hour TWA samples.
4. Personal breathing zone samples shall be collected within a one foot radius of the head (i.e., attached to or near the collar or lapel near the workers face). Area air samples shall be collected from the breathing zone typically 5-6 feet in height.
5. Pre-abatement/background air monitoring shall be conducted one day prior to abatement activities to determine background concentrations before abatement work begins. At a minimum pre-abatement air samples shall be collected using NIOSH Method 7400 (PCM) at these locations: outside the building or outside the regulated area perimeter; inside the building or inside each regulated work area. A minimum of three pre-abatement samples shall be collected under normal building conditions. These PCM samples shall be analyzed within 24 hours and any fiber concentration greater than 0.01 f/cc shall be confirmed from that same filter using NIOSH Method 7402 (TEM).
6. Area air monitoring shall be at least once per shift at locations including; but not limited to; close to the work inside a regulated area; outside entrances to a regulated area; close to glovebag operations; representative locations outside of the perimeter of a regulated area; inside clean room; and at the exhaust discharge point of local exhaust system ducted to the outside of a containment.
7. If sampling outside the regulated area shows airborne fiber levels have exceeded background or 0.01 f/cc, whichever is greater, work shall be stopped immediately, and the COR, Project Manager and APM notified. The condition causing the increase shall be corrected. Work shall not restart until authorized by the COR.

8. Results of all air monitoring shall be made available to the COR, Project Manager and APM within 16 hours of sampling and results posted within the same time frame at the entrance to the regulated area and/or an adjacent location designated by the COR or Project Manager.
9. For PCM air clearance sampling using NIOSH Method 7400, the fiber concentration inside the abated regulated area for each airborne sample, shall be less than 0.01 f/cc. The abatement inside the regulated area is considered complete when every PCM final clearance sample is below the clearance limit. At a minimum three final clearance samples must be collected with a minimum sample volume of 3000 liters.
10. The abatement contractor is responsible for performing exposure assessment and personal air monitoring of abatement contractor's workers.
11. The final air monitoring report shall include a narrative on the scope of work including specific location of the project, materials and quantities removed, project duration, dates of removal, dates of clearance visual inspections/air clearance and approved changes to the scope of work. Project documentation shall include daily construction observation reports, air monitoring logs, certification of final visual inspection and air clearance, analyst/laboratory certifications, proof of analyst proficiency (PAT) and IH/Asbestos Consultant license.
12. Personnel employed by an AIHA certified laboratory will conduct all analysis of PCM/TEM air samples.

## **ASBESTOS PROJECT DESIGN**

1. The asbestos project design/specification shall be prepared and signed by a CIH or TDH Asbestos Consultant. The design shall be project specific and include a scope of work detailing all ACM to be removed with its location, quantity and OSHA/NESHAP classification. Drawings shall denote the extent and type of ACM to be removed and depict the limits of asbestos abatement control areas. Provide sufficient detail for the Contractor to submit an accurate bid (ex. pipe diameter, elevated work, substrate beneath ACM, etc.). Provide detailed work procedures for specific project task items (floor tile, boiler insulation, etc.) including the abatement control method and engineering controls to be utilized (full containment, glovebag, etc.). The designer shall list the federal, state, regional or local laws, regulations and statutes, by authority and document number, which apply to the asbestos work to be performed.
2. In a design/build project where the contractor retains the CIH/TDH Asbestos Consultant to prepare design documents, the contractor shall submit all required items under Asbestos Abatement Plan as part of the design submittal. See ASBESTOS REMOVAL, Item 3b.
3. The designer will not specify the use of any replacement material that contains asbestos. See ASBESTOS AIR MONITORING and ASBESTOS REMOVAL sections as applicable.

## **ASBESTOS REMOVAL**

1. Throughout the duration of the contract work the safety of the Contractor's employees, Government employees, Government contract employees, subcontractors, and the public is the sole responsibility of the Contractor. On-site quality control is the responsibility of the Contractor. Quality control for asbestos abatement operations includes, but is not limited to, observation regarding: integrity of the asbestos control barrier; decontamination facilities and protective coverings; worker protection programs; the air monitoring program; performance of abatement measures including work area preparation and isolation; removal; encapsulation; patching; disposal; and conformance with Federal, State and local regulations.

If the Contractor's Quality Control Program becomes ineffective and the COR, Project Manager or COR's designated representative determines that practices are in violation of the applicable regulations, or endangering workers or facility occupants, work shall be stopped immediately until corrective action is taken. Work shall not restart until authorized by the COR. Any costs resulting from such a stop work order issued by the COR will be borne by the Contractor and will not be a basis for an increase in the contract amount.

