

ATTACHMENT A
IFB 239: 7-0008 (RE-BID #3)

SPECIFICATIONS FOR A FILE SERVER, WORKSTATIONS AND LOCAL AREA NETWORK
FRONTIER CULTURE MUSEUM OF VIRGINIA

I. SCOPE OF WORK

This work shall consist of providing all materials, labor, supervision, tools, equipment and incidentals necessary to furnish, install, setup and render operational a Novell Local Area Network, Pentium Computers and File Server System for the Frontier Culture Museum of Virginia, Staunton, Va. 24402. All equipment, materials and installation work shall comply with this Specification, Virginia OSHA Standards, attached floor/building plans, attached Council on Information Management COV ITRM standard 96-1 and the Virginia Uniform Statewide Building Codes.

II. MATERIAL REQUIREMENTS

The following specifications are intended to define the level of quality and performance of the requested work and not to be restrictive by manufacturer, brand, method of configuring a system, and method of accomplishing required functions, unless otherwise indicated. The word "**shall**" indicates a mandatory requirement. **Bidders : 1) Annotate and return these specification pages to indicate compliance 2) Provide pertinent technical data documenting compliance/equivalence with dimensions, quality, features, functions and performance.** All figures are minimums unless stated otherwise. The Commonwealth reserves the right to obtain technical data, to request clarifications and to set time limits for response, when deemed necessary. **Failure on the part of the Bidder to provide the aforementioned documentation may be cause to declare the bid non-responsive.** The offered equipment **shall** provide the following or approved equal dimensions, quality, features, functions and performance.

SPECIFICATIONS

OFFERED PRODUCT SPECIFICATIONS

STATE MFR. & MODEL NO. _____

A. GENERAL REQUIREMENTS:

- 1. The Contractor **shall** replace the existing file server's and workstations' **CPUs** (this includes the case with all internal components only), **keyboards** and **mice**, in the Educational and Research Bldg., Admin. Bldg. and Visitor's Center, with computer components specified in Section D., Item 1. excluding m. (monitor requirements) and Section E. Items 1 to 6.

IFB 239:7-0008 (Re-bid #3)

- 3. The LAN **shall** be connected to the existing LAN located in the Educational and Research building by a Fiber Backbone encased in a protective, waterproof conduit. The trench will be provided by the Agency. _____
- 4. (DELETED) _____
- 5. Data cabling **shall** be UTP, plenum grade level 5, 24awg and **shall** be terminated at the workstations with RJ-45 connectors. _____
- 6. All RJ-45 patch panels, brackets, wall outlets and patch cords **shall** be provided. _____
- 7. Switched port 10/100Base-TX HUB(s) with auto negotiation **shall** be provided and installed. _____
- 8. HUB(s) **shall** be IEEE 802.3, SNMP, and MIB II compliant. _____
- 9. All connectors, cables and other miscellaneous items **shall** be provided to ensure proper LAN configuration and installation. _____
- 10. Attachments #9 through #11 depicts one possible topology solution. _____

C. **SERVER REQUIREMENTS:**

- 1. The File Server **shall** be Novell certified and capable of handling a minimum of 40 nodes. _____
- 2. The File Server **shall** have the capability to automatically restart in case of trouble. _____
- 3. Server **shall** be capable of unattended backup. _____

shall be provided and installed to provide power protection to the Network Server, monitor and HUB.

2. The UPS system **shall** be Novell certified.

3. The UPS system **shall** have automatic unattended shutdown of any network operating system.

4. The UPS system **shall** have the following minimum LED indicators:

- a. Low Battery
- b. UPS overload

5. The UPS system **shall** comply with ANSI/IEEE 587 category A & B tests.

6. Power management software for Novell, **shall** be provided and installed that monitors the power and broadcasts early warning messages.

G. FLOOR MODEL SURGE PROTECTOR REQUIREMENTS:

1. The Suppressor **shall** be UL 1449 and 1283 or equivalently certified.

2. The Suppressor **shall** comply with ANSI/IEEE 587 category A tests.

3. Nominal line voltage **shall** be 120VAC, 50/60Hz.

4. Surge response time **shall** be less than 1 nano second.

5. Suppressor **shall** have a "Circuitry Working" indicator.

6. Suppressor **shall** provide RFI/EMI noise filtering.

7. Suppressor **shall** have a master on/off

IFB 239:7-0008 (Re-bid #3)

switch.

- 8. Suppressor **shall** have a minimum of six NEMA 5-15R receptacles.
- 9. A surge protector **shall** be supplied for each offered workstation. **(13 each)**
- 10. Surge protectors **shall** be provided with a lifetime warranty.

H. **LASER PRINTER REQUIREMENTS:**

- 1. Four(4) HP LaserJet 5N printers, or approved equals, **shall** be provided and connected to the LAN with one printer being supplied with a duplex assembly.
- 2. All printers **shall** be Energy Star compliant.
- 3. All printers **shall** be supplied with an additional toner cartridge.

I. **SOFTWARE REQUIREMENTS:**

- 1. The Contractor **shall** provide and install management/utility software that reports hardware failures and supplies performance and trouble-shooting tools for the File Server.
- 2. The Contractor **shall** provide and install the software kit to upgrade the current Novell 3.12 license (25 users) to Novell IntranetWare w/Netscape Navigator for 50 users.
- 3. The following Windows 95 version software **shall** be pre-installed on and supplied with all workstations and the file server if applicable:

- a. Novell GroupWise 5.1 or latest version with SMTP/MIME Gateway (NLM, OS/2) that enables GroupWise users to connect to SMTP-based systems using the TCP/IP protocol suite and GroupWise 4.1 Message Server. **(25 User)**
- b. MS OfficePro 97 Upgrade **(25 User)**
- c. AntiVirus software **(25 User)**

- 4. Windows 95 operating system **shall** be supplied and pre-installed on each 13 offered and Eleven (11) existing workstations with CPU replacements.
- 5. Contractor **shall** supply all necessary software on 3.5" diskettes or CD-ROM.
- 6. All software and/or drivers **shall** be supplied and installed for all appropriate components and systems to ensure that a fully functional/operational LAN system is provided.

