

DEPARTMENT OF THE ARMY
Omaha District, Corps of Engineers
106 South 15th Street
Omaha, Nebraska 68102-1618

:NOTICE: Failure to acknowledge : Solicitation No. DACA45 02 R 0012
:all amendments may cause rejec- :
:tion of the offer. See FAR : Date of Issue: 26 MAR 2002
:52.215-1 of Section 00100 : **Date of Receiving Proposals:**
02 APR 2002

Amendment No. 0002
21 March 2002

SUBJECT: Amendment No. 0002 to Request for Proposal Solicitation Package for Design and Construction of CONTROL TOWER, US AIR FORCE ACADEMY, CO. Solicitation No. DACA45 02 R 0012.

TO: Prospective Offerors and Others Concerned

1. The specifications and drawings for subject project are hereby modified as follows (revise all specification indices, attachment lists, and drawing indices accordingly).

a. Specifications. (Descriptive Changes.)

- (1) Section 01002, Page 10, paragraph 1.6.3 List of Plantings, under "Minimum size" add "21 Liter" above "Container".
- (2) Section 01002, Page 11, paragraph 1.6.4.2, delete contents of last sentence and substitute the following: "Sizes shall range from 0.3 to 0.75 meters high and 0.45 to 1.2 meters long."
- (3) Section 01003 Page 4, Paragraph 1.1, delete contents of second to the last sentence and substitute "This facility shall have a sprinkler system which protects the entire building".
- (4) Section 01003, Page 6, paragraph 1.2.2.7, delete "Academy Facilities Excellence Plan" and substitute "Not Used".
- (5) Section 01003 Page 6, paragraph 1.2.2.9, delete "USAF Academy Control Tower Charrette Minutes" and substitute "Not Used"
- (6) Section 01003 Page 7, paragraph 1.5.2, line 5, delete contents of third sentence and substitute: "Exterior walls shall have a maximum U-Value of .07 based on aged insulation values for the entire exterior wall construction".
- (7) Section 01003 Page 7, paragraph 1.5.2, delete second sentence: "The exterior skin of...Sail Plane Hanger."
- (8) Section 01003 Page 11, paragraph 1.7.3, third paragraph, 1st line, delete "3 mm" and substitute "6 mm".

- (9) Section 01003, Page 13, paragraph 1.7.6.4, second sentence add the following after "...panic hardware devices" add ", with the exception Electrical Room #106, Generator Room #108, and Mechanical Room #115, which shall have standard locksets".
- (10) Section 01003, Page 17, paragraph 1.7.17.1, 5th line in fourth sentence, after "...tinted" add "blue/ green".
- (11) Section 01004 Page 6, Interior Design Requirements, paragraph 1.3.6 Ceramic Tile, after last line add "Lobby and entry walls shall not be ceramic tile as directed in AFA Interior Guidelines."
- (12) Section 01004 Page 6, Interior Design Requirements, paragraph 1.3.8 Terrazo Tile, after last line add the following: "Terrazzo shall not be poured-in-place as directed in AFA Interior Guidelines."
- (13) Section 01006, Page 8, middle of page, after:

"Security Engineering:

Provide means to secure (open and/or closed) exterior gas and water main(s) valves with padlocks."

Add a new heading and contents as follows:

"Anti-terrorism & Force Protection:

As applicable, the following shall be provided for all new mechanical systems:

- a. **Air intakes.** Air intakes to heating, ventilation, and air conditioning (HVAC) systems that are designed to move air throughout a building that are at ground level provide an opportunity for aggressors to easily place contaminants that could be drawn into the building.
 - 1) **New buildings.** For all new buildings covered by this document locate all air intakes at least 3 meters (10-ft) above the ground.
- b. **Emergency air distribution shutoff.** For all new buildings provide an emergency shutoff switch in the HVAC control system that can immediately shut down air distribution throughout the building. The switch (or switches) must be located to be easily accessible by building occupants. Providing such a capability will allow building occupants to limit the distribution of airborne contaminants that may be introduced into the building.
- c. **Utility distribution and installation.** Utility systems can suffer significant damage when subjected to the shock of an explosion. Some of these utilities may be critical to safely evacuating personnel from the building or their destruction could cause damage that is disproportionate to other building damage resulting from

an explosion. To minimize the possibility of the above hazards apply the following measures:

- 1) **Utility routing.** For all new buildings route critical or fragile utilities such that they are not on exterior walls.
- d. **Equipment bracing.** Mount all overhead utilities and other fixtures to minimize the likelihood that they will fall and injure building occupants. Design all equipment mountings to resist forces of 0.5 times the equipment weight in any direction and 1.5 times the equipment weight in the downward direction. This standard does not preclude the need to design equipment mountings for forces required by other criteria such as seismic standards.
- e. **Under building access.** To limit opportunities for aggressors placing explosives underneath buildings, ensure that access to crawl spaces, utility tunnels, and other means of under building access is controlled.
- f. **Mass notification.** All buildings must have a timely means to notify occupants of threats and instruct them what to do in response to those threats.
 - 1) **New buildings.** All new buildings must have a capability to provide real-time information to building occupants or personnel in the immediate vicinity of the building during emergency situations. The information relayed must be specific enough to discriminate appropriate response actions. Any system, procedure, or combination thereof that provides this capability will be acceptable under this standard."