2. Contractor must submit a 10-day Demolition/Renovation Notification to the Texas Department of Health (TDH) before the start of any construction activity dealing with renovation and/or demolition. Construction activity involving the removal, renovation, demolition or possible disturbance of asbestos-containing materials must be performed by a TDH Licensed Asbestos Abatement Contractor. In completing the notification form provide project specific information under the section "Description of Facility Name" to include; building number, shop name and CCAD Facilities Project number.

3. A detailed project specific pre-job submittal must be presented to the Contracting Officer's Representative (COR) and Project Manager for **approval** by CCAD's Facilities Engineering Management Division and Safety and Environmental Division ten (10) days before any onsite activity begins. At a minimum it must contain the following general requirements:

a. Copy of 10 day Demolition/Renovation Notification to the TDH.

b. Asbestos Abatement Plan – Submit a detailed plan of the work procedures to be used for asbestos abatement. Such plan shall include; description and location of asbestos regulated areas including clean and dirty areas, decontamination unit and local exhaust equipment, sequencing of asbestos related work and schedule, abatement method to include containment and control procedures, personal protective equipment to be used, initial exposure assessment in accordance with 29 CFR 1926.1101, level of supervision, method of notification of other employers or subcontractors at the work site, interface of trades involved in the construction, fire and medical response procedures, security procedures to be used for all regulated areas, plan for storage and disposal procedures, type of wetting agent and asbestos encapsulant to be used, air monitoring methods, and detailed description of the method to be employed in order to control the spread of ACM wastes and airborne fiber concentrations. Provide drawings as necessary to depict locations of items above.

c. Manufacturers catalog data for all materials and equipment to be used in the work.

- d. Manufacturers certification that vacuum, ventilation, and other equipment required to contain airborne asbestos fibers conform to ANZI Z9.2
- e. A Respiratory Protection Program which conforms to the requirements of 29 CFR 1910.134(b) and ANZI Z88.2
- f. Qualification and documentation of the competent person for the project.
- g. Copy of TDH and or EPA licenses, registrations and accreditation certificates, for the contractor(s) and personnel as applicable.
- h. Medical surveillance records, current respirator fit tests and certification of Workers Acknowledgement for proposed project personnel.
- i. Professional training certifications and licenses for project personnel and supervision.
- j. Name, address and certification of waste disposal site and waste transporter license.
- k. Asbestos sampling reports taken as part of the pre-construction survey.
- l. Proposed air monitoring locations, techniques and procedures.
- m. Safety and Health Program
- n. MSDS for all chemicals to be used onsite.
- o. Information on all building materials to be installed and/or replacement parts to be used including:
  - (1) Required MSDS showing that the materials or replacement parts contain 1% or less of asbestos; or
  - (2) If materials and/or replacement parts contain more than 1.0 % asbestos, documentation must be provided that no alternative non-asbestos materials/parts are available.
  - (3) An MSDS shall be provided for the following building materials and/or replacement parts proposed for the project:

Surfacing materials:

- (a) acoustical plaster;
- (b) decorative plaster/stucco;
- (c) textured paint/coating;

- (d) spray applied insulation;
- (e) blown-in insulation;
- (f) fireproofing insulation;
- (g) joint compound; and
- (h) spackling compounds.

Thermal system insulation:

- (a) taping compounds (thermal);
- (b) HVAC duct insulation; including mastics and adhesives
- (c) boiler insulation;
- (d) breaching insulation;
- (e) pipe insulation; and
- (f) thermal paper products.

Miscellaneous material:

- (a) cement pipes;
- (b) cement wallboard/siding;
- (c) asphalt/vinyl floor tile;
- (d) vinyl sheet flooring/vinyl wall coverings;
- (e) floor backing;
- (f) construction mastic; including weatherproofing materials
- (g) ceiling tiles/lay-in ceiling panels;
- (h) packing materials;
- (i) high temperature gaskets;
- (j) laboratory hoods/table tops;
- (k) fire blankets/curtains;

- (l) elevator equipment panels;
- (m) elevator brake shoes;
- (n) ductwork flexible fabric connections;
- (o) cooling tower;
- (p) heating and electrical ducts;
- (q) electrical panel partitions;
- (r) electrical cloth/electrical wiring insulation; fire stop compounds
- (s) chalkboards;
- (t) roofing shingles/tiles;
- (u) roofing felt;
- (v) base flashing;
- (w) fire doors;
- (x) caulking/putties;
- (y) adhesives/mastics; and
- (z) wallboard.

o. Qualification and documentation of the CIH or TDH Asbestos Consultant selected to prepare the Contractors Asbestos Abatement Plan, prepare and perform training, direct air monitoring and assist the Contractors Competent Person in implementing and ensuring that health and safety requirements are complied with during the performance of all required work.

p. Certifications of the testing laboratory selected for the analysis of airborne samples along with certification that persons analyzing the samples are proficient in the NIOSH Proficiency Analytical Testing (PAT) Program and the laboratory is AIHA accredited.

