

## 628-C-250 OFFICE EQUIPMENT REQUIREMENTS

*(Adopted 04-21-16)*

The Standard Specifications are revised as follows:

SECTION 628, BEGIN LINE 197, DELETE AND INSERT AS FOLLOWS:

**(c) Computer System and Computer System Equipment**

When specified in the Schedule of Pay Items, the Contractor shall provide the computer system and computer system equipment in accordance with the minimum requirements listed below for the Department's exclusive use for each field office.

**1. Computer System**

- a. Laptop computer
- b. Processor – Intel or AMD compatible, 2.0 GHz
- c. Memory – ~~4.08.0~~ GB, 1333 MHz
- d. Hard Drive – ~~250~~500 GB, 5,400 rpm *or 128 GB SSD (Solid State Drive)*
- e. ~~Module Bay Device – 24X CD-RW drive~~
- f.e. Ports – Two USB 2.0 compliant ports
- g.f. Network/Wireless – Ethernet or wireless card to be compatible with the selected internet and office network connections
- h.g. Graphics – Integrated graphics card
- i.h. Display - 15 in. WX GA LCD panel
- j.i. Battery - Nine cell Lithium ion
- k.j. Miscellaneous - One compatible port replicator with AC adapter, one additional AC adapter, one DC adapter and one padded carrying case.

The initial condition of the computer system shall be nearly pristine. All owner installed e-mail accounts, games, spyware, online services, applications, network or other profiles previously set up on the system shall be removed prior to placement in the field office. If the system was provided for a previous Department contract, all software not specified shall be removed prior to placement in the current field office.

The Contractor shall provide a minimum 900 J, six-outlet surge protector for each computer system specified in the contract.

**2. Computer System Equipment**

- a. Monitor – 22 in. widescreen digital flat panel with VGA and DVI connections
- b. Keyboard – USB enhanced multimedia keyboard
- c. Mouse – Optical USB 2-button scroll mouse
- d. *Miscellaneous - One port replicator with AC adapter, one additional AC adapter, one DC adapter that is compatible with the Department's provided laptop or mobile device.*

**3. Computer Software**

The Contractor shall provide software for the computer system in accordance with the minimum requirements listed below.

- a. Operating System Software – Windows 710 Professional.
- b. Productivity Software – Microsoft Office 20072013 Small Business and Adobe Acrobat Professional XI.
- c. Security Software – McAfee Virus Scan Plus.

All software shall include the most current updates and patches at the time the computer system is provided to the Department. The Contractor shall provide for installation of updates and patches for the operating system, productivity and security software during the term of use of the computer system by the Department. Updates and patches shall be provided by an automatic update method.

The Department may install and maintain proprietary software on the computer in order to run the Department's construction management programs.

#### **4. Miscellaneous Computer Requirements**

The Contractor shall provide all cables, connections and software required to connect the computer system provided by the Contractor or by the Department to the printer and the scanner.

The Contractor shall provide an Ethernet and a wireless office network to enable all computer systems in the field office to access the field office internet service, the printer and the scanner.

The Contractor shall provide all manuals necessary for operation of the computer system, computer system equipment and software with the system and shall include all documentation normally furnished with the equipment and software when purchased.

The Department will be utilizing the computer system to run or access Department provided construction management software applications. These applications are known to run on Intel and AMD compatible equipment when using the Windows 710 Professional operating system. If the Department experiences problems running these applications due to hardware or software compatibility, the Contractor shall replace the equipment to ensure compatibility to the satisfaction of the Engineer within five business days.

The computer system shall be maintained in good working order. If a portion of the system becomes defective, inoperable, damaged, or stolen, that portion shall be repaired or replaced within five business days after the Contractor is notified by the Engineer. If the computer system and related accessories are not maintained by the Contractor as required, the Engineer may withhold partial payments until the computer system is operational to the Department's satisfaction.

#### **(d) Field Office Internet Service**

The Contractor shall provide broadband internet service for the field office. Broadband internet service shall be capable of a minimum average upload speed of 65 Mbps and a minimum download speed of 2550 Mbps, unless otherwise approved by the Engineer.

**(e) Field Office Machines**

The Contractor shall provide a fully operational copier, printer, and document scanner for the Department's exclusive use in the field office in accordance with the minimum requirements listed herein.

In lieu of separate copier, printer, and scanner, the Contractor may provide an all-in-one unit that meets all the requirements for any combination of the individual machines being provided. Separate machines shall be provided for those machine functions that are not included in an all-in-one type machine.

**1. Copier**

*The copier shall be compatible with, and shall be connected to, the computer system provided by the Contractor or the Department for use by the Department in the field office.* The copier shall be capable of using plain paper and of making full size, black and white copies of letter, legal and ledger US paper size original documents. The copier shall be capable of reducing and increasing copy sizes. The copier shall have a self-feeding paper tray, an automatic document feeder and be capable of producing at least 20 copies per minute.

**2. Printer**

The printer shall be compatible with, *and shall be connected to,* the computer system provided by the Contractor or by the Department for use by the Department in the field office. The printer shall be capable of printing single-sided, black and white letter, legal and ledger US paper size documents at a rate of 20 pages per minute and capable of automatic duplex printing. More than one printer may be used to meet this requirement.

All printers shall be set to accommodate wireless printing from the Department's iPads using ~~AirPrint™~~ <sup>AirPrint™</sup> technology provided laptop or mobile device.

**3. Document Scanner**

The document scanner shall be compatible with, *and shall be connected to,* the computer system provided by the Contractor or the Department for use by the Department in the field office. The scanner shall be capable of scanning letter and legal size documents and shall have an automatic document feeder and be capable of 200 to 600 dpi black and white resolution, preset to 200 dpi.

SECTION 628, BEGIN LINE 390, DELETE AND INSERT AS FOLLOWS:

**628.04 Cellular Telephones**

The Contractor shall provide cellular telephone equipment and services, as specified below, for use by the Department on the contract.

Each cellular telephone unit shall have a service coverage area that includes the project limits. Each cellular telephone unit shall include a belt clip system, a 120V AC charger, a 12V DC mobile charger, and a hands-free kit consisting of a speaker and a microphone enabling the user to operate the unit with minimal need for the use of their hands. The hands-free kit may be either wired or wireless.

All equipment shall be covered by normal manufacturer's warranties. All cellular telephone units and associated equipment will remain the property of the Contractor and will be returned to the Contractor upon completion of the contract.

Cellular telephone units shall meet the following minimum requirements:

**(a) Type A**

1. internet ready device with minimum 3.5 in. display, measured diagonally
2. cellular telephone anytime minutes per month as shown in the Schedule of Pay Items
3. unlimited nights and weekends service
4. voice mail and caller ID
5. protective case to prevent damage to the unit
6. rear facing camera with a minimum 4 MP resolution
7. minimum 720 p video capture
8. 25 GB or higher data plan per unit
9. internal memory of 8/16 GB or higher
10. USB port for computer connection.

**(b) Type B**

1. a cellular telephone with anytime minutes per month as shown in the Schedule of Pay Items
2. unlimited nights and weekends service
3. voice mail and caller ID
4. build-in camera with a minimum 3.2 MP resolution.

The Department will be responsible for damage or loss of the units beyond that covered by normal manufacturer's warranties, while in use by the Department. The Contractor shall provide replacement cellular telephone units, batteries, chargers, and equipment within one business day of notification of need for the item.

The Contractor shall not enter into any agreement with any service provider or purchase any cellular telephone units for use by the Department until authorized by the Engineer. The Engineer will notify the Contractor a minimum of 10 business days prior to the need for the units.

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