(14) Section 01006, Page 13, add the following to paragraph 1.5:

"Piping, ductwork, and equipment shall be seismically restrained in accordance with TI 809-04, Chapter 10-3. The Guideline is based on Chapter 6 FEMA 302 and National Earthquake Hazard Reduction Program (NEHRP). Accordingly, contractor bracing may be provided by vendors, which are in compliance with these guidelines. Restraints for mechanical bracing shall be similar to the figures 10-12 and 10-13 in the TI-809-04, Chapter 10."

(15) Section 01006, Page 13, delete paragraphs 1.5.1 and 1.5.2 in entirety.

(16) Section 01006, Page 25, paragraph 1.11.5, last line, delete "30% full cooling airflow rate" and substitute "75% of full flow cooling airflow rate"

(17) Section 01006, Page 27, paragraph 1.12, delete last sentence: "HCFC-22 is not allowed."

- (18) Section 01007, Page 7, paragraph 1.1.8, delete the first sentence "All exterior electrical...be factory painted brown." and substitute "All exterior electrical equipment such as the service transformers and pad-mounted switch shall be factory painted brown."
- (19) Section 01007, Page 8, paragraph 1.1.9.2 add the following sentence to the end of the paragraph: "Remove transformer per paragraph 1.1.9."
- (20) Section 01007, Page 9, paragraph 1.3.1. Add the following sentence to the end of the paragraph: "Provide a new transformer for the facility."
- (21) Section 01007 Page 9, paragraph 1.3.3, after the third sentence "There are two incoming power feeds at manhole FL-7 (old number is AF-7)." add the following: "The existing feeds consist of #4/0 15kV cables. All power outages shall be approved in writing 14 days in advance."
- (22) Section 01007, Page 16, paragraph 1.9.

Delete the first sentence:

"The interior secondary distribution voltage within the building shall be 480Y/277 volt, 3-phase, 4-wire for lighting and large loads and 208/120 volt, 3-phase, 4-wire for receptacles and smaller loads."

and substitute:

"The interior secondary distribution voltage within the building shall be 480Y/277 volt, 3-phase, 4-wire for lighting and large loads and 208/120 volt, 3-phase, 4-wire for receptacles, incandescent lighting and smaller loads. Loads required by NFPA and other design guidance shall have the required voltage."

- (23) Section 01007, Page 25, paragraph 1.11, delete the third sentence "See approximate routing on photo overlay in Attachment 2C." and substitute "See approximate routing on photo overlay in Attachment 2C (note that the green lines represent the approximate routing of the existing manhole/duct bank system while the red routing is the proposed new routing of the system)."
- (24) Page 01007-29, delete contents of paragraph 1.12.7 and substitute the following:

"Antenna Poles

GATR Site. Install two (2) 30 m (100 ft) poles (mono-poles) to replace removed antenna poles. New poles shall have climbing provisions, obstruction light(s) and lightning protection. Two known acceptable manufactures include Rohn Industries, Inc. (Contact Scott Wenk, 714-734-0987) and Glen Martin Engineering, Inc. (Tatum Martin, 660-882-2734). The poles shall be made of steel and free standing. Antennas to be placed on the poles shall be provided and installed by others. All requirements for the poles and associated equipment shall be coordinated with the USAF Academy 10th Communication Squadron. The poles shall be painted dark green, Pittsburgh Paints Copper Verde 7429 or approved equal. The north antenna pole shall be #10014 Antenna SPT STRU and the south antenna pole shall be #10015 Antenna SPT STRU. The poles shall be located a maximum of 12.1 meters (39.6 ft) from the GATR Building. Coordinate this requirement with the foundation requirement for the tower. The top of one of the antenna poles (transmitter) shall have a platform with guard rail that is 4267 mm (14 feet) square. The top of the other antenna pole (receiver) shall have a platform with guard rail that is 3660 mm (12 feet) square. Cables (provided by others) are to be pulled up inside the antenna tower. Provide tower with climbing provisions. Tower shall meet the requirements of ANSI EIA/TIA 222-F. Tower shall be grounded in accordance with NFPA 780 and the antenna tower manufacturer recommendation."

