

SECTION 688—MICROCOMPUTER SYSTEM

688.1 DESCRIPTION—This work is furnishing, setting up, and maintaining a microcomputer of the type specified, and a battery backup system if indicated, for the exclusive use of Department personnel.

688.2 MATERIAL—

(a) General. Provide all material necessary for setup and operation of microcomputer, including all cords and cabling. Upon delivery to the field office, ensure that all hardware and software are compatible and operational.

(b) Microcomputer. The Type A microcomputer is a desktop or tower model. The Type C microcomputer is a laptop computer. The minimum hardware specifications for each type microcomputer are as indicated in Table A and as follows:

1. Monitor. For the Type A microcomputer, provide a 17-inch, color, non-interlaced monitor (SVGA equivalent or greater), with enhanced graphics capabilities; having, at a minimum, 16-bit color, a resolution of 1024 x 768 dpi, and 0.26 mm dot pitch; supported by a 32 MB (minimum), 64-bit graphics video card.

For the Type C microcomputer, provide a 13.9-inch (minimum), TFT active matrix, color display screen having a minimum of 16-bit color and a resolution of 1024 x 768 dpi.

2. Surge Protector. Provide a surge protector, with a minimum of six AC outlets and one telephone outlet, having a line voltage regulator/conditioner that protects against chronic low or high voltage, voltage spikes, and radio frequency interference.

3. Keyboard. Provide a Windows compatible, 104 key, full function keyboard.

4. Miscellaneous.

- Provide two Lithium-Ion batteries, AC adapter, automobile adapter, and external battery charger with Type C microcomputer.
- Provide a carrying case large enough to carry the Type C microcomputer, spare battery pack, external pointing device (mouse), AC adapter, automobile adapter, and external battery charger.

(c) Software. All system software must be installed on the C: drive partition.

- Provide MS Windows XP Professional operating system, including SP 1. Set up this operating system as a new installation, not as an upgrade from a previously installed, older version of Windows.
- Provide MS Office XP, Professional Edition, with all current Service Packs.
- Provide Symantec PC Anywhere 32 Host Mode, most current version.
- Provide MS Windows XP compatible software for the CD-RW and Zip Drives, as applicable.
- Provide antivirus software that meets the Department's current standard, with updates for the duration of the project.
- Provide the Inspector-In-Charge with all OEM software CD's/licenses, manuals, and documentation, to be maintained in the Department's Project Field Office for the duration of the project.
- Provide a compatible Internet browser that meets the Department's current standard for ECMS.

(d) Battery Backup System. For the Type A microcomputer, provide a UPS (uninterrupted power supply) battery backup system meeting the following minimum requirements:

- Load Wattage (minimum) 500
- Full Load maximum time 9 minutes
- Number AC Outlets Regulated 4
- Number AC Outlets w/battery backup 2
- Number AC Outlets with noise isolation and spike protection 4
- Indicator Lights Line and Battery Power
- Circuit Protection
 - Line Breaker
 - Battery (internal) Fuse
- Alarm (audible tone during battery operation with defeat switch)

TABLE A
Minimum Specifications

| System Type | Type A | Type C |
|--|----------------------------|----------------------|
| Central Processing Unit (Min) | Pentium IV | Pentium IV |
| CPU Speed (Min) | 2.6 GHz | 1.7 GHz |
| Random Accessible Memory (RAM) (Min) | 512 MB | 512 MB |
| Internal EIDE Hard Drive 7200 RPM (Min) | 40GB | 40GB |
| Internal CD-ROM Drive (Min) | 40X | 24X* |
| 3 1/2-inch Internal Disk Drive | 1.44 MB | 1.44 MB |
| 250 MB ZIP Drive (Min) | Yes | — |
| 250 MB External ZIP Drive (Min) | — | Yes |
| USB Interface | | |
| Internal CD-RW Drive 48x10x40 Speed (Min) | Yes | — |
| External CD-RW Drive 32x8x32 Speed (Min) USB Interface | — | Yes* |
| External Serial or PS/2 Mouse | Yes | Yes |
| Internal Pointing Device | — | Yes |
| Serial/Parallel Ports (Min) | 1/1 | 1/1 |
| USB Ports (Min) | 6 (2 front, 4 rear) | 2 |
| External USB 2.0 4-Port Hub (Min) | — | Yes |
| Type II PCMCIA Slots | — | 2 |
| Internal Modem (Min) | 56K V.92 Data/Fax/Voice | — |
| PCMCIA or Internal Modem (Min) | — | 56K V.92 Data/Fax |

