



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

April 12, 2010

SUBJECT: FAP Route 646/673 (IL 40/116)
Project HD-000S (805)
Section (101, 103) TS-1; (102, 126) TS-3ETC
Peoria & Tazewell County
Contract No. 68970
Item No. 133, April 23, 2010 Letting
Addendum B

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised pages 14 - 18 of the Special Provisions.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Scott E. Stitt, P.E.
Acting Engineer of Design and Environment

A handwritten signature in cursive script, reading "Ted B. Walschleger P.E." with a small "P.E." to the right.

By: Ted B. Walschleger, P. E.
Engineer of Project Management

cc: Joseph E. Crowe, Region 3, District 4; Mike Renner; R. E. Anderson;
Estimates

TBW:DB:jc

The following items shall also be included with **switch**:

- Power Supply – Qty. 1 (Aaxeon Model DR-45, 45 Watt, 12 Volt DC, Industrial Din-Rail Power Supply or Approved Equal)
- Power Strip – Qty. 1

The power strip shall have a minimum of six outlets and integral surge suppression that meets or exceeds the following minimum specifications:

- Let Through Voltage: <85 Volts
 - Operating Voltage: 120VAC, 50/60H
 - UL Suppressed Voltage Rating: 330V
 - Energy Rating: 320J
 - Peak Current NM/CM: 13k Amps NM, 13k Amps CM
 - EMI/RFI Noise Filtration: >25-60dB
- **DIN Rail, 2 ft. Section - Qty. 1**
 - **Fiber Optic Patch Cables - Qty. 2 (multimode fiber, 1 meter length, duplex, ST connectors)**

Basis of Payment: This work will be paid for at the contract unit price per each for FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH which price shall be payment in full for all labor, materials, and equipment required to provide the fiber optic Ethernet drop and repeat switch and associated equipment and deliver it to the Department.

DATA NETWORK PORT ADAPTER

The Contractor shall furnish a data network port adapter complete with the accessories specified below and deliver it to the Department.

The **data network port adapter** shall meet or exceed the following minimum specifications:

Approved Models: MOXA Model N-Port 5210” “ (2 Port RS-232 Serial Device Server, or approved equal.

LAN:

- Ethernet: 10/100 Mbps, RJ45, IEEE 802.3
- Protection: Built-in 1.5 KV magnetic isolation
- Number of Ports 1
- Connector(s) 8-pin RJ45

Serial Interface:

- Interface: RS-232
- Number of Ports: 2
- Port Type: 8-Pin RJ45
- Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
- Serial Line Protection: 15 KV ESD for all signals
- Power Line Protection: 4 KV Burst (EFT), 2 KV Surge (Power)

Revised 04/12/2010

Serial Communication
Parameters:

- Parity: None, Even, Odd, Space, Mark
- Data Bits: 5, 6, 7, 8
- Stop Bit: 1, 1.5, 2
- Flow Control: RTS/CTS, XON/XOFF, DTR/DSR
- Transmission Speed: 110 bps to 230.4 Kbps (Bi-Directional Data Transmission)

Software Features:

- Protocols: ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP, HTTP, SMTP, SNTP
- Real COM/TTY Drivers: Windows 95/98/ME/NT/2000/XP/2003 Real COM drivers
- Configuration: Web Browser, Serial/Telnet Console, or Windows Utility
- The data network port adaptor shall include software that can be installed on a workstation to provide access to all adapters through the use of software selectable and assignable virtual communication ports (minimum of 128 ports) on the host computer.