- (25) Section 01007, Page 30, Paragraph 1.13, delete the following sentences starting from the 5th line:

"The public address system shall have all conduit, junction boxes, and Category-5 shielded pair plenum wiring (24 AWG) for speakers, Category 5 110 blocks, speakers, grilles, amplifiers, etc. for a complete and usable public address system in accordance with the guidance herein and with the requirements given in UFGS 16770. The speaker cables shall terminate on cabinet-mounted 110 blocks located in Telephone Equipment Room 122. The quantity shall be coordinated with the number of cables required. Each speaker cable shall terminate on its own terminal at the 110 blocks."

and substitute:

"The public address system shall have all conduit, junction boxes, and shielded pair plenum wiring (18 AWG) for speakers, speakers, grilles, amplifiers, etc. for a complete and usable public address system in accordance with the guidance herein and with the requirements given in UFGS 16770. The speaker cables shall terminate on appropriate terminal equipment located in Telephone Equipment Room 122. The quantity shall be coordinated with the number of cables required. Each speaker cable shall terminate on its own terminal."

- (26) Section 01007, Page 36, paragraph 1.20, third sentence, delete "air terminals 457.2 mm (18")" and substitute "air

terminals 457.2 mm (18") minimum".

- (27) Section 01008, Page 5, add the following at the end of the paragraph:

"Note: The pressures and flow are provided in Section 01002. Depending on design of the sprinkler system a fire pump might be required. This shall be taken into account in the design of the sprinkler system and if a fire pump is required, it shall be provided under this contract."

- (28) Section 01008, Page 7, paragraph 1.2.7.5. Delete the first sentence "Provide duct detectors, manual...notifications appliances, etc.." and substitute: "Provide duct detectors, manual pull stations, flow switches, tamper switches, notifications appliances, pressure switches, compressor(s), etc. as required in NFPA and this section."

- (29) Attachment #3C Specification Section 15951, Page 3, paragraph 1.2:

delete:

"The direct digital control (DDC) shall be a complete system suitable for the heating, ventilating and air-conditioning (HVAC) system and energy management and control system (EMCS) provided by Staefa Control System, Inc (SCS). Staefa Control System, Inc. is the only acceptable manufacturer for DDC Controllers, automatic control valves, damper and valve operators, temperature and velocity instruments and data communication equipment. All other materials and equipment may be furnished by other manufacturers but shall be specifically approved by (SCS) through the Contracting Officer for use on this project and for the intended application on this project. Notwithstanding Section 00700 Contract Clauses FAR 52.236-5, Material and Workmanship, DDC system shall be manufactured by Staefa Control System, Inc. in order that the DDC system is compatible with the existing EMCS. No other product will be acceptable. The Competition Advocate authorizes sole source procurement."

substitute:

The direct digital control (DDC) shall be a complete system suitable for the heating, ventilating and air-conditioning (HVAC) system and energy management and control system (EMCS) provided by Siemens Controls APOGEE EMCS. Siemens Controls APOGEE EMCS is the only acceptable manufacturer for DDC Controllers, automatic control valves, damper and valve operators, temperature and velocity instruments and data communication equipment. All other materials and equipment may be furnished by other manufacturers but shall be specifically approved by Siemens through the Contracting Officer for use on this project and for the intended application on this project. Notwithstanding Section 00700 Contract Clauses FAR 52.236-5, Material and Workmanship, DDC

system shall be manufactured by Siemens Controls in order that the DDC system is compatible with the existing EMCS. No other product will be acceptable. The Competition Advocate authorizes sole source procurement.

- (30) Attachment #4 CID Furniture Requirements, Page 2, Rm 114 Open Office, delete "***SAME AS WS1?***".
- (31) Attachment #4 CID Furniture Requirements, Page 3, Rm 126 Cadet Flight Commander, after "Computer Testing Workstations", delete "(with P/B/F Pedestal and Overhead Storage)" and substitute ", consists of:1524mm x 762mm (60" x 30") worksurface, Privacy Panels, P/B/F Pedestal, and Overhead Storage)"
- (32) Attachment #4 CID Furniture Requirements, Page 3, Rm 133 Break Room, before "TV (wall mount)" insert "533mm (21)"

b. Drawings (Not Reissued). The following drawing is revised as indicated below with latest revision date of 21 March 2002. This drawing is not reissued with this amendment.

- (1) Drawing A1.2, Intermediate Level Floor Plan, delete "LANDING (EL 14952)".

2. This amendment is a part of the proposing papers and its receipt shall be acknowledged on the Standard Form 1442. All other conditions and requirements of the request for proposal remain unchanged. If the proposals have been mailed prior to receiving this amendment, you will notify the office where proposals are received, in the specified manner, immediately of its receipt and of any changes in your proposal occasioned thereby.

a. Hand-Carried Proposals shall be delivered to the U.S. Army Corps of Engineers, Omaha District, Contracting Division (Room 301), 106 South 15th Street, Omaha, Nebraska 68102-1618.

b. Mailed Proposals shall be addressed as noted in Item 8 on Page 00010-1 of Standard Form 1442.

3. Offers will be received until 2:00 p.m., local time at place of receiving proposals, 02 APR 2002.

U.S. Army Engineer District, Omaha
Corps of Engineers
106 South 15th Street
Omaha, Nebraska 68102-1618

21 March 2002
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