* One Internal CD-RW Drive, meeting the specifications for External CD-RW Drive, may be used in lieu of two separate drives

(e) Maintenance Agreement. Furnish a maintenance agreement, which provides for on site repair service within 24 hours of notification. If the system can not be repaired, provide a replacement within 48 hours of notification.

(f) Compatibility. All references to compatibility require that compatibility be demonstrated in the Inspector's Field Office.

688.3 CONSTRUCTION—Furnish microcomputer(s) for Department use no later than 5 working days after the Notice to Proceed date or 5 days before the scheduled start of work. Provide the type of microcomputer specified and install in the Inspector's Field Office. Maintain the system from installation until 30 days after physical work has been satisfactorily completed unless released earlier by the Representative. The Representative may direct that the system be maintained for more than 30 days after physical work has been satisfactorily completed, as necessary, to allow time for Department personnel to process outstanding project records. Remove and properly dispose of all dispensable items for the life of the project and upon release by the Representative.

688.4 MEASUREMENT AND PAYMENT—Lump Sum

For the type indicated.

Paid in three payments, in accordance with the following schedule:

- Whenever all the requirements specified of [Section 688.2\(a\)](#) have been met and compatibility satisfactorily demonstrated to the Representative, 80% of the amount bid for this item will be paid.
- Whenever work is performed equal to 40% of the original contract amount, excluding the bid price for this item, 10% of the amount bid for this item will be paid.
- Whenever work is performed equal to 80% of the original contract amount, excluding the bid price for this item, the remaining 10% of the amount bid for this item will be paid.

(a) Price Adjustments. Adjustments to the lump sum prices for the indicated type microcomputer system, as applicable, will be made as follows:

1. Time Extensions and Reductions. In the event the time for completion of all work on the project is extended or reduced, as specified in [Section 108.06](#), to be more than A percent or less than B percent of the original contract time, where A and B are as specified in Table B, an appropriate adjustment (payment to the Contractor or rebate to the Department) will be made to the lump sum prices bid for the indicated microcomputer systems, as applicable, for that portion of adjusted contract time in excess of A percent of (payment) or less than B percent of (rebate) the original contract time, at the following daily rate:

$$\text{Daily Price Adjustment Rate} = \frac{75\% \times \text{Contract Lump Sum Price}}{\text{Original Contract Time in Days}}$$

TABLE B
Contract Time

| Original Contract Time in Days | | Percent | |
|--------------------------------|------------------|---------|----|
| From More Than | To and Including | A | B |
| 0 | 100 | 130 | 70 |
| 100 | 300 | 120 | 80 |
| 300 | 500 | 115 | 85 |
| 500 | 1000 | 112 | 88 |
| 1000 | | 110 | 90 |

2. Systems Maintained More than 30 Days After Physical Work Completion. In the event the Representative directs that the microcomputer systems be maintained for more than 30 days after the date of physical work completion, as specified in [Section 688.3](#), an appropriate adjustment (payment to the Contractor) will be made to the lump sum prices bid for the indicated microcomputer systems, as applicable, for the days in excess of 30 until released by the Representative, at the Daily Price Adjustment Rate specified in [Section 688.4\(a\)1](#).

No adjustment will be made if the Representative directs that the microcomputer systems be maintained for more than 30 days after the date of physical work completion due to the Contractor's failure to submit, complete, and/or correct required certificates or documents, as established during the final inspection.