Electrical:

- 120 VAC (internal or external power supply) and self-setting over-current protection shall be included
- Input Voltage 12 to 48 VDC
- Power Consumption 305 mA @ 12 V max.
- Power Line Protection 1 KV burst (EN61000-4-4: EFT/B), 0.5 KV surge (EN61000-4-5)

Physical Characteristics:

- Enclosure Aluminum (1 mm), providing IP30 protection
- Weight 320 g
- Dimensions Without ears: 67 x 100.4 x 22 mm (2.64 x 3.95 x 0.87 in)
- With ears: 90 x 100.4 x 22 mm (3.54 x 3.95 x 0.87 in)

Environmental:

- Operating Temperature: **-32 to 131** degrees F
- Operating Humidity 5 to 95% RH
- Storage Temperature -20 to 85°C (-4 to 185°F)

Other:

- Both local and remote configuration and software upgrade capability
- Password protection for security

Basis of Payment: This work will be paid for at the contract unit price each for DATA NETWORK PORT ADAPTER, which shall be payment in full for all labor, materials, and equipment required to furnish the equipment described above and deliver it to the Department.

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VIDEO SERVER

The Contractor shall furnish a video server complete with the accessories specified below and deliver it to the Department.

The video server shall meet or exceed the following minimum specifications:

Approved Models: Axis Communications Model **241Q** (4-Port “ “ video encoder) or approved equal.

- Video Compression:
- (MPEG-4 Part 2)
 - Motion JPEG
- Resolutions:
- NTSC: 720x480 to 176x120
 - PAL: 720x576 to 176x144
- Frame rate:
- H.264 Frame rate: 30/25 (NTSC/PAL) fps in all resolutions
 - Motion JPEG Frame rate: 30/25 (NTSC/PAL) fps in all resolutions
- Video streaming:
- **Simultaneous MPEG-4 and Motion JPEG**
 - Controllable frame rate and bandwidth
 - VBR/CBR **MPEG-4**

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- Image settings:
- Compression, color, brightness, contrast
 - Rotation: 90°, 180°, 270°
 - Aspect ratio correction
 - Mirroring of images
 - Text and image overlay
 - Privacy mask
 - Enhanced deinterlace filter
- Security:
- Password protection, IP address filtering, HTTPS* encryption,
 - IEEE 802.1X* network access control, digest authentication,
 - user access log
- Supported protocols:
- IPv4/v6, HTTP, HTTPS*, IEEE 802.1X*, QoS layer 3 DiffServ, FTP, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS
- Application Programming Interface:
- Open API for software integration, including VAPIX® from Axis Communications available at www.axis.com
- Intelligent video:
- Video motion detection, active tampering alarm,
- Alarm triggers:
- Intelligent video, external inputs, video loss
- Alarm events:
- File upload via FTP, HTTP and email
 - Notification via email, HTTP and TCP
 - External output activation

- Video buffer:
 - **9 MB** pre- and post-alarm per channel
- Pan/Tilt/Zoom:
 - Wide range of analog PTZ cameras supported (drivers available for download at www.axis.com)
 - 100 presets, guard tour, PTZ control queue
 - Supports Windows compatible joysticks
- Casing:
 - Metal casing. Standalone or wall mount
- Processor and memory:
 - ARTPEC-2, **64 MB** RAM, **8 MB** Flash
- Power:
 - 8-20 V DC, max. 16.1 W
- Connectors:
 - 4 analog composite video BNC inputs, NTSC/PAL auto-sensing
 - RJ-45 10BASE-T/100BASE-TX/1000BASE-T
 - DC terminal block: power in 8-20 V DC, max. 16.1 W
 - 4 I/O terminal blocks with 2 configurable inputs/outputs per channel
 -
 - RS-485/RS-**232** serial ports
- Operating conditions
 - 0-45 °C (32-113 °F)
 - Humidity 20-80% RH (non-condensing)
- Approvals:
 - EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22, EN 60950-1
 - Power supply PS-P: EN 60950-1, UL, CSA
- Weight:
 - 796 g (1.75 lb.)
- Included accessories:
 - Power supply, mounting and connector kits, Installation Guide, CD with installation and management tools, software and User's Manual
 - **1** Windows decoder user license

Basis of Payment: This work will be paid for at the contract unit price each for VIDEO SERVER, which shall be payment in full for all labor, materials, and equipment required to furnish the equipment described above and deliver it to the Department.

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