4. A detailed post-job submittal must be presented to the COR for approval by CCAD's Facilities Engineering Management Division and Safety and Environmental Division. At a minimum it must contain the following:

a. A narrative on the scope of work including specific location of the project, materials and quantities removed, project duration, dates of removal, dates of visual clearance/air clearance and approved changes to the scope of work.

b. Competent person daily construction reports

c. Records of negative pressure differential readings.

d. Waste Manifests

e. MSDS sheets for building materials and/or replacement parts utilized on the project.

f. Training, respiratory and medical documentation for all personnel on the project.

g. Daily sign-in sheets

h. Containment sign-in sheets

i. Record of safety meetings

j. Air monitoring logs, laboratory sheets, lab certifications.

5. Required Daily Reports:

a. Daily reports will be provided to the Project Manager and COR of all activities including, but not limited to, contractor daily field reports, consultant reports including air sampling and negative pressure reading reports, man hour utilization reports, any shipping documentation, copies of training certificates and TDH/EPA licenses of new employees before they commence working with ACM, and any TDH notification form amendments ready for signature by the COR.

b. At the conclusion of the ACM phase of the project, the final air clearance sampling report.

6. Refer to ASBESTOS AIR MONITORING and ASBESTOS DESIGN sections for applicable requirements.

7. The Containment-area ventilation will be provided by local exhaust units with HEPA filtration, and in sufficient number to maintain a minimum pressure differential of minus 0.02 inches of water column relative to adjacent unsealed areas. The units shall provide a minimum of four containment air changes per hour and be operated continuously for the duration of the project. Pressure differential shall be monitored continuously, 24 hours per day, with a digital recordable manometric instrument. The COR and Project Manager shall be notified immediately if the pressure differential falls below the prescribed minimum. The local exhaust system shall terminate outside the building away from any building air intakes unless impractical and an alternate arrangement is allowed by the COR.

**THERE SHALL BE NO VISABLE EMISSIONS FROM THE WORK AREA.**

8. All work shall be accomplished using the most recent editions of the EPA, TDH and the United States Department of Labor, 40 CFR 763, 29 CFR 1926.1101, and 29 CFR 1910 Requirements.
9. The contractor will provide a pre-removal inspection report of the containment and decontamination unit prior to proceeding with removal, a visual clearance inspection report of the work area prior to running clearance samples, and clearance sample results for each containment. The contractor supervisor (competent person) and the Asbestos Air Monitor/Project Manager will sign the form to attest their completion of the inspections.
10. All direct and indirect waste disposal costs shall be borne by the contractor. This shall include at a minimum:
  - a. Waste analysis reports
  - b. Waste hauling costs
  - c. Waste container rental costs or purchases.
  - d. Container decontamination costs.

All waste shall be manifested through the Environmental Support Branch of CCAD and the Environmental Division of the Navy Public Works Office, POC: *Ross Ybarra*, EXT: 1-3776

11. For any previously untested building components suspected to contain asbestos and located in areas impacted by the work, the Contractor shall notify the COR and Project Manager. The COR will direct sampling as required to determine asbestos content. Any additional components identified as ACM that have been approved by the COR for removal shall be removed by the Contractor and will be paid for by an equitable adjustment to the contract.

**THE CCAD PROJECT MANAGER or COR SHALL DO THE FOLLOWING:**

1. The Project Manager shall provide, as necessary, the contractor with a copy of the CCAD Asbestos Survey results for the applicable project area, dated December 2001 with all amendments.
2. The Project Manager shall conduct a pre-construction meeting with the following personnel:
  - a. A representative from the CCAD Environmental Litigation Office.
  - b. A representative of the CCAD Environmental & Safety Division.
  - c. The site supervisor of the Abatement Contractor.
  - d. The supervisor (competent person) of the abatement project area.
  - e. All of the supervisors adjacent to the abatement project.

- f. A representative of the affected directorate.
- g. The COR for the project.

Detailed minutes shall be kept as well as a roster of those attending. The minutes and the roster will be kept in the project files and copies will be furnished to all attendees.

- 3. The Project Manager shall conduct a pre-abatement notification meeting with the supervisors, affected bargaining unit representative and CCAD work force located in and adjacent to the project area. The Project Manager shall prepare a sign in sheet to be signed by the attendees.
- 4. The Project Manager shall post or distribute the air sampling results to each CCAD supervisor that is affected by the project.
- 5. The Project Manager shall maintain a copy of all records until the completion of the project.
- 6. All records generated from the project shall be maintained by the Environmental Litigation Office and the Facilities Engineering Management Division until further notice or otherwise directed by Federal law, or statute.