J. SET-UP/ INTEGRATION/ UPGRADE REQUIREMENTS:

- 1. All offered equipment: workstations, printers, file server, etc. **shall** be set-up and configured for immediate use with all software, drivers, icons, etc.
- 2. The offered Anti-Virus software **shall** be installed and set-up for automatic virus protection on all workstations and the file server.
- 3. All software **shall** be setup on each workstation for complete functionality. This **shall** include any necessary file migrations from the replaced CPU's.
- 4. All LAN and workstation addresses, Id's, etc. **shall** be setup and appropriately configured ensuring proper LAN operation.

5. The Contractor **shall** remove and replace the following Ten (10) workstations' and One (1) file server CPU's:

a. Seven (7) workstations located in the Educational & Research Bldg. which are 486/33's.

b. One (1) workstation located in the Educational & Research Bldg. which is a 486/33VL.

c. One (1) workstation located in the Administration Bldg. which is a 486/33. This workstation **shall** be connected to the LAN connection located in the basement of the Visitor's Center. **(See Attachment #8)**

d. One (1) workstation located in the Visitor's Center Bldg. which is a 486/33VL. This workstation **shall** also have an external Zip Drive provided and connected, including the installation of the backup software. The Zip Drive **shall** store approximately 100MB of data and be provided with 3 blank disks.

e. One (1) file server located in the Educational & Research Bldg. which is a 486/66.

K. MAINTENANCE/WARRANTY REQUIREMENTS:

1. All on-site maintenance **shall** be provided between the hours of 8:15 AM and 5:00 PM, Monday through Friday, excluding State and Federal holidays.

2. A toll-free phone number **shall** be provided to the Agency for service related calls. The Contractor **shall** return the service call within 2 hours from initial notification.

3. Contractor **shall** provide 1 year on-site, warranty and operating support (LAN Management) services with 100% parts, labor and transportation included (Min.). Contractor **shall** return the service call within 2 hours from initial notification. If repair/problem can't be corrected remotely, then on-site response **shall** be made within 4 hours of the initial service call. This **shall** include the existing network

and all existing/new network equipment and workstations.

4. Contractor **shall** provide a 3 year on-site, maintenance and operating support (LAN Management) service with 100% parts, labor and transportation included, following

the one (1) year Warranty/ Operating Support. The Contractor **shall** return the service call within 2 hours from initial notification. If repair/problem can't be corrected remotely, then on-site response shall be made within 24 hours of the initial service call. This **shall** include the existing network and all existing/new network equipment and workstations.

5. Operating support **shall** consist of ensuring that the LAN (HW/SW) is operating correctly and efficiently. Upgrades, fixes, patches, etc. **shall** only be required, if necessary, **during the one (1) year warranty/Operation Support period.**

L. TRAINING REQUIREMENTS:

1. Training **shall** be provided for 4 Agency members.

- 2. Training **shall** consist of classroom and hands-on instruction and **shall** be conducted at the Agency location. _____
- 3. Total training time **shall** be at least 16 hours and **shall** be conducted between the hours of 9:00 AM and 5:00 PM, Monday through Friday, excluding State and Federal holidays. _____
- 4. Training **shall** be provided on a date mutually agreeable with the Contractor and Agency Representative. _____
- 5. Training **shall** consist of a familiarization of all installed software and LAN management techniques. Other topics such as network logon, passwords, system backups and minor trouble shooting **shall** also be covered. _____

M. POST-INSTALLATION DOCUMENTATION REQUIREMENTS:

- 1. Complete documentation on all hardware components **shall** be provided. _____
- 2. Appropriate documentation, registration, and licensing for all supplied software **shall** be provided. _____
- 3. A complete list of jumper settings, interrupts, address and other pertinent configuration information on all hardware components as installed and assembled, **shall** be provided. _____
- 4. An overall LAN topology diagram of all network nodes **shall** be provided. _____

III. INSTALLATION

The Contractor shall plan and coordinate the performance of the work with the Agency's Representative in order to expedite the work so as to cause minimal disturbance of facilities. The Contractor shall notify the Agency's Representative at least 3 working days prior to beginning such work.

Work shall be performed by competent technicians who are employees of the Contractor and familiar with the specific equipment. They shall be supervised by a competent full-time job foreman. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work.

The Contractor shall perform the described work in accordance with the manufacturer's recommendations, code requirements and these Specifications. The Contractor shall provide all structural supports, mechanical and electrical connections, and any other incidental items necessary to provide a completely operational system. The Contractor shall pick-up and lawfully dispose of all construction debris off State property at the conclusion of each work day.

Any damage to existing utilities, equipment or finished surfaces resulting from this work shall be repaired to the Agency's satisfaction at the Contractor's sole expense.

At the conclusion of the work, the Contractor shall demonstrate to the Agency's Representative that the work is fully operational and in compliance with these Specifications and Codes. All documentation shall be provided in a 3-ring binder and delivered to the Agency's Representative at the time of demonstration. Any deficiencies shall be promptly and permanently corrected by the Contractor at the Contractor's sole expense prior to final acceptance of the work.