# **Lead Abatement Project Requirements for Licensed Lead Contractors**

Prepared By

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Department of Engineering Services

Facilities Engineering Management Division

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## **LEAD REMOVAL**

1. Throughout the duration of the contract work the safety of the Contractor's employees, Government employees, Government contract employees, subcontractors, and the public is the sole responsibility of the Contractor. On-site quality control is the responsibility of the Contractor. Quality control for lead abatement operations includes, but is not limited to, observation regarding: integrity of the lead control barrier; decontamination facilities and protective coverings; worker protection programs; the air monitoring program; performance of abatement measures including work area preparation and isolation; removal; encapsulation; patching; disposal; and conformance with Federal, State and local regulations.

If the Contractor's Quality Control Program becomes ineffective and the COR, Project Manager or COR's designated representative determines that practices are in violation of the applicable regulations, or endangering workers or facility occupants, work shall be stopped immediately until corrective action is taken. Work shall not restart until authorized by the COR. Any costs resulting from such a stop work order issued by the COR will be borne by the Contractor and will not be a basis for an increase in the contract amount.

## **LEAD PRE-ABATE MENT SUBMITTAL REQUIREMENTS**

1. A detailed project specific pre-job submittal must be presented to the Contracting Officer's Representative (COR) and Project Manager for **approval** by CCAD's Facilities Engineering Management Division and Safety and Environmental Division ten (10) days before any onsite activity begins. At a minimum it must contain the following general requirements:

a. Lead Abatement Plan – Submit a detailed plan of the work procedures to be used for lead abatement. Such plan shall include; description and location of lead regulated areas including clean and dirty areas, decontamination unit and local exhaust equipment, sequencing of lead related work and schedule, abatement method to include containment and control procedures, personal protective equipment to be used, initial exposure assessment in accordance with 29 CFR 1926.62, level of supervision, method of notification of other employers or subcontractors at the work site, interface of trades involved in the construction, fire and medical response procedures, security procedures to be used for all regulated areas, plan for storage and disposal procedures, air, surface, and bulk waste monitoring methods, and detailed description of the method to be employed in order to control the spread of lead wastes and airborne lead concentrations. Provide drawings as necessary to depict locations of items above.

b. Manufacturers catalog data and manufactures certification for all materials and equipment to be used in the work.

c. A Respiratory Protection Program which conforms to the requirements of 29 CFR 1910.134(b) and 29 CFR 1926.62.

- d. Copy of TDH and or EPA licenses, registrations and accreditation certificates, for the contractor(s) and personnel as applicable.
- e. Medical surveillance records, current respirator fit tests and certification of Workers Acknowledgement for proposed project personnel.
- f. Name, address and certification of waste disposal site and waste transporter license.
- g. Lead sampling reports taken as part of the pre-construction survey.
- h. Proposed air, surface, and bulk waste monitoring locations, techniques and procedures.
- i. Safety and Health Program
- j. MSDS for all chemicals to be used onsite.
- o. Information on all building materials to be installed and/or replacement parts to be used.
- p. Certifications of the testing laboratory selected for the analysis of lead air, lead surface, and lead bulk waste samples shall participate in National Lead Laboratory Voluntary Accreditation Program (NLLVAP) and shall be American Industrial Hygiene Accreditation (AIHA) accredited.

#### **REQUIRED DAILY REPORTS**

1. Daily reports shall be provided to the Project Manager and COR of all activities including, but not limited to, contractor daily field reports, containment log and visitor log, consultant reports including sampling activities, man hour utilization reports, any shipping documentation, and copies of applicable training certificates and licenses of new employees before they commence working with lead.

#### **LEAD POST-ABATEMENT SUBMITTAL REQUIREMENTS**

1. A detailed post-job submittal must be presented to the COR for approval by CCAD's Facilities Engineering Management Division and Safety and Environmental Division. At a minimum it must contain the following:
  - a. A narrative on the scope of work including specific location of the project, materials and quantities removed, project duration, dates of removal, dates of visual clearance, wipe clearance and approved changes to the scope of work.
  - b. Waste Manifests (All waste shall be manifested through the Environmental Support Branch of CCAD and the Environmental Division of the Navy Public Works Office, POC: *Ross Ybarra*, EXT: 1-3776)
  - c. MSDS sheets for building materials and/or replacement parts utilized on the project.

- d. Training, respiratory and medical documentation for all personnel on the project.
- e. Contractor daily reports, visitor log, containment sign-in sheet.
- f. Record of daily tailgate safety meetings
- j. Air, wipe, bulk waste sampling log with results, laboratory sheets, and lab certifications.

## **OTHER REQUIREMENTS**

1. For any previously untested building components suspected to contain lead and located in areas impacted by the work, the Contractor shall notify the COR and Project Manager. The COR will direct sampling as required to determine lead content. Any additional components identified as ACM that have been approved by the COR for removal shall be removed by the Contractor and will be paid for by an equitable adjustment to the contract.